

Temperament, Gender, and Cultural Differences in Maternal Emotion Socialization of Anxiety, Somatization, and Anger

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Abstract Individual differences exist in emotional experiences, and cultural context is believed to play an important role in emotion socialization. How parental meta-emotion philosophy (MEP) is related to children's anxiety, somatization, and anger was examined cross-culturally. Cultural group and child's gender as moderators to parental MEP and emotional outcomes were also examined. Adolescents (9–13 years, $M_{\text{age}} = 11.8$) and mothers from three groups [Caucasians ($n = 40$), Indian Americans in U.S.A. ($n = 32$), Indians ($n = 64$)] completed measures on temperament [negative affect (NA) and effortful control (EC)], MEP (emotion coaching and emotion dismissing), and emotional outcomes (anxiety, somatic complaints, and anger). Data were analyzed using t tests, ANOVA, and multiple regressions. NA was positively associated with emotional outcomes. EC was not significantly related to emotional outcomes. Children with low EC reported fewer somatic complaints and less anger when mothers used emotion coaching. Emotion dismissing was positively associated with anxiety. Maternal emotion coaching was found to be a buffer for somatization in children with high NA. Indian children were significantly more anxious, and higher on NA than their counterparts. Indian mothers engaged in more emotion dismissing and less emotion coaching compared to the other groups. Implications for parenting and intervention are discussed.

Keywords Culture · Emotion socialization · Anxiety · Gender · Temperament

Introduction

Culture plays a significant role in emotion socialization (Bugental & Grusec, 2006), influencing parents' emotion-related behaviors (Eisenberg, Cumberland, & Spinrad, 1998a). Parental meta-emotion philosophy (MEP; Gottman, Katz, & Hooven, 1996) involves awareness of their own emotions, inhibition of negative affect, as well as labeling and validation of child's emotional experiences (Gottman et al., 1996). Emotion socialization is affected by cultural norms and values concerning the meaning attributed to emotional events (Suveg, Zeman, Flannery-Schroeder, & Cassano, 2005). Emotion expression, suppression, as well as display rules vary across cultures (Butler, Lee, & Gross, 2007; Kirmayer, 1984). In addition, emotional experiences may also be affected by child temperament, parental emotion socialization, and gender of the child. This study examined associations among children's temperament [e.g., negative affect (NA) and effortful control (EC)], maternal MEP (emotion coaching and dismissing; Gottman et al., 1996), child gender, and emotion-related outcomes of anxiety, somatization, and anger in adolescence, and how these constructs might vary by culture. Three cultural groups were explored: Caucasians (European Americans), Indian Americans (first-generation Indian children growing up in the U.S.A.), and Indians (Indian children in India). Like most comparative studies, this study also used nation of origin (India or U.S.A.) as the marker for participants' two cultural groups (Garcia Coll et al., 1996). However, in order to recognize the dynamic, ever changing nature of culture, a third group was

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recruited, wherein “ethnic” group membership was considered (i.e., Indian Americans). Herein, culture is defined to be locally situated in a community’s history and within shared resources and limitations (Cole & Tan, 2007).

Emotional Outcomes and Temperament

Anxiety is a feeling of uncertainty, wherein a danger is perceived as present and impending. Late childhood and early adolescence are critical times in the development of anxiety disorders (Repetti, Taylor, & Seeman, 2002), which persist in early adulthood and can adversely impact social and occupational functioning (Mineka & Zinbarg, 2006). Anxious children are at increased risk of later symptoms of depression (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003) as well as externalizing problems (Bittner et al., 2007).

Somatization is the tendency to experience and report psychological distress through physical complaints that cannot be explained by known medical findings (Garralda, 2000). Somatization is characterized by an impaired ability to verbalize emotional distress, and psychological suffering is central to somatic symptoms. Individuals who report somatic complaints (i.e., somatizers) often express their psychological pain through physical illness (Löwe et al., 2008). Because children lack certain cognitive and verbal skills and possess limited vocabulary for emotional expression (Garralda, 2000), somatization is common in childhood and adolescence (Dufton, Dunn, & Compas, 2009). Anger is defined as a state of arousal that results from social conditions involving threat or frustration (Averill, 1982). Anger expression in children is associated with a number of negative physical and mental health outcomes, including elevated blood pressure, psychosomatic symptoms, poor perceived health, depression, aggression, and externalizing problems (Kerr & Schneider, 2008).

Temperament is the tendency to regulate and express emotions with a certain intensity that is unique to each individual (Fox, 1998). While temperament seems to be biologically based, learning to express and regulate emotions depends on parental input and socialization. Temperament is a biologically driven component of personality, an innate attribute that reflects individual differences in regulation, reactivity, and sociability (Thomas & Chess, 1977), and influences one’s sensitivity and response to stressful situations. It is well known that there is a relation between early temperament and maladaptive psychosocial outcomes, such as anxiety (Prior, Smart, Sanson, & Oberklaid, 2000). In the current study, two overarching aspects of temperament, Negative Affectivity (NA), and EC are examined as potential contributors to emotional expressiveness. NA refers to one’s proneness to experience

feelings of worry and emotional discomfort (Rothbart, Ahadi, & Evans, 2000). EC involves biologically driven individual differences in the ability to shift and focus attention, and to actively control emotional and attentional responses (Putnam, Ellis, & Rothbart, 2001). EC reflects an individual’s voluntary regulation of attention and behavior (Rothbart et al., 2000), and EC fosters the regulation of approach/withdrawal tendencies when confronted with rewards and punishments and is used to modulate reactivity (Rothbart & Bates, 2006). Although surgency (defined as a factor consisting of high levels of positive affect, reaction to novelty, and impulsivity) and affiliation (defined as the desire to have closeness with others, independent of an individual’s sociability level) are two other aspects of temperament (Rothbart & Putnam, 2002), previous research indicates that both are not meaningfully related to internalizing and externalizing problems in preadolescents (Oldehinkel, Hartman, De Winter, Veenstra, & Ormel, 2004); hence, in this study, we focused on the two temperamental factors of NA and EC.

