

Filipino Mothers' Self-Efficacy in Managing Anger and in Parenting, and Parental Rejection as Predictors of Child Delinquency

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The authors tested a model in which Filipino mothers' self-efficacy in managing anger/irritation influenced child delinquency via two parenting variables: parental self-efficacy and parental rejection. Structured interviews were conducted with 99 mothers twice with an interval of one year with efficacy beliefs and rejection measured in the first year and child delinquency data collected in the following year. Path analyses showed that self-efficacy in managing anger/irritation negatively predicted child delinquency indirectly through the sequential mediation of parental self-efficacy and parental rejection. Results provided further evidence for the importance of efficacy beliefs, particularly self-efficacy in managing anger/irritation and parental self-efficacy, in the domain of child development.

Keywords: child delinquency, parental rejection, parental self-efficacy, parenting, self-efficacy in managing anger

Self-efficacy beliefs are the foundation of human agency and are powerful determinants of emotion, cognition, motivation, and behavior, as demonstrated in a number of studies (Bandura, 1997). In the domain of parenting, however, much remains to be investigated regarding the concept of self-efficacy. Most of the research has focused on parental self-efficacy (see Jones & Prinz, 2005 for examples).

However, people possess different forms of self-efficacy beliefs that may independently and in interaction with each other influence an individual's day-to-day tasks and roles (Bandura, 1997). The goal of this study, then, is to build on what is known about parental self-efficacy and explore the role of another form of self-efficacy belief that may affect parenting processes and outcomes, namely, self-efficacy in managing anger or irritation (SEMAI). Focusing on Filipino mothers, the authors proposed that beliefs about how well one can manage anger can influence the child's delinquent behavior, mediated in sequential order by one's belief in her ability to parent, known as parental self-efficacy, and through behaviors that indicate rejection of the child, labeled as parental rejection. Figure 1 presents the proposed model of relations among the target variables. The succeeding sections summarize the literature that serves as the basis for the proposed model.

The Relation Between Parental Anger and Child Delinquency

Anger is one of the most prevalent negative emotions experienced by parents, particularly mothers (Frude & Goss, 1979). Anger is experienced as a response to perceived threat or injustices, assuming there is someone or something to blame (Averill, 1983). In the case of parents, anger is triggered when parental goals are frustrated by a child's behavior, especially if they believe that the behavior was intentional (Dix, 1991). This emotional response shifts the angered person's attention to the source of threat and triggers physiological arousal in preparation for a behavioral response such as attack (Ekman, 2003, as cited in Rivers, Brackett, Katulak, & Salovey, 2007).

Parental anger may serve some adaptive purposes, such as compelling parents to respond swiftly when child safety is at stake and directing children's attention to behaviors that are unacceptable to the parent (Dix, 1991). However, anger and other negative emotions have inimical effects on child development, whether via direct exposure or through their association with harmful parenting practices. The negative affect of parents has been linked to lower social competence (Green & Baker, 2011) and more externalizing problems among children, and with children's poorer relationships with teachers and

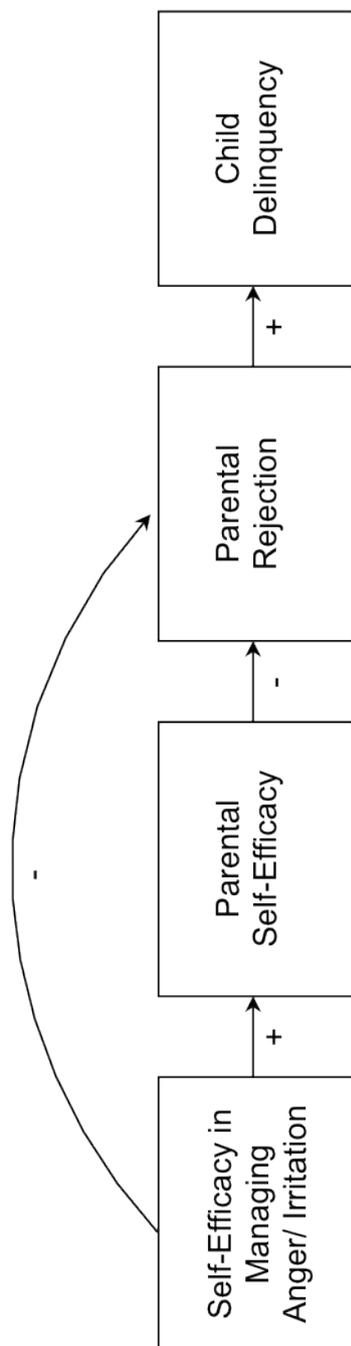


Figure 1. Conceptual framework.

peers (Narayan, Herbers, Plowman, Gewirtz, & Masten, 2012).

This study focuses on delinquency as the child outcome predicted by mothers' efficacy beliefs and rejection. Child delinquency, which includes stealing and destroying others' property, often arises in middle childhood (Achenbach, 1991) and may continue to adolescence or even adulthood (Farrington, 1995). Cummings and Davies (1994) integrated studies providing evidence of the role of parental anger among depressive mothers in the development of child externalizing problems, including child delinquency. Depressive mothers tend to show more anger and irritation and are more aggressive towards their child and their partners. Further, Cummings and Davies pointed out that children exposed to parental and interparental anger, such as in the case of marital conflict, tend to be more prone to engaging in delinquency and other problem behaviors. Eisenberg, Cumberland, and Spinrad (1998) explained how parents' expression of emotions, including hostile ones such as anger, is linked to children's socioemotional competence and the development of problem behaviors. For instance, parental expression of emotion may affect children directly through imitation and contagion, such that they mimic their mothers' expression of anger or also feel anger when their mother is angry. Parental expressiveness may also provide children with information regarding the emotional significance of events, behaviors linked to different emotions, and how others may react to certain emotions. Such knowledge may guide children in their interaction with others. Finally, emotions expressed by parents can shape children's feelings about themselves and others and help them build their working model about relationships. Parental anger, therefore, whether directed towards the child or towards another adult in the presence of the child, can contribute to child delinquency through various mechanisms.

