The Relations of Parental Emotional Expressivity With Quality of Indonesian Children's Social Functioning

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In Western societies, parental expression of positive emotion has been positively related to the quality of children's social functioning, whereas their expression of negative emotion has been negatively or inconsistently related. The relations of parental expressivity to 3rd-grade Indonesian children's dispositional regulation, socially appropriate behavior, popularity, and sympathy were examined. Parents, teachers, and peers reported on children's social functioning and regulation, and parents (mostly mothers) reported on their own expression of emotion in the family. Generally, parental expression of negative emotion was negatively related to the quality of children's social functioning, and regression analyses indicated that the relations of parental negative expressivity to children's popularity and externalizing behaviors might be indirect through their effects on children's regulation. Unexpectedly, parental expression of positive emotion was unrelated to children's social functioning.

In recent years, numerous investigators have proposed that parental socialization of children's emotional responding has important implications for the quality of children's social functioning (e.g., Denham, 1998; Eisenberg, Cumberland, & Spinrad, 1998; Parke & Buriel, 1998). An aspect of parental socialization of emotion that has frequently been discussed is family expressiveness. Family expressiveness reflects family members' tendencies to express the emotions they feel, often in situations that do not directly involve a particular child and when the emotion is not directed toward a given child. Parental expressivity (expressivity of a particular parent in the family) is often used as an index of family expressiveness, although a given parent is only one of the family members contributing to overall expressiveness. Family or parental expressiveness is often assessed with parent reports (Bronstein, Fitzgerald, Briones, Pieniadz, & D'Ari, 1993; Halberstadt, Cassidy, Stifter, Parke, & Fox, 1995).

Theoretical Perspectives

Family or parental expressivity is believed to influence children's social and emotional development in a variety of ways. Parke and Buriel (1998) proposed a model in which parental emotional expressiveness affects children's decoding and encoding skills, understanding of the emotional causes and consequences, understanding and use of display rules, and emotion...
regulation. In turn, these skills affect the quality of children's interaction with peers and their sociometric status. These researchers argued that in children's interactions with their parents that involve emotional signals, they have opportunities to learn to decode signals and use them to regulate the social behavior of others.

Similarly, Eisenberg, Cumberland, and Spinrad (1998) suggested that parental or family expressivity affects children's expression of emotion in multiple ways. For example, through imitation and contagion, parents who express positive emotions may foster children's expression of similar emotions, and children who are emotionally positive are likely to be more socially competent and well-adjusted than are less positive children (e.g., Fabes & Eisenberg, 1992; Hubbard & Coie, 1994; Isley, O'Neil, Clatfelter, & Parke, 1999). Parental expressivity may also mediate the effects of other parenting-related variables on children's emotional and social competence, such as parental hostility, support, stress, or feelings of incompetence as a parent (although most work on this topic has assessed parental expression of emotion directed toward a child [e.g., Bugental, Blue, & Cruzcosa, 1989; Matthews, Woodall, Kenyon, & Jacob, 1996]). Moreover, parental expressivity may affect children's perceptions of themselves and others, as well as their expectations regarding normative emotional experiences and expressions (Dunsmore & Halberstadt, 1997). Finally, parental expressivity may contribute to children's abilities to interpret others' emotional reactions and their understanding of the consequences of the expression of various types of emotion, as well as their beliefs about how much and what types of emotional expressions are appropriate and effective in social interactions (Denham, Zoller, & Couchoud, 1994; Dunn & Brown, 1991; Eisenberg, Cumberland, & Spinrad, 1998).

Eisenberg, Cumberland, and Spinrad (1998) further suggested that some of the influence of parental or family expressivity (and other aspects of emotion socialization) on children's social behavior is due to its effect on children's arousal in a specific context and on children's regulation. Whereas emotion regulation generally has been defined as modulating or controlling internal (or experiential) states related to emotion, emotion-related regulation can also include modulating or controlling behavioral manifestations related to emotion. Although definitions vary somewhat, emotion-related regulation can be defined as the process of initiating, inhibiting, maintaining, modulating, or changing the occurrence, intensity, or duration of internal feeling states, emotion-related physiological processes and motivational states, and the behavioral concomitants of emotion (Eisenberg, Fabes, Guthrie, & Reiser, 2000; see also Thompson, 1994). The concomitants of emotion include facial and gestural reactions and other behaviors that stem from, or are associated with, internal emotion-related psychological or physiological states and goals. Therefore, emotion-related regulation includes that modulation and control of the experience of emotion and its expression.

Emotion-related regulation often involves effortful control, a construct discussed by Rothbart and colleagues (e.g., Ahadi & Rothbart, 1994; Rothbart, Ahadi, & Evans, 2000). Effortful control is defined as "the ability to inhibit a dominant response to perform a subdominant response" (Rothbart & Bates, 1998, p. 137). It involves both attentional regulation (e.g., the ability to voluntarily focus attention as needed) and behavioral regulation (e.g., the ability to inhibit behavior as appropriate, especially in evocative situations). For example, children can effortfully shift their attention or focus on neutral or positive stimuli to defuse emotional responding and inhibit facial or gestural reactions to an emotion if deemed appropriate in the given context.

The regulation of both emotional experience and emotion-related behavior are believed to affect the quality of children's social functioning. Consistent with this expectation, effortful control (including attentional and behavioral regulation) has been related to low levels of, or better modulated, negative emotionality (Derryberry & Rothbart, 1988, 1997; Kochanska, Coy, Tjebbes, & Husarek, 1998); high levels of empathy, prosocial behavior, and conscience (Eisenberg, Fabes, Karbon, et al., 1996; Kochanska, Murray, & Coy, 1997; Kochanska, Murray, Jacques, Koenig, & Vandeegeest, 1996; Rothbart, Ahadi, & Hershey, 1994); and social competence and low levels of externalizing behaviors (e.g., Eisenberg, Fabes, Guthrie, et al., 1996; Rothbart et al., 1994; see Eisenberg et al., 2000, for a review).

Although a child's regulatory abilities are thought to derive in part from his or her temperament, experience plays a role in shaping the expression of temperament (Eisenberg et al., 1999; Rothbart & Bates, 1998). Children's abilities to regulate their attention, emotion, and behavior are believed to be embedded in the context of social relationships (Campos, Campos, & Barrett, 1989; Walden & Smith, 1997), and children's self-regulation can be fostered by, and perhaps partly learned from, their parents (Gottman, Katz, & Hooven, 1996, 1997; Kopp, 1982).

For example, if parental expression of emotion in
the home is positive, children are unlikely to become overaroused in emotional or stressful situations. Thus, they may be better able, and more motivated, to process parents’ messages and other relevant information to manage their emotion and behavior, and to accurately identify family members’ goals and expectations (Dix, 1991, 1992; Hoffman, 1983). In contrast, if children are exposed to frequent negative emotion, especially hostile negative emotion, they would be expected to be prone to overarousal and to be relatively unregulated and unlikely to process information in an optimal manner. Exposure to negative expressivity when children experience negative emotions themselves may also cause children to associate the expression of negative emotion with internal negative arousal (Buck, 1984), which could undermine both children’s regulation in a specific context and their development of competent regulatory capacities.

Another theoretical argument regarding the effects of parental expressivity relates to children’s sense of security. Davies and Cummings (1994) argued that children’s exposure to adults’ conflict in the home (generally as evidenced by the expression of negative emotion) results in children’s emotional insecurity, which undermines children’s regulation of emotional arousal and adjustment. Cummings and Davies (1996) asserted that emotional security is a goal that motivates children’s regulatory processes, and that problems of emotion regulation associated with emotional insecurity can accumulate as a function of negative experiences in the family and result in a dysfunctional regulatory pattern. Negative emotion, especially hostile negative emotion, either directed toward the child or as a continuous presence in the home, is likely to reduce children’s sense of security. Children may view this as signaling a lack of parental acceptance of themselves or their behavior, which could result in emotional arousal and self-focused emotions and cognitions.