Temperamental traits are linked to the emotional experience of anxiety, somatization, and anger, and both negative reactivity (high NA) and poor self-regulation (low EC) contribute to the development of anxiety and aggression (Muris, Meesters, & Blijlevens, 2007). Specifically, NA is found to be a vulnerability factor for the development of anxiety and depression (Jylha & Isometsa, 2006). In addition, as a child grows, his/her reactive forms of regulation are supplemented by an increasing capacity for EC (Eisenberg et al., 2010). Specifically, EC has been found to be linked with attentional efficiency, such that children with high EC often have low levels of NA, have better ability to delay gratification, exhibit less impulsive behaviors, express less intense anger (Kochanska, Murray, & Harlan, 2000), and display successful regulation of fear (Kochanska, 1993); hence, reducing the probability of internalizing problems (Oldehinkel et al., 2004). On the other hand, children with low EC are vulnerable to anxious psychopathology, as well as ADHD and anger/aggression (Rathert, Fite, Gaertner, & Vitulano, 2011). In addition to the reactive temperament factor of NA, the regulative process of EC also plays an important role in the etiology and maintenance of anxiety and anger problems in children and youth (Eisenberg et al., 2010; Muris & Ollendick, 2005).

Maternal Emotion Socialization

Children’s emotional development is socialized by family, society, and culture (Trommsdorff & Cole, 2011). Seminal work (at least within predominantly Caucasian Western cultures) has identified three primary ways in which parents socialize their children’s emotional development—

(a) parent reactions to children's emotion, (b) parent expressiveness, and (c) parent-child discussion of emotion (Denham, Basset, & Wyatt, 2007). Gottman et al. (1996) proposed that what parents think and feel about emotions in themselves and their children is related to the process by which they socialize emotions for their children. Parental MEP refers to an organized set of feelings and thoughts about one's own emotions and children's emotions (Gottman et al., 1996). Parental MEP is related to both the inhibition of parental NA and the facilitation of positive parenting vis-à-vis a child's emotional experiences, and parental MEP affects children's regulatory physiology as well as their ability to regulate their own emotions (Gottman et al., 1996). A growing body of research has demonstrated that MEP has implications for child outcomes in White American families (Hunter et al., 2010; Katz, Maliken, & Stettler, 2012). However, fewer studies have paid attention to MEP across different cultural and ethnic groups (Bowie et al., 2013; Huang, Li, Zhang, & Li, 2013).

According to Gottman's MEP, parents respond primarily to their children's feelings of sadness and anger via two means of socialization—emotion coaching and emotion dismissing (Cowan, 1996). Gottman, Katz, and Hooven (1997) described “emotion-coaching” parents as being fully aware of their child's emotions, helping their child to verbally label and discuss feelings, perceiving the experience of NA as healthy, and viewing their child's negative emotions as an opportunity for intimacy, teaching, and problem-solving with their child to constructively resolve an emotional situation (Gottman et al., 1997; Lagacé-Seguin & Coplan, 2005). Children whose parents engage in coaching are able to trust their own feelings, regulate their emotions, and effectively employ adaptive problem-solving skills (Gottman & Declaire, 1997). Emotion-dismissing parents, on the other hand, show limited awareness of children's emotions, tend not to discuss emotions, avoid child's negative emotions, and attempt to alter/reduce expression of the child's emotion rather than use emotions as an opportunity to teach self-management and coping skills (Gottman et al., 1996). Children of parents who adopt the emotion-dismissing style are taught to believe that negative feelings are unwarranted and inappropriate (Gottman & DeClaire, 1997).

Young children (57 months) being brought up in an environment where emotions are minimized, denied, and ignored experience poorer social and emotional development (Lagacé-Seguin & Coplan, 2005; Silk et al., 2011). Eisenberg et al. (1998a) noted that parents' own negative emotionality and their negative reactions to children's emotions are associated with children's negative emotionality and low socio-emotional competence (Eisenberg et al., 1998a). Mothers who reported engaging more in

magnifying, neglecting, and punishing children's negative emotion had 3–9-year-old children who scored higher on internalizing symptoms (Silk et al., 2011). On the other hand, children of emotion-coaching parents show lower levels of physiological stress, greater ability to focus attention, and are physically healthier than children of non-emotion coaches (Gottman et al., 1997).

In terms of studies that have examined emotion socialization in diverse cultural groups, Raval (2004) noted that Indian Gujarati children (6–8 year-olds) with somatic complaints had mothers who use more minimizing and punitive responses, as well as less physical and verbal comforting in response to children's expression of anger as compared to children without somatic problems. Similarly, Nahm (2007) found that Korean American immigrant parents, as compared to White American parents, were less aware and less accepting of children's negative emotions, and engaged in less emotion coaching. Korean American parents also showed less directive support and less positive affect in the emotion teaching interaction (Nahm, 2007). Also, in some cases, minimization of emotions when combined with parental warmth may result in different developmental outcomes (Hannesdottir & Ollendick, 2007).

Interaction Between Child Temperament and Maternal MEP on Child Emotions

Moderation processes are possible in the relations between child temperament, maternal socialization, and emotional outcomes. For example, maternal insensitivity to adolescent emotions is found to be associated with an increase in externalizing behavior problems in children specifically for those who are high in NA and/or low in EC (Davenport, Yap, Simmons, Sheeber, & Allen, 2011). As a result, the adverse effects of maternal behaviors, especially dismissive parenting, may amplify negative emotional expressions (such as anxiety and anger) among children with temperamental vulnerabilities such as high NA and low EC. Parental MEP can influence relations between child temperament and children's emotions, and such moderation by MEP in the link between temperament and emotional outcomes was explored in the current study.

Gender

Emotion socialization tends to be differentiated by child's gender (Cassano, Perry-Parrish, & Zerman, 2007), such that certain emotional experiences are more acceptable for one gender than the other. For girls, “tender emotions” (empathy, guilt, fearfulness) and positive affect are considered appropriate, and for boys, anger and related out-directed negative emotions help to support activities

associated with autonomy, authority, dominance, and combat (Zahn-Waxler, 2010). Therefore, boys and girls exhibit significant variation in emotional expression of anxiety, pain, sadness, and anger (Le, Berenbaum, & Raghavan, 2002). Moreover, parents discuss emotions with their daughters more than with their sons and are generally likely to discourage anger and aggression in daughters (Zahn-Waxler, Klimes-Dougan, & Slattery, 2000). Parents express a desire for boys to inhibit sadness and fear, and for girls to inhibit anger (Chaplin, Cole, & Zahn-Waxler, 2005). Caucasian boys who display sadness are likely to violate a societal emotion display rule and are considered “unmanly,” whereas expressing sadness is more socially acceptable for Caucasian girls (Brody, 2000). Early adolescence is a time when gender norms for emotion expression become even more pronounced (Perry-Parrish & Zeman, 2011).