The Role of Parents' Self-Efficacy in Managing Anger/Irritation

To prevent the unfavorable trajectory of uncontrolled anger leading to child behavior problems, it is vital to understand mechanisms that can help in the regulation of parents' anger towards their children.

Parents may encounter similar anger-eliciting caregiving situations (e.g., child misbehavior), but the ability to regulate one's emotion may serve to differentiate parents who are able to cope and use positive and effective strategies versus those who resort to hostile and rejecting practices (Teti & Cole, 2011).

According to Bandura (1997), in order to accomplish a difficult task such as controlling one's emotions, one must first possess the belief in one's ability to successfully accomplish the task. This is referred to as self-efficacy, defined as the "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Applied to emotions, the belief that one has the ability to influence one's affective state is crucial to the actual experience, expression, and regulation of emotions.

Relevant to the regulation of anger and other negative emotions is self-efficacy for regulating negative affect (SERN; Lightsey, Maxwell, Nash, Rarey, & McKinney, 2011), defined as the "beliefs regarding one's capability to ameliorate negative emotional states once they are aroused in response to adversity or frustrating events and to avoid being overcome by emotions such as anger, irritation, despondency, and discouragement" (Caprara et al., 2008, p. 228). Self-efficacy in managing anger/irritation (SEMAI) has been posited as a distinct subcategory of SERN (Caprara et al., 2008). This study adopts Caprara's definition of SERN to describe SEMAI as the belief regarding one's capability to ameliorate and avoid being overcome by anger once it is aroused in response to frustrating events. The specific role of SEMAI in the domain of parenting has not been investigated; the current study fills this research gap. Following Bandura's theory, this paper tests the proposal that having a strong belief in one's ability to control anger will help parents better manage their anger and, therefore, avoid the possible resulting negative outcomes in the child.

As SEMAI is a cognitive belief, it is imperative to clarify the path through which it can influence child delinquency. The authors hypothesize that SEMAI is linked to child delinquency through the mediation of parental self-efficacy (PSE) and parental rejection. The model presented in Figure 1 can be broken down into two paths. First, a sequential mediation transpires as SEMAI affects PSE, which then affects parental rejection, which in turn influences child delinquency.

Second, the link between SEMAI and child delinquency is mediated by parental rejection alone. The two paths emphasize how SEMAI influences another parental cognition, PSE, as well as parental behavior, rejection, more directly. The next sections elaborate on these connections.

Sequentially Mediated Relations Between Self-Efficacy in Managing Anger/Irritation, Parental Self-Efficacy, Parental Rejection, and Child Delinquency

Self-efficacy in managing anger/irritation → parental self-efficacy. In this study, the specific and most relevant form of self-efficacy hypothesized to serve as a mediator between self-efficacy in regulating emotions and parent behavior is parental self-efficacy (PSE). PSE, defined as “the parent’s beliefs in his or her ability to influence the child and his or her environment to foster child’s development and success” (Ardelt & Eccles, 2001, p. 945), has also been found to negatively influence parental rejection (Hill & Bush, 2001; Sanders & Woolley, 2005; Teti & Gelfand, 1991) and child delinquency (Bogenschneider, Small, & Tsay, 1997).

Apart from self-efficacy in managing anger/irritation, people possess a system of interdependent efficacy beliefs (Bandura, 1997; Caprara et al., 2008). Caprara and Steca (2006) argued that researchers should consider how and to what extent these self-appraisals interact, proposing that certain self-efficacy beliefs have greater influence in specific domains of functioning, generalize more widely, and are more amenable to change. Regulatory emotional self-efficacy, in particular, exerts an influential effect over other forms of efficacy. For instance, when individuals feel that they can control the experience and expression of their emotions, they tend to believe more in their ability to perform in specific areas relevant to their developmental age (e.g., for adolescents, school work and warding off negative peer influence); they, in turn, are more likely to do well in various psychosocial functions (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003). In Bandura and colleagues’ framework, the effect of regulatory emotional self-efficacy on individual behavior is mediated by more behavior- and context-specific self-efficacy beliefs.

Although the specific relation of efficacy in managing anger and PSE has yet to be explored, Caprara and Steca (2006) suggested such a relation when they reported that self-efficacy in regulating general negative emotions predicted adults' perceived capability in parenting. Studies showing how negative emotions can undermine parents' belief in their competence also provide some support. Teti and Gelfand (1991) studied mothers with depression and their interaction with their infants and found that PSE mediated the influence of depression on parental behavior. Gondoli and Silverberg (1997) found similar results with PSE mediating the effect of emotional distress on parental responsiveness. Other studies have also shown that this can work in the reverse direction: depending on their level of self-efficacy, parents can feel more or less intense negative emotions; that is, self-efficacy influences the experience of emotions. Weaver, Shaw, Dishion, and Wilson (2008), in a longitudinal study of mothers of 2-year old children, found that the influence of PSE on child externalizing problems was mediated by maternal depression. They explained that mothers with low PSE tend to develop depressive feelings because they think that children's behaviors are uncontrollable, rendering them helpless especially when children misbehave.