Empirical Evidence

Research in Western culture supports the conclusion that parental expression of positive emotion is associated with children’s social competence, emotional understanding, prosocial behavior, high self-esteem, security of attachment, positive emotionality, and positive parent–child relationships (Boyum & Parke, 1995; Cassidy, Parke, Butkovsky, & Braungart, 1992; Halberstadt, Crisp, & Eaton, 1999). In contrast, parental expression of negative emotion tends to be negatively or inconsistently related to positive developmental outcomes (e.g., low aggression, socially appropriate behavior, popularity, an understanding of emotions) for children (Halberstadt et al., 1999). In a recent study, parental anger expressed in dyadic and triadic family interactions predicted externalizing behaviors (problem behaviors that are expressed outwardly, such as aggression, defiance, stealing, and lying), especially for children initially high in problem behavior. Parent-reported dispositional hostility was positively correlated with children’s externalizing behaviors but usually did not predict them 2 or 4 years later, when parental anger during interactions with their children and prior levels of externalizing behavior were controlled in analyses (Denham et al., 2000). Parent-reported negative affect during parenting interactions has also been related to low levels of empathy and conscience (e.g., Hastings, Zahn-Waxler, Robinson, Usher, & Bridges, 2000). Other research indicates that children who are exposed to parents’ anger, conflict (Davies & Cummings, 1994), and marital discord (Buehler et al., 1997; Goodman, Barfoot, Frye, & Belli, 1999; Grych & Fincham, 1990; Katz & Gottman, 1991) tend to be at risk for behavior problems and low social competence.

The limited data also provide some support for an association between parental expressivity and children’s regulation. Gottman et al. (1996, 1997) found that parents who were supportive of their children in regard to encouraging the appropriate expression of emotion and who coached them about their emotions had children who were relatively competent in regulatory abilities. However, Gottman and his colleagues (1996, 1997) did not find a relation between children’s regulation and either parental derogatory behavior or parental scaffolding—praising (at least when other variables were controlled in a structural model), nor did they study parental expression of emotion in the home that was not directed toward the child. In a study of parental reactions to children’s expression of emotion, Eisenberg and her colleagues (Eisenberg et al., 1999) found that parents’ reports of punitive reactions to children’s negative emotions were negatively related to children’s dispositional regulation, with regulation and maternal punitive reactions affecting one another over time. These punitive reactions did not explicitly involve the expression of negative emotion; however, they likely communicated negative emotion to the child. In addition, mothers’ distress, avoidance, or discomfort in response to children’s negative emotions from age 6 to 8 years predicted children’s low levels of regulation 2 years later. Garner and Power (1996) found that preschool-
ers' positive (but not negative) displays of emotion when they received a disappointing prize (a measure of regulation) were related to low parental negative expressivity in the family. Perhaps most relevant, Eisenberg et al. (2001) found in a sample of mothers in the United States that their positive expressivity was positively related both to their own and to teachers' reports of children's regulation, whereas their hostile negative expressivity was negatively related.

Thus, there is conceptual and empirical work supporting associations of parents' positive and negative expressivity with children's regulation. In addition, limited data support the notion that regulation mediates the relation between family expressivity and children's adjustment and social competence. There is a growing body of literature consistent with this possibility, demonstrating a correlation between individual differences in children's regulatory abilities and their externalizing behaviors, social competence, and conscience (Caspi, Henry, McGee, Moffitt, & Silva, 1995; Eisenberg, Fabes, I. K. Guthrie, et al., 1996; Gottman et al., 1997; Kochanska, Murray, & Coy, 1997; Lengua, West, & Sandler, 1998; Rothbart et al., 1994). In addition, Eisenberg et al. (2001), in a structural equation model, found that the relation of maternal positive and negative expressivity to children's social competence and externalizing behaviors was indirect through children's regulation. Eisenberg et al.'s (2001) measure of maternal expressivity included both family expressivity and mothers' observed positive expressivity when interacting with their children.

Indonesian Culture and Emotional Expressivity

Most of the research on family expressivity has been conducted in Western industrialized cultures. Thus, it is not clear if the research findings reviewed previously hold true in other cultures. What is clear is that norms regarding emotional expressivity and the regulation of emotion vary across cultures. For example, in Japanese (Matsumoto, 1996), Inuit (Briggs, 1998), and Tamang (rural Nepal; Cole & Tamang, 1998) cultures, the expression of negative emotions, such as anger, is viewed in a relatively negative light. Even at 11 months of age, infants in the United States were more expressive of positive and negative emotions than Chinese infants (U.S. infants were more expressive than Japanese infants on only a few variables; Camras et al., 1998). By preschool age, U.S. children express more anger than Japanese children (Zahn-Waxler, Friedman, Cole, Mizuta, & Hiruma, 1996), and this difference is also evident in adulthood (Matsumoto, 1996). In addition, there is some evidence that U.S. mothers are more likely than Japanese mothers to encourage emotional expressivity in their children (Zahn-Waxler et al., 1996).

Although some cross-cultural differences in emotional expressivity could be due to heredity, cultural factors likely play a major role. Researchers have argued that people in collectivistic cultures value interpersonal goals and harmony, are very concerned with the consequences of their behavior on other members of the group (Markus & Kitayama, 1991; Matsumoto, 1996), and show great willingness to engage in prosocial behavior for the good of the group (Triandis, 1995). Thus, parents in collectivistic cultures may tend to discourage their children from expressing negative emotions that disrupt relationships among people. In contrast, because Western cultures tend to be individualistic, members of Western society, including parents, may value and endorse the expression of emotion (especially negative emotion) more than those in collectivistic cultures (Zahn-Waxler et al., 1996).

The primary purpose of this study was to examine the relation between parental expressivity and children's socially appropriate and interpersonally competent behavior (including social skills, low externalizing behavior, peer popularity, and sympathy) in Indonesia. Indonesia is an interesting context in which to study this issue because Hofstede (1991) rated the Indonesian society of Java as being at the extreme end of collectivism. Descriptions of the culture are consistent with this finding (see below), although the educated elite in Indonesia (college students) may not be much higher on collectivism than are U.S. college students (Oyserman, Coon, & Kemmelmeier, in press). The nature of collectivism varies somewhat across cultures (Triandis, 1995), but maintaining personal relationships and interpersonal harmony with close group members generally are central values in collectivistic cultures (Markus & Kitayama, 1991; Oyserman, 1993; Triandis, 1995). Consequently, the socialization of emotion and social competence in Indonesia may be expected to differ considerably from socialization in less collectivistic societies, such as the United States.

Consistent with a collectivist orientation, traditional Javanese society has been described as emphasizing cooperation, conformity to authority, and harmonious relationships (i.e., rukun) (Koentjaraningrat, 1985). Koentjaraningrat (1985) asserted that Javanese children are expected to be quiet, obedient, respectful
of their parents, and emotionally reserved. According to Williams (1991), Javanese parents teach children that helping, sharing, and empathizing with others—components of socially competent behavior—are important virtues. Moreover, social scientists have described Javanese society and customs in ways that suggest a cultural emphasis on self-control. For example, Mulder (1989) argued that Javanese children are socialized to feel shame as a means of fostering conformity, self-control, and avoidance of conflict and confrontation. He asserted that the Javanese believe that “to become human is to learn order, inwardly and outwardly so. To know order is to know the rules, at the very least as far as they regulate outward behavior” (pp. 26–27). A cardinal ethical command is “to measure at oneself (tepa slira) what one’s words and actions will cause to the feelings of others or not to do to others that which one does not wish to have done to oneself” (p. 54). This includes commands such as “do not irritate the others” and “be careful not to hurt the other’s feelings” (p. 34). Mulder further noted that “emotion and feeling, intuition, empathy and sympathy, self-consciousness and appreciation of each other’s dignity: these are the valid guides in interaction, along with the suppression of conflict, the denial of frustration, and the mastery of negative emotions” (Mulder, 1996, pp. 102–103). Thus, self-control and the suppression of anger seem to be valued and are likely related to social competence in Javanese society. The expression of hostile or confrontational negative emotion would seem to be especially devalued; the expression of positive emotion may be valued primarily when it promotes interpersonal harmony and the well-being of others or the group.