Gender may operate differently in different cultures. Among Indian children, Pai (1998) noted that 9–12-year-old Gujarati girls hid their emotions more often and gave fewer inappropriate responses as compared to Gujarati boys, and this pattern of response was more common in the presence of authority figures (Pai, 1998). Furthermore, females in Asian cultures (such as India, Thailand, and Japan) often express distress through somatic complaints rather than psychological problems, as physical illness is more acceptable than psychological symptoms (Raval & Martini, 2009). In addition, gender differences in emotional experiences may be larger in some cultural contexts than others. Past research suggests that there is prevalence of parental differential treatment based on child gender in South Asian families (Shariff, 2009). For instance, South Asian gender role socialization results in differential parenting practices for sons and daughters, wherein girls face more intense pressure from parents, sometimes resulting in increased stress, depression, and anxiety specifically for girls (Talbani & Hasanali, 2000).

The relationship between maternal emotion socialization and children’s emotional experiences may differ for boys and girls. In a 6-month longitudinal study with a high-risk urban sample, it was found that emotion coaching predicted girls’ later social skills by improving their emotion understanding, and predicted decreases in boys’ internalizing behavior. Also for boys, but not for girls, emotion coaching was related to better emotion regulation abilities, which in turn predicted higher grades, fewer internalizing and externalizing behaviors, and greater social skills (Cunningham, Kliewer, & Garner, 2009). Thus, child gender may serve as a moderator of relations between MEP and child emotional adjustment (Katz et al., 2012; Talbani & Hasanali, 2000). We examine gender differences in emotional experiences, and note whether links between

maternal MEP and child emotion expressions are the same for boys and girls.

The Role of Culture

There are cultural variations in how parents relate to children’s emotional lives (Mesquita, 2001). Culture is defined as a set of shared values, beliefs, and behaviors driven by symbols (such as language and art), and social learning (Shweder & Haidt, 2000). Children in varied social and cultural contexts are deliberately taught how to label, express, and regulate emotions by their parents and others in the environment (Super & Harkness, 2002). Although core emotional experiences may be universal, culture influences the form and content of emotional expression (Kirmayer, 1984), affects parents’ emotion-related behaviors (Eisenberg, Spinrad, & Cumberland, 1998b), and determines the social appropriateness of emotional displays (Cole, Bruschi, & Tamang, 2002; Raval & Martini, 2009). Although there are a few studies with adults that show *how* emotional processes differ across groups and cultures (Cole & Tan, 2007), literature on children is limited and much needed.

There are cultural variations in how members of a cultural group appraise situations, communicate emotions, and act on them (Raval & Martini, 2009), which, in turn, play an important role in emotion socialization. For example, many collectivistic societies (where the focus is on maintaining group harmony) discourage a child’s negative emotion, implicitly encourage the child to rely on affect-suppression methods of managing emotions, and thus, may promote internalizing problems (such as anxiety and somatic pain) (Friedlmeier, Corapci, & Cole, 2011). Similarly, anger is often discouraged by parents in Asian societies because it threatens authority and relationship harmony (Cole et al., 2002). Thus, parents in Eastern, collectivistic cultures often coach emotions within their own cultural/moral norms, and often use subdued family expressiveness styles (Friedlmeier et al., 2011). Although such parents are sensitive to their children’s feelings and want to help, they often practice emotion dismissive parenting which at least in other cultures is interpreted as denying children’s emotional needs (Friedlmeier et al., 2011).

Traditional Indian families value interdependence and hierarchical relationships (Verma & Saraswathi, 2002). Indian parents are likely to show lower acceptance of displays of negative emotions like anger and sadness (Raval & Martini, 2009) and are found to be highly evaluative of their children’s emotions (Markus & Kitayama, 1991). Indian parents often use strict control on their children (e.g., behavioral strategies such as scolding and

spanking) that involve less direct emotion-related communication (Raval et al., 2012). Indian parents often attend to a child's distress with anger and rejection, which promotes high levels of self-restraint, a highly valued trait, in Indian children (Trommsdorff & Cole, 2011). Indian mothers specifically report more sympathy and less negative reactions toward children's pain than their anger (Raval & Martini, 2011), which may promote somatic behavior in children. In addition, it is believed that anger tends to tax parental resources to a greater extent than child's sadness (Friedlmeier et al., 2011).

In contrast, parents in individualistic cultures tend to facilitate emotion learning through two ways: direct methods (actions in response to children's emotions and coaching them to regulate their feelings via supportive praise or punishment), and indirect methods (modeling emotional behaviors they want to see) (Eisenberg et al., 1998b). For most Western nations, encouragement of emotion labeling and expressions, and direct verbal discussions about emotions appear to be associated with positive outcomes in the child (Kench & Irwin, 2000). However, there are individual differences in MEP styles adopted by parents within individualistic societies that are associated with child temperament and use of distraction coping strategies (Lagacé-Séguin & Coplan, 2005).

The Present Study

Responding to recent calls for more cross-cultural work to be done on children's emotion socialization (Cole & Tan, 2007; Raval et al., 2010), the current study examined Caucasian children growing up in the U.S.A., Indian American children growing up in the U.S.A. (an immigrant group), and Indian children growing up in India (National Capital Territory of Delhi). The current socio-cultural context of a family, as well as cultural heritage and customs influence child development. Thus, our inclusion of the Indian American group, whose cultural heritage is India but whose current location is the U.S.A., allows us to examine whether current setting (and a *functional* culture) or cultural heritage (a traditional culture) is a more related to maternal emotion socialization practices and children's emotional experiences. We examined children between the ages of 10–13, as previous research in this area has typically involved younger children (Davenport, Yap, & Allen, 2010; Spear, 2000), although early adolescence is an important period for the development for emotion regulation (Spear, 2000) given increased parent–child conflicts (Morris, Silk, Steinberg, Myers, & Robinson, 2007). We examined maternal report because past research indicates that mothers are often the primary emotion socializers (Davenport et al., 2010; Raval et al., 2010). In traditional Indian families, the mother is typically responsible for

children's socialization, and the father's role is often limited to provider and a disciplinarian (Kao & Sinha, 1997). Children report being most comfortable expressing emotions to their mothers compared to fathers and peers (Gryczkowski, Jordan, & Mercer, 2010; Zeman & Garber, 1996).