This study takes the position that parents' self-efficacy to manage their emotions, particularly anger, influences PSE rather than the reverse. According to Bandura's (1997) social cognitive theory, the construction of specific efficacies depends on the demands of a developmental period. As the need to regulate emotions goes beyond and even before one becomes a parent, it is assumed that one must have developed the ability and the belief in one's ability to regulate anger prior to becoming a parent, and therefore prior to the construction of one's PSE. Moreover, Bandura argued that people's judgment of their efficacy in a specific domain is based in part on their evaluation of their general self-regulatory skills. Providing evidence to this postulate, studies that have looked at general self-efficacy in managing negative emotions show that it can influence other forms of efficacies that are more task- or context-specific such as academic self-efficacy (Bandura et al., 2003) and self-efficacy in marital relationships and in parenting (Caprara & Steca, 2006). Drawing from these, it is hypothesized in this study that SEMAI can affect mothers' beliefs regarding their efficacy in

childrearing.

Parental self-efficacy → parental rejection → child delinquency. There is ample support for the relation of PSE, parental rejection, and child delinquency, given that PSE is a well-studied construct. Jones and Prinz (2005) collated 47 studies that examined the role and influence of PSE on parenting and child adjustment. The majority of the studies in their review provided evidence for the link of PSE to parental competence. PSE was linked positively with parenting practices that are inconsistent with rejecting parenting such as parental support (Meunier, Roskam, & Browne, 2010), involvement (Ardelt & Eccles, 2001), and responsiveness (Gondoli & Silverberg, 1997). On the other hand, PSE was negatively related to harsh or inconsistent discipline (Sanders & Woolley, 2005), love withdrawal (Hill & Bush, 2001), and disengagement (Teti & Gelfand, 1991). Moreover, among Filipino fathers, Garcia (2012) found that PSE moderates the negative impact of the experience of stressful life events on parental hostility and aggression. That PSE takes an antecedent role over parental behavior (e.g., Ardel & Eccles, 2001) is consistent with Bandura's theory. Parents who have a strong sense of efficacy in their ability to parent invest more in learning better ways to parent, are more motivated to face challenges in childrearing, and are more likely to successfully deal with those issues.

Through its relation to parenting practices, PSE contributes to child functioning, specifically in the prevention of delinquency. Associations have been found between PSE and behavior problems of children aged 3 to 5 years (Murdock, 2012). PSE also predicted academic and socioemotional adjustment of adolescents, as mediated by parental monitoring, involvement, and communication (Shumow & Lomax, 2002).

This study focuses on the parental behavior of rejection. Rohner (2004) defined parental rejection as the absence or withdrawal of love and the presence of physically and psychologically hurtful behaviors and emotions. The negative behaviors underlying parental rejection, hostility, undifferentiated rejection, and neglect (Putnick et al., 2012), are considered among the stronger predictors of child delinquency, having higher effect sizes compared to other aspects of parenting (Hoeve et al., 2009). Simons and Gordon (2006) explained

that hostile, rejecting parenting instills a distrusting and cynical view of relationships and arouses anger in children, which increases the likelihood of involvement in delinquent behavior.

Direct Relation Between Self-Efficacy in Managing Anger/Irritation and Parental Rejection

To the authors' knowledge, only one study has investigated self-efficacy in managing emotions among parents (Caprara & Steca, 2006), which revealed that parents' belief in their capacity to manage their emotions successfully is crucial in promoting positive thinking and affect. If self-efficacy in managing negative emotions, including anger, can foster parents' wellbeing, there remains the question of whether this will directly reflect on their interactions with their children.

Support for the relation of SEMAI to parental rejection can be deduced from studies of anger and other related negative emotions. Anger can lead to child maltreatment when it is expressed excessively or is inappropriate to the caregiving situation (Leung & Smith Slep, 2006). When responding to child misbehavior, parents may use discipline strategies that may turn abusive if they cannot control their anger. Indeed, uncontrolled anger has been cited as the most common trigger of child abuse (Peterson, Ewigman, & Vandiver, 1994). Further, anger is positively related to the tendency to use hostile parenting strategies (Lorber, O'Leary, & Smith Slep, 2011) and is negatively related to maternal sensitivity (Burrous, Crockenberg, & Leerkes, 2009) and supportive parenting (Dix, Gershoff, Meunier, & Miller, 2004). In fact, it is anger and irritation often experienced by depressed parents, and not depression or anxiety per se, that account for harsh and coercive parenting (Downey, Osatinski, & Pettit, 1993, as cited in Downey, Purdie, & Schaffer-Neitz, 1999).

Thus, it is possible that parents' belief in their ability to ameliorate and overcome anger, that is, SEMAI, will prevent them from behaving in ways that are hurtful to their children, thereby avoiding negative child consequences such as delinquency. Bandura (1997) argued that the belief that one can relieve an unpleasant emotion makes those emotions less aversive, allowing one to deal with it and its perceived cause more effectively. A mother angered by child misconduct, for

example, but who has high SEMAI will be likely to tone down her anger and find more effective ways of dealing with her child's misbehavior versus a mother who thinks she is less able to manage her emotions. Based on these findings, it is hypothesized that another pathway linking SEMAI to child delinquency is via its direct relation to parental rejection.

Self-efficacy Beliefs Among Filipino Mothers

Little is known about self-efficacy beliefs among Filipino parents. Thus far, SEMAI among Filipino parents has not been investigated. Garcia (2012) explored the role of self-efficacy of Filipino mothers and fathers and found that the interaction of PSE and the experience of stressful life events predicted parental hostility and aggression among fathers but not for mothers. However, PSE was not a significant predictor of parenting behaviors regardless of sex. Garcia speculated that because of the collectivist nature of Philippine society and the extended familial support typically available to Filipino parents, PSE may have a different, perhaps more limited role in influencing Filipino parent behaviors. This finding contradicts studies mentioned earlier and therefore warrants further investigation.

However, Bandura (1997) contends that people in collectivist societies have as much desire to be efficacious in the roles that they perform as those in individualistic societies. Self-efficacy beliefs can also benefit others although they primarily serve personal goals. Filipino mothers emphasize the role of good parenting in raising competent children (Durbrow, Peña, Masten, Sesma, & Williamson, 2001). When parent-child interactions fail, Filipino parents perceive themselves as responsible (Alampay & Jocson, 2011). With such emphasis on the importance of their role in the molding of children, it makes sense to consider parental efficacy a key aspect of Filipino parenting. Thus, it is also relevant to determine how Filipino parents evaluate their capacities in performing the parental role.