Javanese individuals may differ from Westerners in the experience as well as the expression of emotion. Traditionally, the Javanese believe that the experience of negative emotion (e.g., anger) can make people sick and shorten their lives (Geertz, 1976; Wollenkamp, 1995). Wikan (1989) reported that people on Bali, the neighboring island, believe that shaping emotions is a collective concern; “It is rigidly enforced by stringent moral sanctions, and requires an effort to sustain” (pp. 294–295). Thus, in some parts of Indonesia, controlling the experience of emotion is believed to be essential for communal cooperation and good health.

There is very little relevant empirical work in Indonesia that is published in English. Nonetheless, some findings are consistent with the assertion that Javanese people are expected to suppress their emotional displays. In a study of Indonesian children’s play behavior with their mothers and older siblings, Farver and Wimbarti (1995) found that mother–child play tended to be quiet and reserved compared with sibling–child play. Even though similar patterns of play may be seen in the United States, Indonesian parents likely impose their expectations in regard to the expression of emotion and regulation when interacting with their children. Farver and Wimbarti, like Williams (1991), argued that Javanese children are socialized to maintain harmonious social relationships and to mask their emotions. Consistent with their assertions, French et al. (2000) found that youths in the United States reported more conflict in their friendships than Indonesian youths, who reported more help-giving. Moreover, French, Setiono, and Eddy (1999) found that Javanese peers’ (but not adults’) ratings of anxiety were associated with negative peer sociometrics (there were no associations for positive sociometrics), suggesting that the expression of negative emotion, even if it is not hostile, is linked to rejection by Indonesian peers.

On the basis of the limited available work, one would expect containment of hostile negative emotion to be culturally valued in Java, even more so than in the United States. Thus, parental expression of such emotion was expected to be negatively related to children’s regulation and social competence, including socially appropriate behavior, sympathy, and popularity with peers. In contrast, parental expression of positive emotion was expected to be positively related to children’s social competence, if it was related at all. Given the general emphasis in Java on the control of emotion, it is unclear if high levels of positive parental expressivity, if not used primarily to convey warmth and support directly to the child, would correlate with children’s social competence. High intensity or frequent positive emotion may be viewed as acting silly or as disruptive to social interactions; therefore, parents may constrain their expression of positive emotion, as well as their children’s.

The assumption was that in most cultures, peer acceptance and adults’ reports of socially appropriate behavior, low externalizing behaviors, and sympathy would be valid indexes of social competence. However, given the cultural emphasis in Java on behaving in the expected manner, sympathy, and prosocial behavior, behaviors such as sympathy and low aggression would be expected to be especially valued. Consistent with this notion, French et al. (1999) found negative relations between peers’, teachers’, and parents’ ratings of 5th-grade students’ aggression and
their sociometric status—findings similar to those in the United States. Thus, the aforementioned measures of social functioning were expected to be linked to both optimal parental socialization of emotion (i.e., low levels of expression of hostile emotion) and children's regulation.

The aforementioned hypotheses were tested with correlational analyses and regression procedures. With regressions, we examined whether the relation between parental expressivity and children's social functioning might be mediated by children's regulation. However, because the data are concurrent and correlational, it was not possible to prove causality; all we could do was determine whether mediation is a statistical possibility in the given data set. Although we hypothesized that parental expressivity would predict aspects of children's social functioning, it is also quite possible that children's regulation affects parental expressivity and that, over time, relations between parental expressivity and child regulation or outcomes are reciprocal (Bell, 1977). Children who are not socially skilled, who engage in problematic behavior, and who are unsympathetic or do not get along with peers may be challenging for parents and could engender more negative emotion in the home. Indeed, initial evidence suggests that reciprocal effects do occur (Eisenberg et al., 1999; Patterson, 1982). Moreover, heredity might account for some of the predicted relations. For example, negative emotionality has some hereditary basis (Plomin & Stocker, 1989), so heredity may contribute to both parents' expression of hostile emotion and children's aggression and difficulties in peer relationships.

Method

Participants

Participants were 127 Indonesian children (58 girls, 69 boys; mean age = 109.41 months, SD = 4.75 months, range = 94–132) from three 3rd-grade classes of a public school in Bandung, Indonesia. Bandung, located approximately 180 km from Jakarta on the island of Java, has a population of over 1 million people and is a center for education and technological development (French et al., 1999). Ninety-seven percent of the children lived in a two-parent household, 2% lived in a one-parent household, and 1% lived within an extended family. Consistent with the dominance of Muslims in Java, 96% were Muslim and 4% were Christian. Many of the children were Javanese, several of them were part Sundanese, and a few of them came from other islands (e.g., Sumatra and Celebes). In Bandung, as in this school, many children are of mixed heritage. The school was a private public school rather than a government public school, which means that families pay higher tuition than for government-run schools. Thus, the sample was middle class and many parents (especially fathers) were professionals (e.g., bank officials, doctors, lawyers, businessmen). About 50% of the mothers worked, often in white-collar jobs.

Procedure

All questionnaires were translated into Indonesian by Sri Pidada and back-translated by an Indonesian graduate student. Few disagreements in meaning were found, and those that occurred were resolved by consensus. Questionnaires were distributed to parents (124 mothers and 3 fathers), teachers, and children. Parents who participated were invited to the school on one of three Saturday sessions. The experimenters provided general instructions to parents who completed the measures at school. Some parents did not have time to complete the measures at the school and completed the questionnaires at home (parents of 18 children did not return questionnaires). Teachers completed measures on children’s social functioning and regulation and were given instructions to ensure that they understood the items and the scales.

Parents and teachers were told that the investigators (including Sri Pidada, who is principal of the school) were conducting research on children of the given age and wanted to know how children of that age express their emotions and react to certain situations. They were also told that their help was needed because they (teachers and parents) knew and could describe the children well. The investigator emphasized that there were no right or wrong answers and that parents and teachers should simply report what they had seen. Parents and teachers were told that the research had nothing to do with the children’s school performance or evaluations and that it concerned all children in the age group, not individual children. The principal left after introducing students from the university to the parents and teachers, and these students collected the data from the participants (including the children). Neither the principal nor the teachers were involved in any data collection with parents or children.

An experimenter read the items of the child measures to the children individually. Children were given instructions similar to those provided to adult reporters. They were told something similar to, “you would help me very much when you tell me how you
Parents' Expressiveness

Parents' expressiveness in the Family Questionnaire. The question-naire assesses how frequently the given parent expresses emotions with family members that are positive (e.g., “Expressing excitement over future plans,” “Expressing gratitude for a favor”; some items that were not on the short scale were dropped; 14 items), negative–dominant (e.g., “Showing contempt for another’s action,” “Quarreling with a family member,” “Threatening someone”; 10 items), and negative–submissive (e.g., “Crying after an unpleasant disagreement,” “Sulking over unfair treatment by a family member,” “Showing how upset you are after a bad day,” “Apologizing for being late”; 10 items). Items in the negative–submissive scale tend to pertain to displays of emotion that are not directly confrontational or hostile, although some could be manipulative or hurtful. Items on the negative–dominant scale pertain to more hostile and abrasive expressions of negative emotion. Items were rated on a 9-point scale, indicating how frequently the parent expressed the various emotions from 1 (rarely express these feelings) to 9 (frequently express these feelings). Alphas for positive, negative–dominant, and negative–submissive subscales were .90, .74, and .71, respectively.

Children's Regulation

Measures of children’s regulation consisted of parents’ and teachers’ reports of children’s attentional control and inhibition control.