The following research questions and hypotheses were posed:

1. To what extent do children's negative affect (NA) and EC predict children's anxiety, somatic complaints, and anger, and does maternal MEP influence relations between children's NA and EC and emotional outcomes? We expected that, across the whole sample, children with low EC will report higher anger, and those with high NA would show vulnerability for anxiety and somatization. It was hypothesized that mothers who engage in more emotion coaching would have children who exhibit lower anxiety, anger, and somatic problems. Conversely, mothers who practice more emotion dismissing would have children with higher anxiety, somatization, and anger. In terms of moderation, we expected that children who are high in NA would be prone to elevated anxiety, anger, and somatic behavior, but especially so in the context of high emotion dismissing by the mother. Similarly, children low on EC would have better emotional outcomes in the context of emotion coaching by the mother, while the emotional outcomes of children high on EC would not depend as much on maternal MEP.
2. What role does child gender play in the emotional experiences of the child, and are links between maternal MEP and child emotional outcomes the same for boys and girls? First, we expected, for the whole sample, girls would exhibit higher levels of anxiety and somatization compared to boys, and boys would show higher anger. Second, we hypothesized that being a girl would increase one's vulnerability for anxiety and somatic complaints, especially in the context of maternal emotion dismissing. Conversely, we expected girls to experience lower anxiety in the context of emotion coaching, while boys would report low anxiety regardless of maternal MEP. However, in the context of high emotion dismissing, boys would express higher anger than girls who would show more somatic complaints.
3. To what extent are there cultural differences in MEP, and are gender differences in temperament, MEP, and emotional outcomes similar across cultures? We expected that Indian and Indian American mothers would adopt less emotion coaching and more emotion dismissing with their children, compared to Caucasian mothers who would use more emotion coaching. We

predicted Indian children would exhibit less anger compared to Caucasian children, with Indian Americans in the middle. We expected Indian children would exhibit higher anxiety and somatic behavior as compared to the Caucasians, and the Indian American group would show moderate levels of anxiety and somatization. Further, we expected gender differences in emotional outcomes to be bigger for Indians compared to Caucasians. We did not expect cultural differences in anger and anxiety for boys. Finally, we thought that there would be bigger gender differences in maternal MEP across cultural groups, especially for girls with Indian mothers, and that Caucasian mothers would show more similar MEP across boys and girls.

Method

Participants

A sample ($N = 136$ dyads) of 10–13-year-olds was recruited to participate in the study along with their mothers. The three groups participating were mother–child Caucasians dyads in the U.S.A. (US; $n = 40$), Indian Americans in the U.S.A. (IA; $n = 32$), and Indians in India (I; $n = 64$). The Indian children were born and raised in the National Capital Territory of Delhi (NCT), India. When recruiting participants in the U.S.A., the following criteria were used to define cultural group membership. The children must be between the ages of 10 and 13 years. The parent and child have to be either Caucasian or Indian American. By Caucasian, we meant white, European-descent parents with their child born in the U.S.A. By Indian American, we meant that the child participant could either be born in the U.S.A., or have migrated to the U.S., with at least one parent/guardian being born in India. We did not have data on how many years the Indian American child had lived in the U.S.A. but we did know country of birth for the IA children—25 out of 32 (78 %) were born in the U.S.A., and seven (22 %) were born in the Indian subcontinent. T tests conducted to compare U.S.-born Indian Americans to India-born Indian Americans indicated no differences between the two groups on NA, EC, coaching, dismissing, nor on the three emotional outcomes (anxiety, anger, and somatic complaints).

For the entire sample, a little more than half of the participants were male (52 %), and average age was 11.8 years (range 9–13 years). There were significant group differences in children's age, $F(2, 132) = 8.84$, $p < .001$. Indians ($M_{\text{age}} = 12.07$, $SD = 0.51$) were about 6 months older than Indian Americans ($M_{\text{age}} = 11.31$, $SD = 1.01$). The Caucasian children were not different in

age from the other groups. Similarly, there were significant group differences in mothers' age, $F(2, 122) = 3.43$, $p < .05$. Post hoc comparisons revealed that Indian mothers ($M_{\text{age}} = 36.96$, $SD = 3.38$) were, on average, younger than Indian American mothers ($M_{\text{age}} = 40.0$, $SD = 3.94$) with Caucasian mothers ($M_{\text{age}} = 38.95$, $SD = 8.17$) not different in age from the others. In terms of maternal education, there was a difference across groups, $F(2, 121) = 3.09$, $p < .05$. The categories ranged from 1 = less than high school, and 6 = pursuing/completed PhD/MD. Most mothers were educated with at least a Bachelor's degree across cultural groups. However, post hoc analyses revealed that maternal education for Indian American mothers ($M_{\text{ed}} = 4.64$, $SD = 0.66$) was slightly higher than for Indian mothers ($M_{\text{ed}} = 4.14$, $SD = 0.96$), $t(68) = 2.18$, $p < .05$.

Self-reported annual family income was only validly reported for Caucasians and Indian Americans. Although they were asked on the survey, many Indian mothers did not answer the question (30 %) and the ones that did answer appeared to seriously underestimate their family income. The low amounts indicated were neither consistent with the living cost for the area in which they lived nor the tuition expenses of the schools the children attended. Also, income and parental education were appropriately positively related among the other two groups (r 's = .34–.48) but negatively related for Indians ($r = -.38$). There is a well-known response bias within the Indian community where people resist sharing information about their economic status (Bijapurkar, 2007). For these reasons, we only report average income for Indian Americans and Caucasians, which was approximately \$90,000, with no difference between these two groups. In this study, maternal education was considered to be a proxy for SES; hence, maternal education, rather than income, was used as a covariate for SES across groups.

Procedure

In India, paper packets of questionnaires were distributed to students in sixth grade at two schools in the National Capital Territory of Delhi (NCT). NCT is a large metropolitan region (spread over 573 sq miles), which includes New Delhi and its surrounding urban cities such as Gurgaon, Noida, Ghaziabad, and Faridabad. Mothers responded by signing the consent form, filling out the demographic sheet and questionnaires, and sending the packet back to school with the child. They were informed that their child will be answering a similar set of questions at school. Then, the children whose mothers had responded filled out the questionnaires during school hours in their classroom. They were assured of confidentiality and that

their mothers had answered similar questions. The measures used were kept in their original language (English) for all participants, a decision that was justified by the fact that education in India (and at the schools attended by the participants) is imparted in English, most people in India speak English fluently, and English is one of the official languages at the federal level (Ball, 2011). Other than English, the next most commonly spoken language in this region is Hindi; however, the youth tend to prefer to use English or “Hinglish” (a mixture of English and Hindi) (Rubdy, 2013).