Moreover, the role of negative emotions in parenting has not been given attention in the local context, where rejecting parenting practices are not uncommon. For instance, compared to other countries, the incidence of parental use of corporal punishment—a manifestation of

rejecting parenting—is relatively high in the Philippines (Lansford et al., 2010). Given the association between negative emotions, especially anger, and parental rejection, understanding SEMAI among Filipino parents and how this relates to and affects their parenting and their children is therefore imperative.

This study tests the proposed relations among Filipino mothers who assume the role of primary caregiver (Enrile & Agbayani, 2007). Because mothers manage children’s behavior on a day-to-day basis and discipline them more frequently than fathers do (Alampay, 2014), it is likely that they experience more anger episodes than fathers. Moreover, Murdock (2012) found that parents’ negative affect was significantly related to maternal, but not paternal, self-efficacy; and that maternal PSE, but not paternal PSE, was associated with child behavior problems. Such differential patterns have been attributed to differences in emotion socialization of men and women, as well as the distinct roles that mothers and fathers take in childrearing. Thus, we expect that the relation among the variables under study will be particularly evident among mothers.

In sum, this study investigates the paths through which parents’ self-efficacy in managing anger/irritation can influence child delinquency. It is hypothesized that SEMAI indirectly influences child delinquency through the serial mediation of parental self-efficacy and parental rejection. SEMAI is also proposed to have a direct influence on parental rejection, which then serves as the mediator between the mother’s cognition and child delinquency.

METHOD

Participants

Data for SEMAI, PSE, and maternal rejection were drawn from one time period, and mother-report of child delinquency was drawn from the subsequent year of data collection from the Philippines site of the Parenting Across Cultures (PAC) project. PAC is a longitudinal study conducted in nine countries, the goal of which is to understand how parents’ cognitions and behaviors affect children’s development. Nonrandom quota sampling was employed to approximate the

socioeconomic status distribution in urban Metro Manila. For the first year of the project, 117 mothers of 120 7- to 9-year old children were recruited from public and private elementary schools in Quezon City, the largest and most populous city in Metro Manila. The data used for the present analyses were derived from the second and third years of data collection, as these were the years when the self-efficacy measures were administered. Ninety-nine mothers provided data on SEMAI, PSE, parent rejection, and child delinquency for both years (mothers' age range = 26 to 60 years, $M = 39.20$, $SD = 7.03$). In terms of education, the majority of mothers (61.7%) completed 11 to 16 years of education (corresponding to some college education or vocational training). Sixty-five percent were employed (48.5% of these were on a full-time basis). A little more than half of the sample (55.6%) belonged in the low income stratum, 34.4% in the middle income stratum, and 8.1% in the high income group, based on the country's annual family income cut-off by income class (Virola, 2010).

Procedures

Letters were sent to target schools to seek permission to distribute letters to their students' parents. After acquiring the school's consent, letters were sent to parents through the second- and third-grade students. Parents who signified interest to participate in the study were contacted by research assistants through telephone and were informed about the details of the study. Families who gave consent became part of the Philippine PAC sample, and structured interviews are conducted with these families annually. Interview dates were scheduled via telephone, and parents indicated the language (Filipino or English) they preferred to use in the interview.

Trained research assistants traveled to the families' homes or to a designated place to conduct the structured interviews. Mothers were given the option to answer orally or in writing. Flash cards containing the response scales to all the measures were provided to aid the mothers. The interview lasted approximately 1 to 2 hours, after which the mother was given a gift check as compensation for her participation.

Data entry was done twice by two different research assistants

into an MS Access database, and a file comparison procedure was used to correct data entry errors. Data were then transferred to SPSS and EQS (Bentler, 2006) for statistical analyses.

Measures

Four mother-report measures were used in this study. The measures were translated from English to Filipino and back translated by the Philippines PAC team researchers, all of whom are fluent speakers of English and Filipino. Corresponding adjustments regarding the length of the interview, sequencing of the measures, and wording of the items were made in consultation with the international research group.

Self-efficacy in managing anger/irritation. SEMAI was measured using the mean score of the four items derived from the anger-irritation factor of the Regulatory Emotional Self-Efficacy (RESE) scale (Caprara et al., 2008). This scale has not previously been used in a Filipino sample but has been validated and tested in other countries (e.g., Caprara et al., 2008; Caprara & Steca, 2006). The items asked mothers how well they think they can control their emotions (e.g., How well can you avoid losing your temper when you feel angry?). Mothers responded via a 5-point Likert-type scale ranging from 1 (*not well at all*) to 5 (*very well*). Internal consistency was Cronbach's $\alpha = .77$.

Parental self-efficacy. PSE was measured using six items from the Efficacy Scale of the PAC interview. The items pertained to how much control mothers believe they have over aspects of the child's development at home, in school, and outside of home and school (e.g., How much can you do to get your children to stay out of trouble in school?). Mothers responded via a 5-point Likert-type scale ranging from 1 (*nothing*) to 5 (*a great deal*). PSE has an internal consistency of Cronbach's $\alpha = .75$.

Parental rejection. Parental rejection was measured using the mother report for the Undifferentiated Rejection, Hostility, and Neglect subscales of the Parental Acceptance-Rejection/Control Questionnaire (Rohner, 2005). The mean score for the three subscales was computed to represent parental rejection, similar to the approach

of Putnick and colleagues (2012). Mothers answered in terms of frequency using a scale of 1 (*never or almost never*) to 5 (*everyday*). Cronbach's α was .74.