Rothbart’s Child Behavior Questionnaire (CBQ; Rothbart et al., 1994), a measure of temperament, was used to measure dispositional regulation. This instrument was designed by Rothbart to describe discrete, observable behaviors expected to reflect temperament rather than the outcomes of temperament (e.g., social competence or problem behavior). Because of the potential for overlap between measures of temperament and externalizing behaviors (Sanson, Prior, & Kyrios, 1990), some investigators believe it is important to ensure that the items tapping regulation and child outcomes are not confounded. Nonetheless, investigators have found less confounding of measures of temperament (including regulation) and externalizing behaviors (Lengua et al., 1998; Sanson, Smart, Prior, Oberklaid, & Pedlow, 1994) in comparison with internalizing behaviors. Moreover, there is debate regarding the significance of any overlap in these measures (Bates, 1990).

Attentional control. Parents and teachers rated children’s attentional shifting and focusing on a 7-point scale from 1 (extremely untrue of your child) to 7 (extremely true of your child) with a subset of items from the CBQ (Rothbart et al., 1994). Accord-
ing to Rothbart’s standard procedures, the parent or teacher was asked to describe the child’s reactions in situations and told that there is no “correct” way of responding because children differ widely in their responses. Some items were slightly modified for teachers because the CBQ was designed for parents. Parents and teachers rated 10 items for attention shifting (e.g., “Can easily shift from one activity to another”; \( \alpha_s = .75, .70, .72, \) and \( .82 \) for parents and Teacher 1, 2, and 3). One additional item was dropped for all reporters because of low item-scale correlations. Parents rated 7 items for attention focusing (e.g., “Has difficulty leaving a project he/she has begun”; \( \alpha_s = .52 \); 2 additional reversed items were dropped because of low item-scale correlations and parents’ apparent difficulty with reversed items. Although this alpha is low, if attention shifting and focusing were combined (as they are; see below), the alpha for parents would be .75. Teachers rated the same 7 items as parents for attention focusing (\( \alpha_s = .61, .78, \) and \( .83 \) for Teachers 1, 2, and 3).

**Inhibitory control.** Parents and teachers also rated children on inhibitory control (e.g., “Can wait before entering into new activities if he/she is asked to”) by using the CBQ subscale and the response scale described above (13 items for parents and for teachers; \( \alpha_s = .70 \) for parents and \( .84, .89, \) and \( .85 \) for Teachers 1, 2, and 3).

**Data reduction for adult-reported regulation.** Parents’ reports of regulation included scores for attention shifting, attention focusing, and inhibitory control. A principle-components factor analysis with a varimax rotation yielded one factor that included all three subscales, with all scales loading at .80 or higher. Similarly, three separate factor analyses were computed for Teachers 1, 2, and 3. Factor analyses with varimax rotations yielded one factor for each of the teachers, with the three scales loading on this factor at .79 or higher for each teacher. It is not surprising that all three subscales loaded on the same factor for all reporters because correlations among the three scales ranged from .45 to .50 for parents and from .51 to .86 for individual teachers. Thus, for each reporter, these scales were standardized (with \( z \) scores) and averaged.

Next, regulation scores for the three teachers were combined. Scores for teachers’ reports on each of the three subscales were positively and significantly related. Intercorrelations of the three teachers’ ratings for attention shifting ranged from \( r(120) = .23, p < .009, \) to \( r(124) = .36, p < .001; \) intercorrelations among teachers for attention focusing ranged from \( r(120) = .39, p < .001, \) to \( r(123) = .55, p < .001; \) and intercorrelations for inhibitory control ranged from \( r(123) = .31 \) to \( r(120) = .39, p < .001. \) Correlations among teachers for their composite regulation scores ranged from .35 to .58, thus, the composite scores for the three teachers were standardized and averaged. A high score indicated a high level of regulation.

**Quality of Social Functioning**

Teachers, parents, and peers reported on children’s popularity and externalizing behaviors; only adults reported on children’s sympathy.

**Externalizing behaviors.** Children were rated on externalizing behaviors by parents and teachers by using the Lochman and Conduct Problems Prevention Research Group (1995) Child Problem Behavior Checklist. Twenty-three items were included (e.g., “teases other children,” “breaks things on purpose,” “defiant toward adults”); one item pertaining to setting fires was excluded. Items were rated on a 4-point scale from 1 (never) to 4 (often). Alphas were .83, .93, .90, and .94 for parents, Teacher 1, Teacher 2, and Teacher 3, respectively. Scores were positively related among the three teachers (\( rs \) ranged from .41 to .48) and were standardized and averaged.

Children also provided ratings on peers’ fighting behavior. They were asked to select four classmates, one after another, who “fight a lot.” First choices were weighted (multiplied) by 4, second choices by 3, third choices by 2, and fourth choices by 1 for same-sex and other-sex nominations. This is similar to methods used in the past (e.g., Hartup, Glazer, & Charlesworth, 1967; Eisenberg, Fabes, Karbon, et al., 1996). The weighted peer nominations were summed to arrive at separate scores for same-sex and other-sex nominations of fighting. These scores were standardized within class and averaged.

**Sympathy.** Parents and teachers rated children on sympathy with five scale items (e.g., “This child often feels sorry for others who are less fortunate”) vs. “This child does not often feel sorry for those who are less fortunate”; Eisenberg, Fabes, Murphy, et al., 1996; Eisenberg, Fabes, Shepard, et al., 1998). Alphas for parent, Teacher 1, Teacher 2, and Teacher 3 = .77, .87, .64, and .69, respectively. Intercorrelations among scores for teachers ranged from .10 (ns) to .19 (\( p < .039 \)), and scores were averaged across teachers on each item to increase reliability (Epstein, 1979).

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2 Relations with parent expressivity did not differ substantially if unweighted scores were used in analyses.
**Popularity.** Parents rated children on popularity with three scale items (e.g., “This child finds it hard to make friends” vs. “For this child, it’s pretty easy to make friends”; α = .75; Eisenberg, Fabes, Karbon, et al., 1996). Teachers rated children on popularity with two items (α = .81, .63, and .70 for Teachers 1, 2, and 3, respectively). One item (“This child is popular with others his/her age” vs. “This child is not very popular”) was dropped for teachers because it lowered the alphas (because of low item-scale correlations). Intercorrelations of scores for teachers ranged from .18 (p < .048) to .41 (p < .001) and scores were standardized and averaged to increase the reliability of the scale (α = .71).

Peers also provided information regarding children’s popularity. Children selected four peers, one after another, whom they liked the most. First choices were weighted (multiplied) by 4, second choices by 3, third choices by 2, and fourth choices by 1 separately for same-sex peers and other-sex peers (children could nominate peers of either sex). Because children were asked to name one child after another, there were no tie scores reported. The weighted nominations were summed to compute separate scores for being “liked most” by same-sex and other-sex peers. These two scores were standardized within class and averaged.

**Results**

**Descriptive Statistics**

Means and standard deviations for the major variables are presented in Table 1. Note that many means are 0 (or close to 0) because they are standardized scores or composites of standardized scores. Only peers’ reports of liking and teachers’ reports of externalizing behaviors were significantly related to age, rs(125) = .20 and .18, ps < .022 and .044. Gender was not significantly related to parent-reported expressiveness.