In the United States, Caucasian and Indian American participants were recruited by distributing flyers at local community centers, religious centers (e.g., church, temple), and grocery stores, as well as by informal emails to acquaintances. These two samples were drawn from the densely populated Northern Virginia area. Mass emails were also sent out on listservs of parenting groups, music/dance schools, and summer camp organizers. Those who agreed to participate were either handed a paper–pencil packet to fill out and mail back at the university address ($n = 9$), or they were provided a flyer that briefly mentioned the study and had web links to two online surveys ($n = 63$), one of which was to be filled out by the mother and the other by the child. The participants were also asked to complete a demographic sheet wherein they reported the child’s age, date of birth, gender, first and second language, mother’s age, education, and income.

The method of response was different across groups. In India, all participants completed a paper-and-pencil version of the questionnaires; and in the U.S.A., they completed either paper-and-pencil or a web-based version via the Internet. Online assessment is now common and has the advantages of accurate data entry, reduced missing values, immediate data entry, more honest participant self-disclosure, fewer socially desirable responses, and higher perceived privacy (Joinson, 1999; Luce et al., 2007). The disadvantage, however, is lack of control over who was present in room when completing the measures online and lack of knowledge about the state of the person at the time of answering the online questions. Research shows that responses on most measures do not vary as a function of mode of administration and that online survey data are comparable to that received with paper-and-pencil measures (Pettit, 2002; Vallejo, Jordan, Diaz, Comeche, & Ortega, 2007). *T* tests revealed that participants who completed the survey on paper were no different from those who completed it online on demographic variables, predictor, and outcome measures.

Measures

Temperament

The Early Adolescent Temperament Questionnaire (EATQ; Capaldi & Rothbart, 1992) is designed to assess temperament in adolescents aged 9–15 years and available in self- and parent-report formats. It is a 65-item questionnaire consisting of statements rated on a 5-point, Likert scale. The measure yields four factors of temperament—negative affectivity (NA), surgency, affiliativeness, and EC based on 11 subscales: fear, surgency, shyness, depressive mood, aggression, affiliation, pleasure sensitivity, perceptual sensitivity, frustration, activation, inhibitory control, and attention. Alphas for the scales as reported by test authors were high (NA, $\alpha = .76$; EC, $\alpha = .77$), and test publishers’ average convergence between parent report and adolescent report was .29 (Capaldi & Rothbart, 1992). In this study, as is standard; six out of eleven subscales (depressive mood, aggression, frustration, activation, inhibitory control, and attention) were used to create NA and EC factors. EC scores come from the attention, activation control, and inhibitory control subscales, and NA score consists of depressive mood, aggression, and frustration. Because (a) there were more complete responses on temperament from mothers than for children (missing data $n = 16$), and (b) mother and child reports were significantly correlated, (NA, $r = .42$ and EC, $r = .37$), and mother report was used. Alphas reported for the two measures were similar to, or better than the publishers’ reported figures, and were moderate to high, both overall (NA = .82, EC = .80), and across cultural groups [Indians (I)—NA, $\alpha = .66$; EC, $\alpha = .63$; Indian Americans (IA)—NA, $\alpha = .76$; EC, $\alpha = .81$; Caucasians (U.S.A.)—NA, $\alpha = .89$; EC, $\alpha = .89$].

Maternal Meta-Emotion Philosophy

The Emotion-Related Parenting Styles Self-Test True/False version (ERPSST-T/F; Gottman et al., 1997) is an 81-item true/false format survey that results scale representing a different parenting style based on Gottman’s MEP theory. Responses marked as “true” on each scale are summed and divided by the total number of items for that style. The emotion-coaching scale is comprised of 23 items (e.g., “If there’s a lesson I have about anger, it’s that it’s okay to express it”; “It’s important to help the child find out what caused the child’s anger”) and the dismissing scale has 25 items (e.g., “When my child is angry, I usually don’t take it all that seriously”; “I don’t want to make a big deal out of my child’s sadness”). The test–retest reliability reported

during validation studies was emotion coaching, $r = .43$, and dismissing, $r = .87$ (Hakim-Larson, Parker, Lee, Goodwin, & Voelker, 2006). Alpha coefficients reported by the test publishers are Coaching, $\alpha = .62$ and dismissing, $\alpha = .76$, and test–retest reliability was .88 over 1 month (Hakim-Larson et al., 2006). The overall Cronbach alpha for emotion coaching in this sample was .71 (U.S.A. = .79, IA = .73, I = .58) and for emotion dismissing, it was .80 (U.S.A. = .86, IA = .82, I = .57). Emotion coaching and dismissing were not related, $r(127) = .06$, *ns*, for this sample.

Anxiety

The State Anxiety Inventory for Children (SAIC; Spielberger, 1973) consists of 20-items measuring state anxiety in children between ages 8 and 14. SAIC examines the short-term state anxiety specific to situations. It prompts the child to rate 20 statements on a four-point Likert-scale ranging from “hardly ever true” to “often true.” Cronbach alpha reliability of the SAIC Anxiety scale, computed for the original validation study was .82 for males and .87 for females (Spielberger, 1973). For this study, the SAIC Anxiety scale score was used as an outcome and Cronbach’s alpha for the overall sample was 0.84 (20 items). Similar to the test publisher’s findings, the alpha coefficients were 0.86 for males and 0.82 for females for the current sample. Reliability coefficients were high across cultural groups as well (U.S.A. = .87, IA = .90, I = .72).

Somatic Complaints

The Symptom Questionnaire (SQ; Kellner, 1987) consists of 92 Yes/No items, out of which 68 items indicate anxiety, depression, anger-hostility, and somatic symptoms. The SQ was used to generate the somatic score of participants (17 items). Children were asked to describe symptoms they have experienced during the past week. The score on the somatic subscale was obtained by adding the number of “yes” responses on somatic problems wherein a higher score indicates more somatization. It is a widely used indicator of somatic distress (Kellner, 1987). Publishers’ test–retest correlation for somatic symptoms was .77 (Kellner, 1987). In the present study, Cronbach’s alpha of somatic symptoms for overall was .84, and for across groups, U.S.A. = .88, IA = .88, I = .80.

Anger

The Anger Expression Scale for Children (AESC; Steele, Legerski, Nelson, & Phipps, 2009) is a 26-item measure that utilizes a four-point Likert response format (almost never, sometimes, often, and almost always). Based on

factor analysis, the measure generates two factors, anger expression, and anger control. For the purpose of this study, we used the “anger expression” factor that consists of 16 items from both the a priori “trait anger” and “anger-out” subscales (Steele et al., 2009). Higher scores on this scale indicate more frequent experience of anger and greater outward expression of anger. Internal consistency reliability (Cronbach) on the anger expression subscale is .69 for healthy controls (Steele et al., 2009). Internal consistency reliability of the anger expression scale here was high and consistent across cultural groups; that is, Indians ($\alpha = .85$), Indian Americans ($\alpha = .93$), and Caucasians ($\alpha = .95$). In addition, anger expression has shown short- and long-term stability in previous validation (Steele et al., 2009).