Child delinquency. The Delinquency subscale of the Achenbach Child Behavior Checklist (Achenbach, 1991) was used to measure child delinquency. Mothers answered if they have observed the stated behavior in their child or not by answering 0 for not true, 1 for somewhat or sometimes true, and 2 for very true or often true. The score is computed by summing the rating for each of the 13 items of the Delinquency subscale and can range from 0 to 26. Internal consistency for this scale was Cronbach's $\alpha = .63$.

RESULTS

Descriptive and Bivariate Analyses

The means and standard deviations of mothers' SEMAI, PSE, parental rejection, and reports of child delinquency are reported in Table 1. PSE was negatively skewed whereas parental rejection and child delinquency were both positively skewed. Thus, the robust estimation method for path analysis was used.

Pearson's r correlations among the variables are presented in Table 2. All the variable interrelations were in the hypothesized direction. SEMAI was positively associated with PSE which, in turn, was negatively associated with parental rejection. Maternal SEMAI, however, did not significantly correlate with maternal rejection, suggesting the absence of a direct path between these variables in the model. Lastly, maternal rejection was positively associated with child delinquency.

Path Analyses

Model goodness of fit was tested with maximum likelihood (ML) estimation using Bentler's (2006) EQS 6.1 path models. Statistical requirements for performing path analysis were first considered. The ML fitting function requires the assumption that the joint data distribution is multivariate normal. As previously mentioned, some

Table 1. Means and Standard Deviations of Variables

	<i>N</i>	<i>M</i>	<i>SD</i>
Self-efficacy in managing anger/ irritation	105	3.16	.75
Parental self-efficacy	105	4.48	.44
Parental rejection	105	1.38	.30
Child delinquency	100	2.36	2.07

Note. Score range: Self-efficacy in managing anger/irritation = 1-5, Parental self-efficacy = 1-5, parental rejection = 1-5, child delinquency = 0-26.

Table 2. Correlations of Variables

Variable	1	2	3
1. Self-efficacy in managing anger/irritation (Y2)	—		
2. Parental self-efficacy (Y2)	.247*	—	
3. Parental rejection (Y2)	-.124	-.194*	—
4. Child delinquency (Y3)	-.165	-.169	.313**

Notes. * $p < .05$. ** $p < .01$. Y2 = year 2. Y3 = year 3.

variables were skewed. Multivariate kurtosis showed a normalized estimate of 2.5996, well within the 3.0 limit suggested by Savalei and Bentler (2006), but beyond the 1.96 standard cut-off for a z-score. Thus, we used the more robust estimation method, Satorra-Bentler scaled chi-square, in conjunction with the ML parameter estimates.

Two components of model fit were evaluated: statistical fit and practical fit (Savalei & Bentler, 2006). Statistical model fit was evaluated using chi-square and its associated p-value to test the null hypothesis that the model and the data are not significantly different. Practical fit examines the degree of misfit of the model with the data. Four of the more widely accepted fit indices were used here for better estimation of model fit: normed fit index (NFI), non-normed fit index

(NNFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA; Savalei & Bentler, 2006). For the first three fit indices, a value of .9 or higher indicates good fit. For the last fit index, the value must be .05 or lower in order for the model to be considered as having a good fit with the data.

Model fit. The Satorra-Bentler scaled chi-square was not significant, $\chi^2(2, N = 99) = 1.9023, p = .386$, indicating that the hypothesized model did not differ significantly from the data, thus, a good fit. Other indices indicate that the hypothesized model fit the data adequately: NFI = .920, NNFI = 1.017, CFI = 1.000, RMSEA = .000 (90% CI [.000, .196]). All path coefficients were significant except between SEMAI and parental rejection (see Figure 2). Overall, the path model is generally consistent with the hypotheses. Mothers' SEMAI predicted child delinquency through the sequential mediation of PSE and parental rejection.

Test of indirect effect. The path model shows that the relation between SEMAI and child delinquency is mediated by PSE and parental rejection, in sequence. The significance of this indirect effect was tested using bootstrapping, which is a valid and powerful method for testing indirect effects and does not assume normality of the sampling distribution (Hayes, 2009). In addition, bootstrapping can be used for testing indirect effects in various models; in this case, the serial multiple mediation model. Bootstrapping was done using the PROCESS macro for SPSS provided by Hayes (2012). PROCESS generates 95% bias-corrected bootstrap confidence intervals for the indirect effect using 10,000 bootstrap samples. An indirect effect is considered significant if the resulting 95% confidence interval does not include zero. Using this procedure, the indirect effect of maternal SEMAI on child delinquency through the sequential mediation of PSE and parental rejection was significant with a point estimate of -.0157 (bootstrap SE = .0132), 95% CI [-.0618, -.0016].

Test for model invariance across socioeconomic status and child gender. Contextual factors that may affect the relations of the variables under study were also explored. In particular, the relations between parenting cognitions, behaviors, and child outcomes may vary depending on economic status (Ardelt & Eccles, 2001) and child gender (Deater-Deckard & Dodge, 1997). Post hoc analyses