3 Girls scored lower than boys on parent-reported externalizing behavior and higher on sympathy, t(107, 103) = −2.44 and 3.60, p < .016 and .001, respectively. Teachers reported that girls were more regulated, popular, and sympathetic and scored lower on problem behaviors, ns(125) =

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</tr>
<tr>
<td>Positive</td>
<td>6.38</td>
<td>1.23</td>
<td>6.18</td>
</tr>
<tr>
<td>Negative–dominant</td>
<td>3.12</td>
<td>0.90</td>
<td>3.21</td>
</tr>
<tr>
<td>Negative–submissive</td>
<td>5.35</td>
<td>1.02</td>
<td>5.39</td>
</tr>
<tr>
<td>Regulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher 1, 2, 3 report</td>
<td>0.00</td>
<td>0.80</td>
<td>−0.29</td>
</tr>
<tr>
<td>Parent report</td>
<td>0.00</td>
<td>0.81</td>
<td>−0.07</td>
</tr>
<tr>
<td>Externalizing behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher 1, 2, 3 report</td>
<td>0.00</td>
<td>0.79</td>
<td>0.34</td>
</tr>
<tr>
<td>Parent report</td>
<td>2.00</td>
<td>0.33</td>
<td>2.07</td>
</tr>
<tr>
<td>Peer report (fights)</td>
<td>0.00</td>
<td>0.94</td>
<td>0.36</td>
</tr>
<tr>
<td>Sympathy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher 1, 2, 3 report</td>
<td>−0.01</td>
<td>0.69</td>
<td>−0.19</td>
</tr>
<tr>
<td>Parent report</td>
<td>3.37</td>
<td>0.42</td>
<td>3.24</td>
</tr>
<tr>
<td>Popularity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher 1, 2, 3 report</td>
<td>0.00</td>
<td>0.75</td>
<td>−0.15</td>
</tr>
<tr>
<td>Parent report</td>
<td>3.22</td>
<td>0.60</td>
<td>3.21</td>
</tr>
<tr>
<td>Peer report</td>
<td>−0.03</td>
<td>0.76</td>
<td>−0.10</td>
</tr>
</tbody>
</table>

*This measure was standardized within class for peer measures and within teacher before combining across teachers.

Means and standard deviations (in parentheses) for Teachers 1, 2, and 3 were 4.37 (0.65), 4.04 (0.48), and 4.26 (0.69) for attention shifting; 4.28 (0.64), 4.07 (0.58), and 4.42 (0.77) for attention focusing; 5.15 (0.73), 4.88 (0.62), and 5.01 (0.69) for inhibitory control; 1.73 (0.49), 1.85 (0.33), and 1.73 (0.48) for externalizing behavior; 3.33 (0.57), 3.00 (0.24), and 2.54 (0.35) for sympathy; and 3.39 (0.73), 3.25 (0.58), and 3.31 (0.54) for popularity.

These means do not include 1 participant who was an outlier on this measure.
Outlier analyses (using SPSS regression program) indicated only 1 outlier for peers’ reports of liking. This one variable was dropped for the one child.

**Correlations Among Types of Parental Expressivity**

Parental reports of expressing positive emotion in the home were significant and positively related to their reports of their own negative–submissive emotion, \( r(107) = .61, p < .001 \), but were unrelated to their reports of expressing negative–dominant emotion, \( r(107) = .11, ns \). Parents’ reports of negative–dominant and negative–submissive emotion were also positively related, \( r(107) = .34, p < .001 \). The correlation between positive and negative–submissive emotion is higher than has generally been found in the United States (e.g., Eisenberg et al., 2001).

**Correlations Between Parental Expressivity and Child Social Functioning**

Correlations between the negative components of parental expressivity and the 10 measures of children’s social functioning or regulation are presented in Table 2. Partial correlations controlling for gender were quite similar, and therefore are not presented.

In general, all significant relations between parental reports of negative expressivity and measures of functioning suggested a modest association between parental negative expressivity and poor regulation or social functioning in children. Correlations that were at least marginally significant ranged from .16 to .29 (in their absolute values; some correlations were negative). The pattern of findings suggested that parents who expressed relatively high levels of negative emotion tended to view their children negatively. However, their children also tended to be viewed somewhat negatively by teachers and peers. Specifically, parental reports of expressing dominant (i.e., hostile) negative emotion in the home were positively related to their reports of children’s externalizing behaviors and negatively related to their reports of sympathy; they also were negatively related to teachers’ reports of popularity and regulation (see Table 2).

Reports of expressing negative–submissive emotion were positively correlated with parents’ reports of externalizing behavior and negatively related to parents’

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4. Some variables were skewed. Correlations with transformed data were highly similar to those with untransformed data (e.g., no correlation of relevance differed more than .02 across transformed and nontransformed variables), so nontransformed means and correlations are presented.

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Table 2
Inter correlations Between Measures of Parental Expressivity and Measures of Children’s Regulation and Social Functioning

<table>
<thead>
<tr>
<th>Reports of child functioning</th>
<th>Parent positive expressivity</th>
<th>Parent negative–dominant expressivity</th>
<th>Parent negative–submissive expressivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation (P)</td>
<td>-.06 (.18f)</td>
<td>-.16</td>
<td>-.31** (-.35*** )</td>
</tr>
<tr>
<td>Regulation (T)</td>
<td>-.01 (.09)</td>
<td>-.20*</td>
<td>-.13 (-.16)</td>
</tr>
<tr>
<td>Externalizing (P)</td>
<td>.02 (-.16)</td>
<td>.21*</td>
<td>.24* (.28**)</td>
</tr>
<tr>
<td>Externalizing (T)</td>
<td>-.16 (-.18f)</td>
<td>.10</td>
<td>-.03 (.08)</td>
</tr>
<tr>
<td>Fighting (Peer)</td>
<td>.01 (-.04)</td>
<td>.11</td>
<td>.07 (.08*)</td>
</tr>
<tr>
<td>Sympathy (P)</td>
<td>.07 (.18f)</td>
<td>-.26**</td>
<td>-.11 (-.20*)</td>
</tr>
<tr>
<td>Sympathy (T)</td>
<td>-.13 (.00)</td>
<td>-.07</td>
<td>-.22* (-.17f)</td>
</tr>
<tr>
<td>Popularity (P)</td>
<td>.00 (.02)</td>
<td>-.13</td>
<td>-.04 (-.04)</td>
</tr>
<tr>
<td>Popularity (T)</td>
<td>-.08 (.06)</td>
<td>-.20*</td>
<td>-.20* (-.19*)</td>
</tr>
<tr>
<td>Popularity (Peer)</td>
<td>-.04 (.08)</td>
<td>-.17†</td>
<td>-.16† (-.18†)</td>
</tr>
</tbody>
</table>

*Note.* Reporter is in parentheses (P = parent; T = teacher). Correlations in parentheses are positive expressivity controlling for negative–submissive expressivity or vice versa.

† \( p < .10 \) (marginally significant).

* \( p < .05 \). ** \( p < .01 \). *** \( p < .001 \).
reports of regulation and to teachers' reports of sympathy and popularity. Peers' reports of liking were marginally negatively related to both types of parental negative expressivity. In contrast, parental reports of positive emotion were not significantly related to regulation or children's social functioning. There were no significant gender differences in the correlations for girls and boys. The correlations changed little when the data from the three fathers were dropped, so they were left in all analyses.

Because positive and negative–submissive expressivity were so highly correlated—much more than in the United States—we also computed partial correlations between (a) positive expressivity and child regulation and social functioning, controlling for negative–submissive expressivity, and (b) negative–submissive expressivity and child regulation and social functioning, controlling for positive expressivity. As can be seen in Table 2, the pattern of correlations was generally slightly stronger for negative–submissive expressivity when positive emotionality was partialed from the correlation, with the negative correlation with parent-reported sympathy now attaining significance. Similarity, the pattern of findings for positive expressivity was somewhat stronger and more consistent with what has been found previously in the United States, although none of the correlations was significant (three were marginally significant at \( p < .075 \), or better). Thus, controlling for one another, the patterns of findings for positive and negative–submissive expressivity were slightly stronger and more consistent than in the zero-order correlations. Therefore, although the positive and negative expressivity were moderately correlated, patterns of findings did not seem to be primarily because of that unexpected association.

**Regression Analyses**

Baron and Kenny's (1986) procedures were used to test the possibility that the relation between parental expressivity and children's social functioning (i.e., problem behavior, popularity, and sympathy) were mediated by children's dispositional regulation. According to Baron and Kenny's procedures, for the relation between a predictor (A) and a criterion (C) to be mediated by a third variable (B), the following three conditions must hold: (a) The predictor must be significantly associated with the criterion variables (A \( \rightarrow \) C), (b) the predictor must be significantly associated with the mediation (A \( \rightarrow \) B), and (c) when both the predictor and mediator are used as predictors of the criterion variable (A, B \( \rightarrow \) C), B but not A should be a significant predictor of C. These conditions are tested in three separate regressions. In addition, MacKinnon and Dwyer (1993) developed a statistic to test if the degree of mediation evident with the aforementioned regression procedures is significant.