Results

Preliminary Data Analyses

The correlations between the main variables of interest (emotion coaching, emotion dismissing, NA, EC, anxiety, anger, and somatic complaints) and demographic variables, including child gender, child age, mother age, mother education, and family income were examined for the overall sample, as well as by cultural group and gender. For the whole sample, child gender (girl) was only correlated with NA, such that girls had higher scores on NA; however, this was only true/significant for Indian Americans and Caucasians. Mothers’ age was negatively related with emotion dismissing, such that older mothers dismissed less, and with children’s anxiety, such that with increasing mothers’ age, child anxiety levels reduced. Maternal education was negatively associated with the use of emotion dismissing, and income was negatively associated with dismissing (see Table 1). Given the above, mothers’ age, and education were controlled for in the regression analyses below.¹

For the whole sample, NA was negatively correlated with EC, and positively associated with the three child outcomes: anxiety, somatic, and anger (see Table 1). Mothers’ reported use of EC was significantly correlated with emotion dismissing with her child. Child age was positively related to somatic complaints ($r = .55$, $p < .01$) only among the Caucasians and was not related to other outcomes. Mothers’ age was negatively associated with the use of emotion coaching for both Indian American

¹ Betas, R^2 change, and p values did not change in significance or magnitude for any of the predictors when mothers’ age and maternal education were entered as controls in step 1 of the regressions. In fear of losing degrees of freedom as well as complicating the reporting of values in tables, we report results below without these controls.

Table 1 Intercorrelations between all demographics and variables of interest (whole sample)

	1	2	3	4	5	6	7	8	9	10	11	12
1 Girl	1											
2 Child age (years)	0.04	1										
3 Mother age (years)	0.005	0	1									
4 Mother education	-0.01	-0.17	0.13	1								
5 Annual income	-0.11	-0.03	0.02	0.39**	1							
6 NA	0.23**	0.14	-0.01	-0.15	-0.05	1						
7 EC	-0.05	-0.01	0.13	0.15	0.01	0.40**	1					
8 Coaching MEP	-0.11	-0.03	-0.07	0.11	0.025	-0.08	0.01	1				
9 Dismissing MEP	-0.02	0.08	-0.18*	-0.22*	-0.25*	0.09	-0.18*	0.05	1			
10 Anxiety	0.10	0.086	-0.24	-0.12	-0.14	0.36**	-0.14	-0.14	0.33**	1		
11 Somatic complaints	0.06	0.11	-0.04	-0.01	0.17	0.23*	-0.12	-0.12	0.18	0.41**	1	
12 Anger	0.02	0.02	-0.05	.004	0.13	0.30**	-0.22*	-0.08	0.14	0.43**	0.42**	1
Mean	0.48	11.8	38.33	4.25	4.78	2.68	3.23	0.77	0.56	1.98	0.26	3.89
SD	0.5	0.87	5.53	1.04	1.01	0.55	0.52	0.15	0.19	0.44	0.22	1.18
N	136	136	126	125	66	135	135	135	135	120	120	119

Bold values indicate significant correlations

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

($r = -.36$, $p < .05$) and Caucasian ($r = -.34$, $p < .05$) participants, suggesting that older mothers in both the groups used less emotion coaching with their children. Mothers' age was also negatively associated with somatic complaints in Indian American children ($r = -.40$, $p < .05$) indicating that Indian American children with older mothers had fewer somatic problems. Maternal education was negatively related to emotion dismissing among Caucasian mothers ($r = -.43$, $p < .01$) and was positively associated with anxiety ($r = .45$, $p < .05$) and somatic scores ($r = .50$, $p < .01$) for Indian American children. We also examined the relations between the three emotional outcomes. The emotional outcomes (anxiety, somatic problems, and anger) were reasonably correlated with each other both, overall and across cultural groups (Table 1).

Data Analysis

To answer the research questions, regression models were run with predictor variables being: NA, EC, gender (girl), and MEP (emotion coaching and dismissing); along with related interaction terms with MEP (coaching \times EC, coaching \times NA, and coaching \times gender; dismissing \times EC, dismissing \times NA, and dismissing \times gender). There were three outcome variables in turn—anger, anxiety, and somatic behavior. For moderated regressions, there were four continuous variables as predictors (NA, EC, coaching, and dismissing), and gender was a categorical variable (0 = boy, 1 = girl). Predictors were centered. We reasoned that structural equation modeling was not feasible

in this context, given the small group sample sizes, and for the same reason (small group sizes), we were unable to test whether cultural group moderated associations between MEP and child outcomes. In terms of missing data, only 1 % was missing for maternal reports on NA, EC, coaching, and dismissing. For the child-reported outcome variables of anxiety, anger, and somatic complaints, 12 % were missing.

Research Question 1: Temperament and MEP

To examine how temperament was related to emotional outcomes for the whole sample ($N = 136$), three hierarchical regression models were run where in step 1, NA and EC were the predictors followed by step 2, in which both emotion coaching and dismissing were entered. Next, for step 3, two versions of the model were run separately. First, in step 3a, EC \times coaching and EC \times dismissing interaction terms were entered, and then in another model, as step 3b, the interaction terms NA \times coaching and NA \times dismissing were entered, with anxiety, anger, and somatic scores as dependent variables one at a time (Table 2).

Anxiety There was a significant main effect for temperament (NA) on anxiety, $\Delta F(2, 115) = 9.213$, $p < .001$, such that an increase in NA was associated with higher anxiety, $b = .372$, $t = 3.94$, $p < .001$. EC did not contribute to children's anxiety. Next, maternal coaching and dismissing contributed to child anxiety, $\Delta F(2, 113) = 7.73$, $p = .001$, where specifically, it was emotion dismissing that was a positive predictor of child anxiety, $b = .314$, $t = 3.76$, $p < .001$ (Table 2). It was hypothesized that

Table 2 Moderated regression results for MEP as a moderator of the relationship between temperament (NA and EC) and emotional outcomes