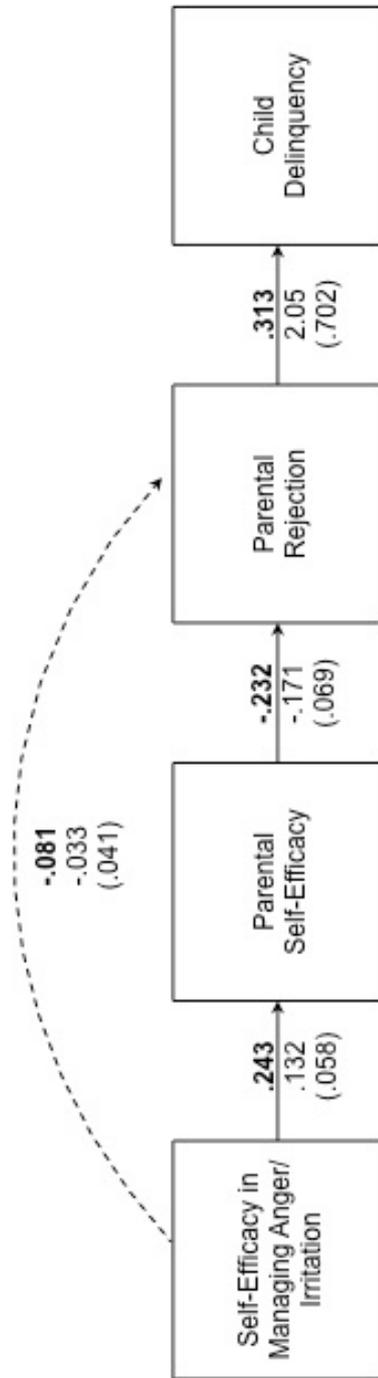


Figure 2. Final path model of the relations among SEMAI, PSE, parental rejection, and child delinquency, with standardized (in bold) and unstandardized coefficient estimates (standard errors). All paths with solid lines were significant at $p < .05$. Path with broken line was not significant. $\chi^2(2, N = 99) = 1.9023, p = .386$; NFI = .920, NNFI = 1.017, CFI = 1.000, RMSEA = .000.

were performed to test model invariance, first, across family income (i.e., low- versus middle- and high-income) and second, across child gender (boys versus girls). For each, we first evaluated a multigroup model where paths are constrained to be equal between the groups, and compared this with an unconstrained model. For socioeconomic status, the fully constrained model had poor fit; χ^2 (8, Ns = 72 low-income and 48 high-income) = 9.214, p = .325; NFI = .695; NNFI = .702; CFI = .881; RMSEA = .036; and did not differ significantly from the unconstrained model, χ^2 diff(4) = 3.106, p = .540. This suggests that the paths were invariant for low- and mid/high-income mothers. For child gender, the fully constrained model showed adequate fit; χ^2 (8, Ns = 61 boys and 59 girls) = 7.251, p = .510; NFI = .752; NNFI = 1.202; CFI = 1.000; RMSEA = .000; and did not differ significantly from the unconstrained model χ^2 diff(4) = 1.544, p = .819. This shows that the proposed paths of influence hold for both boys and girls.

DISCUSSION

We tested a model in which Filipino mothers' SEMAI influenced child delinquency through two parenting variables: parental self-efficacy and parental rejection. Evidence emerged to support the hypothesized path model and the predicted relations, with the exception of the hypothesized direct link between SEMAI and parental rejection. Although the design of the study precludes causal inferences, the finding that the predictor and mediator variables measured at one point are associated with child delinquency at a later time point supports the model's temporal assumptions.

Filipino mothers' SEMAI indirectly contributed to child delinquency via two parenting variables, PSE and parental rejection. Mothers' beliefs in their ability to ameliorate and control their anger predicted more efficacious beliefs in their parenting, similar to the finding of Caprara and Steca (2006). Higher PSE is then related to lower tendencies to be rejecting towards children, a finding that coincides with earlier studies (e.g., Sanders & Woolley, 2005). Finally, consistent with the literature (e.g., Hovee et al., 2009), mothers who were more rejecting of their child reported subsequently higher incidence of child delinquency.

The proposed direct link between SEMAI and parental rejection, however, was not supported. Instead, their relation is fully mediated by PSE. This specific finding is not consistent with the literature (e.g., Peterson et al., 1994) and needs to be clarified in future studies, perhaps using measures specific to managing negative emotions in the domain of parenting. Because the measure for SEMAI focused on anger in general, not specifically in the context of parenting or the family, it is possible that mothers reflected on their experiences outside the home or in situations that may not have to do with their child. This may have resulted in the lack of direct association between SEMAI and parental rejection. Between SEMAI and PSE, it is conceivable that mothers rely more on their PSE in preventing themselves from resorting to rejecting parenting practices. This may be particularly true for Filipino parents who regard their child's behavior, whether positive or negative, as a reflection of the quality of their parenting (Durbrow et al., 2001; Alampay & Jocson, 2011).

Notwithstanding the foregoing, maintaining a strong belief in one's ability to manage anger is associated with mothers' higher beliefs in their competence in childrearing, which is then related to lower rejecting behaviors with children and ultimately lower reports of child delinquency. Simons and Gordon (2006) explained that rejected children experience a lot of anger and develop a distorted and negative view of the world and, thus, become more prone to delinquency. If mothers are more confident in their ability to manage their negative emotions, this could lead to more competent parent efficacy beliefs and behaviors that can protect children from delinquency. Post hoc analyses indicate that these relations hold regardless of socioeconomic status and child gender.

The present findings corroborate the pivotal role of self-efficacy beliefs in human agency (Bandura, 1997). This study also provided empirical evidence that extends the role of self-efficacy in managing negative emotions, specifically anger, in influencing parents' behavior and ultimately, child development. Such is the power of belief in one's capability, that it can impact one's own behavior and the behaviors of those with whom the individual interacts.

The paths of influence suggested by this study may guide interventions. Specifically, efforts to prevent child delinquency may

include targeting parents' efficacy beliefs. Self-efficacy beliefs are dynamic and can be changed through enactive mastery experience, modeling, and verbal persuasion (see Bandura, 1997). Although a number of parenting interventions to reduce child behavior problems target PSE (e.g., Miller-Heyl, MacPhee, & Fritz, 1998), this study suggests that parental SEMAI can also be strengthened to address child behavior problems and prevent child maltreatment.