Because the predictor (i.e., parental expressivity) must be related to both the mediator and criterion (outcome) variable for mediation to occur, we examined mediation only when both a measure of regulation and a given outcome were significantly correlated with parental negative–dominant or negative–submissive expressivity. Moreover, because teachers' reports of childrens' popularity and peers' sociometric ratings were significantly related (see Table 3), both represented popularity at school, and the findings were similar for the two variables, teachers' reports and peers' ratings were standardized, averaged (the composite, henceforth called school popularity), and used in regression analyses.

Teachers' reports of regulation were correlated with parental negative–dominant expressivity (see Table 2) and thus were examined in three separate sets of regressions as a possible mediator of parents' reports of externalizing behavior, sympathy, and school popularity. As can be seen in Table 4, consistent with the correlations, negative–dominant expressivity was a significant predictor of teacher-reported regulation and all of the aforementioned measures of children's social functioning in regression analyses (see the left-hand column in Table 4, with negative–dominant expressivity predicting teacher-reported regulation or parent-reported externalizing behaviors, parent-reported sympathy, or school popularity). Thus, the first two conditions for mediation were met for all the aforementioned variables.

When reports of teacher-reported regulation and parental negative–dominant expressivity were both entered as predictors in the regression analysis (with parent-reported externalizing behaviors, sympathy, or school popularity as an outcome), negative–dominant expressivity was no longer a significant predictor of parental negative-dominant or negative-submissive expressivity. Moreover, because teachers' reports of children's popularity and peers' sociometric ratings were significantly related (see Table 3), both represented popularity at school, and the findings were similar for the two variables, teachers' reports and peers' ratings were standardized, averaged (the composite, henceforth called school popularity), and used in regression analyses.
Table 3  

<table>
<thead>
<tr>
<th>Child variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent-reported externalizing behavior (P)</td>
<td></td>
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<tr>
<td>Teacher-reported externalizing behavior (T)</td>
<td></td>
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<td></td>
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<tr>
<td>Teacher reported sympathy (T)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Teacher reported school popularity (T)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Parent-reported school popularity (P)</td>
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<td>Parent-reported externalizing behavior (P)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Teacher-reported sympathy (T)</td>
<td></td>
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<tr>
<td>Teacher reported school popularity (T)</td>
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</tr>
</tbody>
</table>

Note: + p < .10 (marginally significant), * p < .05, ** p < .01, *** p < .001

Parental negative-dominant expressivity was negatively correlated with parent-reported child regulation, teacher-rated sympathy, and school popularity, and positively related to parents' reports of externalizing behaviors. Thus, sets of regression equations, like those described previously, were computed to determine if parent-rated regulation might mediate the relations of negative submissive expressivity to the indices of social functioning previously listed. In initial regressions examining the relation of negative-dominant expressivity to parent-reported regulation and the child outcomes, parental negative-dominant expressivity was a significant predictor of low parent-rated regulation, as well as teacher-reported sympathy and school popularity, and a positive predictor of parent-reported externalizing behavior. When parent-reported regulation and negative-dominant expressivity were entered as simultaneous predictors of the three outcome variables (each in a separate regression), parent-reported regulation remained a significant predictor of school popularity, teacher-reported sympathy, and parent-reported externalizing behavior, whereas negative submissive expressivity was no
Table 4
Findings for Regressions Examining Mediation

<table>
<thead>
<tr>
<th>Predictor and dependent variable</th>
<th>Parent negative–dominant expressivity (NDE)</th>
<th>Parent negative–submissive expressivity (NSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( F ) for ( R^2 ) change</td>
<td>( \beta )</td>
</tr>
<tr>
<td><strong>Externalizing behavior (parent report)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressivity ( \rightarrow ) externalizing</td>
<td>( F(1, 107) = 5.04^* )</td>
<td>.21*</td>
</tr>
<tr>
<td>Expressivity ( \rightarrow ) regulation(a) (reported by teachers for NDE, parents for NSE)</td>
<td>( F(1, 107) = 4.43^* )</td>
<td>-.20*</td>
</tr>
<tr>
<td>Expressivity, regulation ( \rightarrow ) externalizing</td>
<td>( F(2, 106) = 7.89^{***} )</td>
<td>.15† (expressivity)</td>
</tr>
<tr>
<td><strong>School popularity (teacher/peer report)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressivity ( \rightarrow ) school popularity</td>
<td>( F(1, 107) = 6.43^* )</td>
<td>-.24*</td>
</tr>
<tr>
<td>Expressivity ( \rightarrow ) regulation(a) (reported by teachers for NDE, parents for NSE)</td>
<td>( F(1, 107) = 4.43^* )</td>
<td>-.20*</td>
</tr>
<tr>
<td>Expressivity, regulation ( \rightarrow ) popularity</td>
<td>( F(2, 106) = 22.04^{***} )</td>
<td>-.14† (expressivity)</td>
</tr>
<tr>
<td><strong>Sympathy(b) (reported by parents for NDE, teachers for NSE)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressivity ( \rightarrow ) sympathy</td>
<td>( F(1, 103) = 7.63^{**} )</td>
<td>-.26**</td>
</tr>
<tr>
<td>Expressivity ( \rightarrow ) regulation (reported by teachers for NDE, parents for NSE)</td>
<td>( F(1, 103) = 4.28^* )</td>
<td>-.20*</td>
</tr>
<tr>
<td>Expressivity, regulation ( \rightarrow ) sympathy</td>
<td>( F(2, 102) = 4.60^* )</td>
<td>-.24* (expressivity)</td>
</tr>
</tbody>
</table>

*Note*

\(a\) The measure of regulation was teacher report for analyses including negative–dominant expressivity and parent report for analyses with negative–submissive expressivity.

\(b\) The measure of sympathy was parent report for analyses including negative–dominant expressivity and teacher report for analyses including negative–submissive expressivity.

† \( p < .10 \) (marginally significant).

* \( p < .05 \), ** \( p < .01 \), *** \( p < .001 \).
longer a significant predictor (see the two right-hand columns in Table 4). Mediation was significant in all three cases ($z = 2.32, 2.34$, and $2.81, ps < .05, .05$, and $.01$). Thus, for all three variables, the pattern of findings was consistent with the hypothesis that the relation between negative–submissive expressivity and children's sympathy, popularity, or externalizing behavior was mediated by parent-reported regulation. In none of the instances were the findings consistent with the possibility that parental negative–submissive expressivity mediated between children's low regulation and their levels of sympathy, popularity, or problem behavior. Moreover, when we tested the possibility that children's social functioning mediated the relation between parent-reported regulation and parental negative–submissive expressivity, mediation was not significant for any of the three variables.

Comparison of Relations of Parental Expressivity With Children's Regulation and Social Functioning: Indonesia and the United States

The relations of the parental expressivity scores to children's regulation and social functioning in the Indonesian sample were compared with those in a sample of children in the United States who were, on average, 6 years of age. This sample was selected to include some children with at least borderline levels of internalizing and externalizing behaviors; other children were selected because they had no problem behaviors (see Eisenberg et al., 2001). The original sample comprised 214 children; parental reports on the Halberstadt (1995) scale were available for 208 parents (202 were mothers). In this subsample, there were 93 girls and 115 boys (mean age = 73.6, $SD = 9.6$, range = 55–97 months). Because of the age difference and the age range in this study, some analyses were computed to examine change of relations with age in this sample.