	DV = anxiety				DV = somatic				DV = anger			
	B	SE (B)	β	ΔR^2	B	SE (B)	β	ΔR^2	B	SE (B)	β	ΔR^2
Step 1												
NA	0.30	0.077	0.37*	0.138*	0.08	0.041	0.213*	0.051*	0.57	0.21	0.26*	0.11*
EC	0.00	0.081	0.001		-0.01	0.043	-0.026		-0.27	0.22	-0.12	
Step 2												
Coaching	-0.37	0.245	-0.113	0.104*	-0.17	0.136	-0.116*	0.04	-0.40	0.71	-0.05	0.01
Dismissing	0.74	0.196	0.314*		0.20	0.109	0.164		0.65	0.57	0.104	
Step 3a												
EC \times coaching	0.46	0.496	0.077	0.01	0.56	0.272	0.186*	0.036	3.405	1.397	0.215*	0.045*
EC \times dismissing	0.31	0.429	0.065		0.08	0.235	0.033		-0.38	1.21	-0.03	
Step 3b												
NA \times coaching	-0.43	0.49	-0.077	0.013	-0.892	0.26	-0.313*	0.89*	-3.70	1.38	-0.247*	0.057*
NA \times dismissing	-0.30	0.32	-0.084		0.167	0.168	0.091		-0.35	0.89	-0.065	

B, β are initial betas from the first time, and they were entered in the model

* $p < .05$

children high on NA and/or low on EC would show more anxiety, but if mothers use much emotion coaching, and then MEP would act as a buffer in reducing anxiety. However, we found no supporting evidence for interactions between EC or NA and MEP, in predicting anxiety in children in step 3.

Somatic Complaints Regression analyses using the same models mentioned above revealed a significant main effect for temperamental traits (NA, EC) on somatic complaints, $\Delta F(2, 115) = 3.07, p < .05$, where an increase in NA was associated with an increase in somatic scores, $b = .213, t = 2.155, p < .05$ (Table 2). The addition of MEP did not significantly increase the prediction of child somatic behaviors. However, emotion dismissing was marginally associated with somatic complaints in children, $b = .164, t = 1.79, p = .08$. The interaction between EC and MEP in step 3 was positively associated with somatic complaints, $b = .186, t = 2.067, p < .05$. For children high on EC, emotion coaching did not play much of a role in somatic complaints. However, among children low on EC, use of emotion coaching was associated with fewer somatic problems compared to children who did not receive emotion coaching. In fact, children low on EC reported more somatic problems in the context of low emotion coaching.

Similarly, results indicated that an interaction between NA and emotion coaching predicted a significant portion of the variance in somatic complaints, step 3a $\Delta F(2, 109) = 4.36, p < .01, b = -.297, t = -2.904, p < .01$. Specifically, children with high NA in the context of low emotion coaching are vulnerable to somatic problems (Fig. 1). It was hypothesized that specifically children who are high on NA, when they receive high emotion coaching

by the mother, may show reduced somatization compared to children who receive low maternal emotion coaching. We found support for this since for children with low NA, the presence or absence of emotion coaching did not make a difference in their experience of somatization, but for children who were high in NA, emotion coaching worked as a buffer to reduce somatic complaints.

Anger Regression results indicated that there was a significant main effect for temperament (NA, EC) on anger, $\Delta F(2, 114) = 6.95, p = .001$, where NA was a positive predictor of anger, $b = .265, t = 2.747, p < .01$ (Table 2). There was no main effect of MEP on child anger, suggesting that emotion coaching or dismissing overall did not relate to child anger expression. However, there were significant interactions between EC and MEP, step 3a $\Delta F(2, 110) = 2.97, p = .05$. The interaction between EC and emotion coaching positively predicted anger in children, $b = .215, t = 2.44, p < .05$. It was hypothesized that children low on EC in the context of much maternal emotion coaching would show reduced anger, and this hypothesis was supported. Children with low EC were prone to more anger problems if their mother did not employ much emotion coaching with them, and the use of much emotion coaching was associated with less anger expression in children. In contrast, children with high EC had less different scores on anger as a function of maternal MEP (Fig. 2).

Results also indicated that the interaction between NA and coaching predicted anger, step 3b $\Delta F(2, 110) = 3.85, p < .05, b = -.247, t = -2.68, p < .01$. Children with high NA in the context of low emotion coaching are vulnerable to anger. It was hypothesized that children high on NA in the context of much emotion coaching may show

Fig. 1 Emotion coaching as a moderator for the relation between NA and somatic complaints

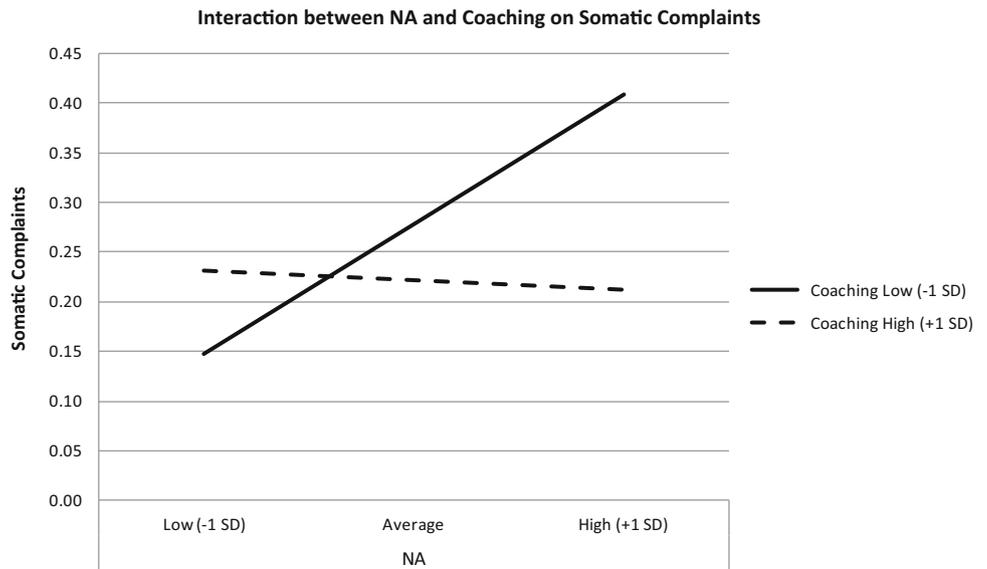
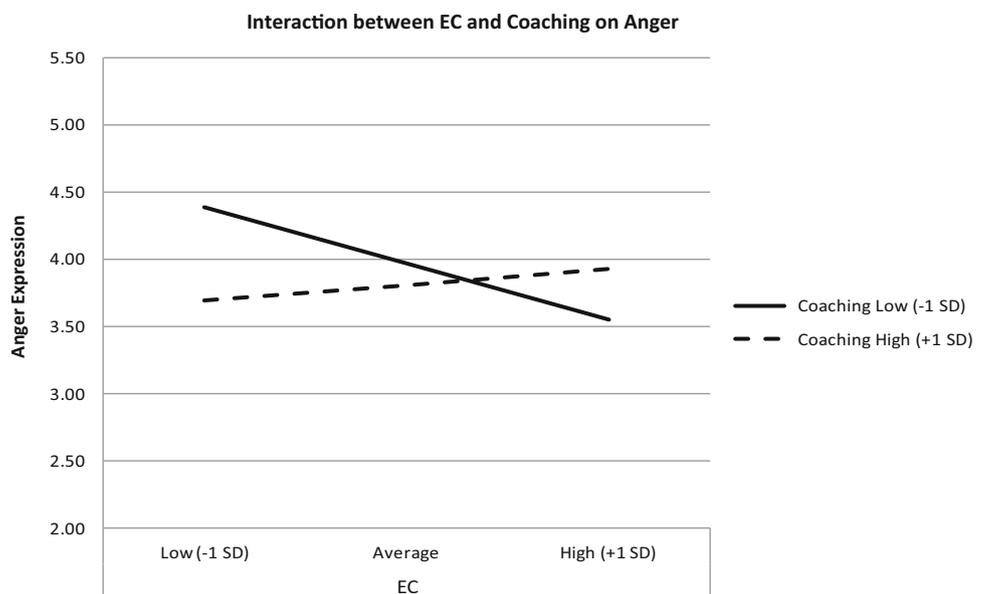