Finally, this study focused on SEMAI and PSE, but it is also possible that other efficacy beliefs contribute to healthy parent-child relationships and positive child development. In the domain of emotions, there is already evidence that efficacy in managing positive and negative emotions affects PSE (Caprara & Steca, 2006). As different emotions have different effects, it is also important to evaluate such efficacy beliefs in various emotions independently and in interaction with self-efficacy in other domains, and how these may affect parenting and child development. As one of the few studies that focused on emotion regulation self-efficacy, this paper highlighted the need for researchers to pay more attention to the various efficacy beliefs that parents hold and how these can influence their parenting and child development.

Limitations

One limitation of this study was the use of mother reports as the source of data for all variables. This opens the data to possible respondent bias and errors due to common method variance. In particular, mothers may overreport positive parenting qualities and underreport negative parenting practices and child behavior. In addition, mothers may not be fully accurate in reporting on their child's behaviors and characteristics outside of their home. The use of multiple informants will increase the validity and reliability of the data.

Although path analysis was used with data from two time points, causation still cannot be inferred from the correlational data. We argued in support of a specific direction of influence (i.e., SEMAI affects PSE), but the findings do not eliminate the possibility of inverse or reciprocal relations among the variables. It is conceivable that because mothers

engage in rejecting parenting, they feel less competent as parents or believe they are unable to control their anger, and child delinquency may elicit more parental anger and rejection. Longitudinal research can help to validate the hypothesized direction of the relations and further support possible causality.

To conclude, the relations between SEMAI, PSE, parental rejection, and child delinquency reported in this study have important theoretical and practical implications. Self-efficacy in managing anger and irritation, in particular, has not previously been considered in the context of parenting and child development. This study found that Filipino mothers' self-efficacy beliefs in their competence to manage anger are indeed associated with their beliefs in their ability to parent effectively, whether they engage in rejecting parenting behaviors, and their child's propensity to delinquency. These results support Bandura's proposition that efficacy beliefs affect each other, such as in the case of SEMAI positively relating with PSE. The model provides additional direction as to the specific parenting factors and processes that can be targeted to prevent child delinquency.

AUTHORS' NOTES

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REFERENCES

- Achenbach, T. M. (1991). *Integrative guide for the 1991 CBCL 14-18, YSR, and TRF Profiles*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Alampay, L. P. (2014). Parenting in the Philippines. In H. Selin & P. Schvaneveldt (Eds.), *Parenting across cultures: Childrearing, motherhood and fatherhood in Non-Western cultures* (pp. 105-122). The Netherlands: Springer.
- Alampay, L., & Jocson, M. M. (2011). Attributions and attitudes of

- mothers and fathers in the Philippines. *Parenting: Science & Practice*, 11, 163-176.
- Ardelt, M., & Eccles, J., (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family Issues*, 22, 944-972.
- Averill, J. R. (1983). Studies on anger and aggression: Implications for theories of emotion. *American Psychologist*, 38, 1145-1160.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bandura, A., Caprara, G., Barbaranelli, C., Gerbino, M., & Pastorelli, C. (2003). Role of affective self-regulatory efficacy in diverse spheres of psychosocial functioning. *Child Development*, 74, 769-782.
- Bentler, P. M. (2006). *EQS: Structural equation modeling software (6)* [Software]. Encino, CA: Multivariate Software.
- Bogenschneider, K., Small, S. A., & Tsay, J. C. (1997). Child, parent, and contextual influences on perceived parenting competence among parents of adolescents. *Journal of Marriage and the Family*, 59, 345-362.
- Burrous, C., Crockenberg, S. C., & Leerkes, E. M. (2009). Developmental history of care and control, depression and anger: Correlates of maternal sensitivity in toddlerhood. *Infant Mental Health Journal*, 30, 103-123.
- Caprara, G., & Steca, P. (2006). The contribution of self-regulatory efficacy beliefs in managing affect and family relationships to positive thinking and hedonic balance. *Journal of Social and Clinical Psychology*, 25, 603-627.
- Caprara, G., Di Giunta, L., Eisenberg, N., Gerbino, M., Pastorelli, C., & Tramontano, C. (2008). Assessing regulatory emotional self-efficacy in three countries. *Psychological Assessment*, 20, 227-237.
- Cummings, E., & Davies, P. (1994). Maternal depression and child development. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 35, 73-112.
- Deater-Deckard, K., & Dodge, K. A. (1997). Externalizing behavior problems and discipline revisited: Nonlinear effects and variation by culture, context, and gender. *Psychological Inquiry*, 8, 161-175.
- Dix, T. (1991). The affective organization of parenting: Adaptive and

- maladaptative processes. *Psychological Bulletin*, *110*, 3-25.
- Dix, T., Gershoff, E. T., Meunier, L. N., & Miller, P. C. (2004). The affective structure of supportive parenting: Depressive symptoms, immediate emotions, and child-oriented motivation. *Developmental Psychology*, *40*, 1212-1227.
- Downey, G., Purdie, V. & Schaffer-Neitz, R. (1999). Anger transmission from mother to child: A comparison of mothers in chronic pain and well mothers. *Journal of Marriage and Family*, *61*, 62-73.
- Durbrow, E. H., Peña, L. F., Masten, A. A., Sesma, A. A., & Williamson, I. I. (2001). Mothers' conceptions of child competence in contexts of poverty: The Philippines, St Vincent, and the United States. *International Journal of Behavioral Development*, *25*, 438-443.
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, *9*, 241-273.
- Enrile, A., & Agbayani, P. (2007). Differences in attitudes towards women among three groups of Filipinos: Filipinos in the Philippines, Filipino American immigrants, and U.S.-born Filipino Americans. *Journal of Ethnic and Cultural Diversity in Social Work*, *16*, 1-25.
- Farrington, D. (1995). The Twelfth Jack Tizard Memorial Lecture. The development of offending and antisocial behaviour from childhood: Key findings from the Cambridge Study in Delinquent Development. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, *36*, 929-964.
- Frude, N. N., & Goss, A. A. (1979). Parental anger: A general population survey. *Child Abuse and Neglect*, *3*, 331-333.
- Garcia, A. S. (2012). *Relations between experience of stressful life events, child externalizing behavior, and parental hostility and aggression: Parental efficacy as moderator* (Unpublished Master's thesis). Ateneo de Manila University, Quezon City, Philippines.
- 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*, 861-868.
- Green, S. S., & Baker, B. B. (2011). Parents' emotion expression as a predictor of child's social competence: Children with or without