By dropping some items on the measures of regulation, popularity, and sympathy scales in the U.S. sample, we created scales that were identical with those used with the Indonesian sample. Alphas for the Halberstadt (1995) scales in the United States sample were $.85, .80$, and $.70$ for positive, negative–dominant, and negative–submissive expressivity. Alphas were $.84$ to $.88$ for the three teacher-report regulation scales (recall that scales were sometimes changed slightly to match those used with the Indonesian sample), $.70$ to $.84$ for the three parent-report regulation scales, $.83$ and $.91$ for parent- and teacher-rated popularity, and $.80$ for parent-reported sympathy (there was no teacher-report measure of sympathy). Unfortunately, the Child Behavior Checklist (Achenbach, 1991; Achenbach, & Edelbrock, 1986) was the measure of externalizing behavior in the U.S. sample. However, we found 14 items on this measure and the one used in Indonesia that were identical or highly similar; these items were used to construct teacher- and parent-reported measures of children's externalizing behaviors in both the United States (as = .91 and .86) and Indonesia (as = .75 for parent and .89, .84, and .93 for Teachers 1, 2, and 3, respectively).

The three parent-expressivity scales were correlated with the measures of adult-reported regulation, popularity, sympathy, and externalizing behaviors in each group (there were no peer-reported data in the United States). The correlations are presented in Table 5 (means for positive, negative–dominant, and negative–submissive expressivity were $7.27, 3.97$, and $5.49; SDs = .98, 1.22, and 1.22$; these differ slightly from those in Eisenberg et al., 2001, because of the inclusion of 6 fathers). As can be seen in Table 5, parent positive expressivity was more consistently related to children's regulation and social functioning in the United States than in Indonesia, whereas the reverse held true for negative–submissive expressivity. Findings for negative–dominant emotion were more similar across the two groups.

Because the children in the United States were somewhat younger than those in the Indonesian sample and there was a broader age range in the United States, we computed regressions to examine whether the relations in the United States were moderated by age. There was no evidence that relations between parental positive expressivity and children's regulation or social functioning changed with age in

3 A structural equation model was computed with Mplus (Muthen & Muthen, 1998), in which the latent construct of negative expressivity (including the observed variables of negative–submissive and negative–dominant expressivity) predicted the latent construct of children's regulation (teacher- and parent-reported), which in turn predicted the constructs of popularity and externalizing problems (teacher-, parent-, and peer-reported), as well as sympathy (teacher- and parent-reported). The model fit well once a direct, positive path from negative expressivity to popularity was added, $\chi^2(37, N = 127) = 43.23, p < .22, \text{RMSEA} = .036$. All paths were significant and in the expected direction. Thus, the model's results were similar to those obtained with the regression analysis.
the United States. The relation between parental negative–dominant expressivity and teacher-reported externalizing behavior increased with age in the United States ($R^2$ change on Step 2 for the interaction term [after entering the main effects of age and parent expressivity]) = .02, $F(0,4)$ for $R^2$ change = 4.16, $p < .043$. In the older half of the sample (split at 6 years of age), the relation between parental negative–dominant emotion and teacher-reported regulation was $r(106) = .30, p < .002$, whereas it was only $- .01$ for younger children. The relation between parental negative– submissive expressivity and teacher-reported externalizing behavior also increased with age in the United States ($R^2$ change = .03, $F(0,4)$ for $R^2$ change = 4.90, $p < .03$); the correlation was positive and nearly significant only in the older U.S. group, $r(106) = .18, p < .056$. Thus, there was relatively little evidence that the differences in patterns of findings were due to age, although it is possible that there is considerable additional change in the relations of parent expressivity to children’s functioning from age 7 to 9.

Another possible difference between the Indonesian and U.S. samples is that the latter likely contained more children with externalizing behaviors (recall that this sample was selected in a manner to increase the number of children at risk for adjustment problems). It was impossible to directly compare reports of externalizing behaviors in Indonesia and the United States because the items on the scales were rated on different metrics; there were three levels of the response scale in the United States and four in Indonesia. Nonetheless, we recomputed the correlations including only children with the Child Behavior Checklist (CBCL) externalizing $T$ scores of less than 70, the cutoff for a clinical level of problems, to examine the findings if the U.S. sample included fewer children with externalizing behaviors.

These correlations are presented in parentheses in Table 5; $ns$ ranged from 151 to 166. The patterns of relations between parental positive or negative–dominant expressivity and children’s regulation and social functioning were weaker than when the full U.S. sample was included in the analyses. Thus, the differences in the findings of the two cultures in regard to positive parental expressivity might have been partly because of differences in adjustment in the samples. The overall pattern of findings for negative–submissive expressivity did not change markedly; one previously significant correlation dropped to nonsignificance, whereas another correlation attained significance. Thus, the pattern of relations for negative–submissive expressivity remained slightly weaker in the U.S. than in the Indonesian sample.

Discussion

An important finding in this study was that in spite of the cultural differences in beliefs about the expression of emotion in Indonesia and the United States, the relations of parental negative expressivity to the quality of Indonesian children’s social functioning were similar to what has been found in the United States, especially for negative–dominant emotion. Children with parents who reported expressing negative emotions in the familial context were lower in both regulation and facets of social functioning that contribute to, or are aspects of, social competence (i.e., sympathy, externalizing behaviors, popularity).

Somewhat similar relations were found for parental dominant and submissive expressivity in Indonesia. Thus, the expression of negative emotion by Indonesian parents (most of whom were mothers) was associated with negative outcomes for children, even if their negative emotion was not hostile or abrasive in tone. As discussed previously, children may become overaroused and insecure in homes in which negative emotion is expressed frequently, which may undermine their regulation of emotion and their social behavior.

Often parental expressivity did not relate to a given construct (e.g., regulation, child outcomes) as perceived by both teachers and parents. For example, regulation as reported by teachers (but not parents) was related to low negative–dominant expressivity, whereas regulation as reported by parents (but not teachers) was related to low negative–submissive expressivity. Moreover, although school popularity and parents’ reports of externalizing behavior were associated with both parents’ negative–dominant and negative–submissive expressivity, teacher-reported externalizing behaviors were not. Furthermore, parent- but not teacher-rated sympathy correlated negatively with negative–dominant expressivity, whereas teacher- but not parent-reported sympathy correlated negatively with negative–submissive expressivity. Thus, often there was not convergence across reporters in relations with either type of parental expressivity. Teachers, parents, and peers can be expected to have somewhat different perspectives on children’s regulation or behavior, which would contribute to a lack of convergence across reporters. Nonetheless, if one views regulation as a latent construct associated with parental expressivity and mediating its relations
to child outcomes (also viewed as latent constructs), there generally was support for the hypothesized relations. Hypothesized relations were statistically supported for some indicators of a construct but sometimes not others, but the predicted pattern was supported. Indeed, as discussed in Footnote 5, when a structural equation model was computed involving latent constructs (using teacher, parent, and peer reports as indices of various constructs), the data fit the predicted model.

More specifically, parental negative–dominant expressivity was related to low teacher-rated regulation, low popularity at school, low parent-reported sympathy, and high levels of parent-reported externalizing behaviors. Because some correlations held across reporters, the relations were not simply due to parents who are prone to express negative emotion in the family viewing their children negatively. Moreover, regression analyses were consistent with the view that regulation mediated the relation of negative–dominant expressivity to children’s externalizing behaviors and low school popularity. The regressions did not support the possibility that (a) parental negative–dominant expressivity mediated the relation of regulation to children’s popularity or externalizing behaviors, or (b) children’s externalizing behaviors or popularity mediated the relation of negative–dominant expressivity. In contrast, the relation of negative–dominant expressivity to parent-reported sympathy was not mediated by regulation, nor was any other mediational path identified involving sympathy. Perhaps the relation of parental negative–dominant expressivity to children’s sympathy was due to parents who are prone to anger and related negative emotions viewing their children as low in sympathy. This relation, as well as those with popularity and externalizing behaviors, also could be due to a hereditary predisposition to low regulation or to negative emotionality that contributes to both parents’ expressivity and low levels of sympathy in children (low regulation and negative emotionality are linked to low sympathy, adjustment, and children’s popularity; Eisenberg et al., 2000; Eisenberg, Wentzel, & Harris, 1998).

The findings for the expression of negative–dominant emotion in the Javanese sample are consistent with findings in the United States. However, unlike in the Javanese sample, findings in regard to negative–submissive emotion sometimes has been associated with positive child outcomes (e.g., sympathy; Eisenberg et al., 1992; see Halberstadt et al., 1999). Eisenberg et al. (2001) found few relations between parental expression of negative–submissive emotion and children’s regulation, problem behavior, or social competence in the United States (see Table 5).

Perhaps in Indonesia, even relatively nonhostile or low-key negative emotion is viewed as relatively undesirable, with the consequence that it promotes greater dysregulation in children. Recall that in parts of Indonesia, the absence of the experience and expression of emotion are valued, especially if emotions are disruptive to interpersonal relationships or group functioning (Mulder, 1996; Wellenkamp, 1995). Indeed, if the culture devalues the expression of even

<table>
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<th>Child measure</th>
<th>Positive</th>
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<th>Negative–submissive</th>
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<tr>
<td></td>
<td>Indonesia</td>
<td>United States</td>
<td>Indonesia</td>
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<tr>
<td>Regulation (P)</td>
<td>-.07</td>
<td>.23** (.16*)</td>
<td>-.15</td>
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<tr>
<td>Regulation (T)</td>
<td>-.01</td>
<td>.19** (.13)</td>
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<tr>
<td>Externalizing behaviors (P)</td>
<td>.11</td>
<td>-.16* (-.08)</td>
<td>.23*</td>
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<tr>
<td>Externalizing behaviors (T)</td>
<td>-.16† (.00)</td>
<td>-.15* (.00)</td>
<td>.11</td>
</tr>
<tr>
<td>Sympathy (P)</td>
<td>-.04</td>
<td>.20** (.17*)</td>
<td>-.26**</td>
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<tr>
<td>Popularity (P)</td>
<td>.00</td>
<td>.17* (.14†)</td>
<td>-.13</td>
</tr>
<tr>
<td>Popularity (T)</td>
<td>-.08</td>
<td>.10 (.07)</td>
<td>-.20*</td>
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</table>

Note. Reporter is in parentheses (P = parent report; T = teacher report). Data from the United States were scales from Eisenberg et al. (2001), although scales were modified to match the Indonesian sample (and thus differ slightly from the data in Eisenberg et al., 2001). Correlations in parentheses are for the subset of children in the United States with Child Behavior Checklist externalizing t scores of less than 70 (n = 151–166). † p < .10 (marginally significant). * p < .05. ** p < .01. *** p < .001.
negative-submissive emotion, homes in which higher levels of these emotions are expressed may be more dysfunctional or deviant than in the United States. Presently, there is little research on the cultural value of various types of negative emotions, and such information is important if one is to understand their expression and socialization within a culture.

As for negative-dominant emotion, regression analyses supported the view that the relations of parental submissive expressivity to parent-reported externalizing behavior, school popularity, and teacher-(but not parent-) reported sympathy were mediated by parent-reported regulation. The possibility that children's regulation resulted in their low school popularity, low sympathy, or high externalizing behaviors, and that these deficits in turn led to more parental negative-submissive emotion, was not supported by the pattern of findings. Perhaps the effects of negative-submissive expressivity on children's regulation are seen primarily in situations involving more subtle negative emotions, which parents likely are more aware of than are teachers. Because teachers have to deal with so many children, they may be more likely to pick up on children's externalizing (e.g., anger) rather than internalizing (e.g., sadness, anxiety) emotions (Eisenberg et al., 1993). Or it is possible that parents who express more negative-submissive emotion simply view their children as relatively unregulated because of a negative bias. However, the relations of negative-submissive expressivity to school popularity or teachers' reports of sympathy were not likely due to biased parental perceptions. Children who tend to express emotions such as anxiety, loss, or sadness at school may learn to do so at home, and such emotions are likely linked to self-preoccupation and interactions with peers that are less than optimal. Of course, another possibility is that parents who are prone to emotions such as distress and anxiety have children with a hereditary vulnerability to such emotions, and this vulnerability may undermine children's regulation in situations involving these emotions (which may occur more at home or be noticed more by parents), as well as the quality of social interactions at school.

In brief, in this concurrent data set, it is clear that there are associations among parents' negative expressivity and children's regulation and social functioning. It is not clear if parental negative expressivity has a negative effect on children's social functioning (indirect through regulation) or if there are associations between parental expressivity and child social functioning because of a third variable (e.g., regulation, hereditary factors) that has a causal influence on both. Longitudinal data are needed to provide better insight into the nature of the causal directions and if and when effects of parental expression of emotion hold over time (Denham et al., 2000).

Interestingly, unlike in the United States (Halberstadt et al., 1999), parental reports of positive expressivity generally were unrelated to children's regulation or to the quality of social functioning. Scores for parental reports of such emotion were moderately high, albeit somewhat lower than the findings of Eisenberg et al. (2001), with a sample of children who were (on the average) slightly younger than in the present study. Moreover, there was somewhat more, not less, variability in Javanese compared with U.S. parents' reports of positive expressivity, so a lack of variability in the measure cannot explain the lack of findings. Relations between positive expressivity and children's social functioning in the U.S. sample were weaker, however, when children with the highest levels of externalizing behavior were dropped from the analyses. Thus, the inclusion of such children may have contributed to the difference in the pattern of findings. However, findings in other research in the United States suggest links between parental positive expressivity and the quality of children's social functioning (Eisenberg et al., 1992; Halberstadt et al., 1999), so it is unlikely that the difference in findings in the United States and Indonesia is solely due to characteristics of the Javanese versus the U.S. samples.

Perhaps in Indonesia the expression of strong positive emotion is sometimes devalued because it is viewed as disruptive and reflecting a lack of emotional control. Control of emotion is valued in Java (Mulder, 1989), and this may include positive as well as negative emotions. The Ifaluk, who live in the southwest Pacific, view happiness as something to be discouraged because it undermines feelings of fear that promote socially appropriate behavior (Lutz, 1988). In some cultures, more subtle and controlled displays of positive emotion may relate to positive outcomes for children, whereas more open or intense displays do not. The expression of positive emotion is an understudied topic (Fredrickson, 1998), and little is known about cultural differences in its meaning or value. Perhaps the quality as well as quantity of parent-expressed positive emotion are related to outcomes for children; if so, findings may differ for various types of positive displays of emotion.

Unlike in the United States, parents' negative-submissive expressivity and positive expressivity
were substantially correlated. It is unclear why this was the case. Perhaps both these types of emotions are viewed somewhat differently in Java than in the United States. Because of the emphasis on social relationships and fostering group interests, both may be seen as sometimes disruptive to the group. Exhibiting these emotions may draw attention to the self and one's own successes or problems, create social tensions, or lead to unregulated behavior. In addition, if the experience of emotion is viewed as detrimental, Javanese parents may try to discourage displays of intense emotion of any sort in themselves and their children. Thus, Javanese parents may exhibit positive and negative-submissive emotions in somewhat different degrees and situations than parents in the United States. The meaning of these emotions in Javanese culture merits further attention.

Because the data for this study were collected in one locale in Indonesia, the findings may not generalize to the many other ethnic and religious groups in that country. Although Islam is the majority religion and Java contains much of the Indonesian population (so the children in this study are representative of the majority group in the country), there are numerous ethnic minorities on the many islands that comprise Indonesia. However, the findings are important in demonstrating that parental expression of negative emotion is related to low levels of regulation, sympathy, popularity, and externalizing behavior in a culture very different from the United States (where most work on parental expressivity has been conducted). Important questions for future work are why positive parental expressivity was unrelated to children's regulation or social functioning in this Indonesian sample, and if relations between negative-submissive parental expressivity and child outcomes vary in valence and strength across cultures. Moreover, longitudinal work in which measures of parental expressivity and child characteristics and behaviors are measured at multiple times is needed to test causal hypotheses, not only in the United States, but in other cultures.

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