- intellectual disability. *Journal of Intellectual Disability Research*, 55, 324-338.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76, 408-420.
- Hayes, A. F. (2012). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling*. [Cited 3 Sep 2012] Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hill, N. E., & Bush, K. R. (2001). Relationships between parenting environment and children's mental health among African American and European American mothers and children. *Journal of Marriage and Family*, 63, 954-966.
- Hoeve, M., Dubas, J., Eichelsheim, V., van der Laan, P., Smeenk, W., & Gerris, J. (2009). The relationship between parenting and delinquency: a meta-analysis. *Journal of Abnormal Child Psychology*, 37, 749-775.
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review*, 25, 341-363.
- Lansford, J., Alampay, L., Al-Hassan, S., Bacchini, D., Bombi, A., Bornstein, M., . . . Zelli, A. (2010). Corporal punishment of children in nine countries as a function of child gender and parent gender. *International Journal of Pediatrics*, 2010, 1-12.
- Leung, D. W., & Smith Slep, A. (2006). Predicting inept discipline: The role of parental depressive symptoms, anger, and attributions. *Journal of Consulting and Clinical Psychology*, 74, 524-534.
- Lightsey, O., Maxwell, D., Nash, T., Rarey, E., & McKinney, V. (2011). Self-control and self-efficacy for affect regulation as moderators of the negative affect-life satisfaction relationship. *Journal of Cognitive Psychotherapy*, 25, 142-154.
- Lorber, M. F., O'Leary, S. G., & Smith Slep, A. M. (2011). An initial evaluation of the role of emotion and impulsivity in explaining racial/ethnic differences in the use of corporal punishment. *Developmental Psychology*, 47, 1744-1749.
- Meunier, J., Roskam, I., & Browne, D. (2010). Relations between parenting and child behavior: Exploring the child's personality

- and parental self-efficacy as third variables. *International Journal of Behavioral Development*, 35, 246-259.
- Miller-Heyl, J., MacPhee, D., & Fritz, J. J. (1998). DARE to be you: A family-support, early prevention program. *The Journal of Primary Prevention*, 18, 257-285.
- Murdock, K. W. (2012). An examination of parental self-efficacy among mothers and fathers. *Psychology of Men & Masculinity*, 14, 314-323.
- Narayan, A. J., Herbers, J. E., Plowman, E. J., Gewirtz, A. H., & Masten, A. S. (2012). Expressed emotion in homeless families: A methodological study of the five-minute speech sample. *Journal of Family Psychology*, 26, 648-653.
- Peterson, L., Ewigman, B., & Vandiver, T. (1994). Role of parental anger in low-income women: Discipline strategy, perceptions of behavior problems, and the need for control. *Journal of Clinical Child Psychology*, 23, 435-443.
- Putnick, D., Bornstein, M., Lansford, J., Dodge, K., Skinner, A., Chang, L., . . . Bacchini, D. (2012). Agreement in mother and father acceptance-rejection, warmth, and hostility/rejection/neglect of children across nine countries. *Cross-Cultural Research*, 46, 191-223.
- Rivers, S. E., Brackett, M. A., Katulak, N. A., & Salovey, P. (2007). Regulating anger and sadness: An exploration of discrete emotions in emotion regulation. *Journal of Happiness Studies*, 8, 393-427.
- Rohner, R. P. (2004). The parental 'acceptance-rejection syndrome': Universal correlates of perceived rejection. *American Psychologist*, 59, 830-840.
- Rohner, R. P. (2005). Parental acceptance-rejection/control questionnaire (PARQ/Control): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (pp. 137-186). Storrs, CT: Center for the Study of Parental Acceptance and Rejection, University of Connecticut.
- Sanders, M., & Woolley, M. (2005). The relationship between maternal self-efficacy and parenting practices: Implications for parent training. *Child: Care, Health and Development*, 31, 65-73.
- Savalei, V., & Bentler, P. M. (2006). Structural equation modeling. In R. Grover & M. Vriens (Eds.), *The handbook of marketing*

research: Uses, misuses, and future advances (pp. 330-364). California: Sage Publications.

- Shumow, L., & Lomax, R. (2002). Parental efficacy: Predictor of parenting behavior and adolescent outcomes. *Parenting: Science and Practice, 2*, 127-150.
- Simons, R., & Gordon, L. (2006). Identifying the psychological factors that mediate the association between parenting practices and delinquency. *Conference Papers - American Sociological Association*, 1-23.
- Teti, D. M., & Cole, P. M. (2011). Parenting at risk: New perspectives, new approaches. *Journal of Family Psychology, 25*, 625-634.
- Teti, D. M., & Gelfand, D. M. (1991). Behavioral competence among mothers of infants in the first year: The mediational role of maternal self-efficacy. *Child Development, 62*, 918-929.
- Virola, R. A. (2010). *How rich is rich?* Retrieved January 21, 2013 from http://www.nscb.gov.ph/headlines/StatsSpeak/2010/061510_rav_joe.asp#f1
- Weaver, C., Shaw, D., Dishion, T., & Wilson, M. (2008). Parenting self-efficacy and problem behavior in children at high risk for early conduct problems: The mediating role of maternal depression. *Infant Behavior and Development, 31*, 594-605.