Fig. 2 Emotion coaching as a moderator for the relation between EC and anger



reduced anger, and this was supported by the data. Children with high NA reported more anger if their mother did not employ much emotion coaching with them, and the use of emotion coaching was associated with less anger. In contrast, children with low NA had low anger scores irrespective of MEP.

Research Question 2: Gender and MEP

To answer question 2, about the role of gender in the emotional experience of the children, and links between emotional expression and maternal MEP being the same for boys and girls, three regression models were executed on the whole sample ($N = 135$). In step 1, gender, coaching, and dismissing were entered, and in step 2, the

interaction terms—gender \times coaching and gender \times dismissing were entered with anxiety, anger, and somatic as dependent variables (Table 3).

Anxiety Emotion dismissing was a positive predictor of anxiety, $b = .80, t = 3.89, p < .001$; and gender and MEP together accounted for 14 % of variance in anxiety in step 1 $\Delta F(3, 114) = 6.20, p = .001$. The interaction between gender and MEP was not predictive of child anxiety, step 2 $\Delta F(2, 112) = .88, p = .42$, suggesting that emotion dismissing was linked with anxiety in the same way for boys and girls.

Somatic Complaints Regression analyses indicated that emotion dismissing was a significant positive predictor of somatic scores, $b = .22, t = 1.99, p < .05$. The interaction

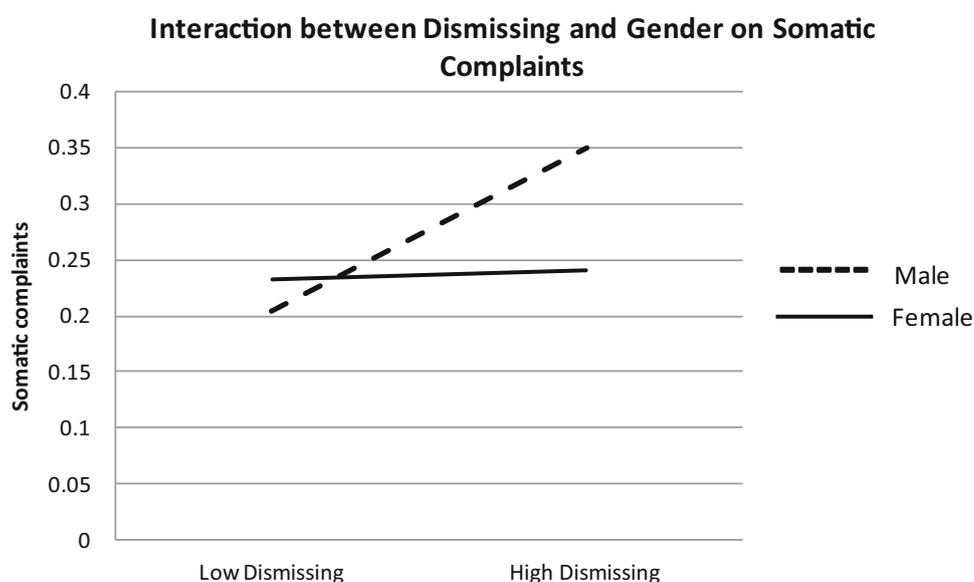
Table 3 Moderated regression results for MEP as a moderator of the relationship between gender and emotional outcomes

	DV = anxiety				DV = somatic				DV = anger			
	<i>B</i>	SE (<i>B</i>)	β	ΔR^2	<i>B</i>	SE (<i>B</i>)	β	ΔR^2	<i>B</i>	SE (<i>B</i>)	β	ΔR^2
Step 1												
Girl	0.09	0.08	0.10	0.14*	-0.037	0.04	-0.08	0.06	0.04	0.22	0.018	0.03
Coaching	-0.4	0.26	-0.13		-0.22	0.14	-0.15		-0.60	0.74	-0.07	
Dismissing	0.8	0.21	0.34*		0.22	0.11	0.18*		0.92	0.58	0.16	
Step 2												
Gender \times coaching	0.57	0.52	0.50	0.01	-0.34	0.27	-0.59	0.05*	-0.40	0.71	-0.05	0.00
Gender \times dismissing	0.22	0.41	0.15		-0.46	0.215	-0.62*		0.65	0.567	0.10	

B, β are initial betas

* $p < .05$ (significant values)

Fig. 3 Emotion dismissing as a moderator for the relation between gender and somatic complaints



between gender and MEP predicted a significant portion of the variance in somatic complaints, step 2 $\Delta F(2, 111) = 3.20$, $p < .05$, such that for girls, receiving much emotion dismissing was not associated with somatic complaints (see Table 3). Higher levels of emotion dismissing were negatively associated with somatization for boys, such that the reports of somatization rose in boys with more maternal emotion dismissing, $b = -.46$, $t = -2.16$, $p < .05$ (Fig. 3).

Anger Neither gender nor MEP predicted anger in children, step 1 $\Delta F(3, 113) = 1.04$, $p = .37$. The interactions between gender and MEP were also not significant predictors of anger, step 2 $\Delta F(2, 111) = .12$, $p = .88$, suggesting that maternal use of emotion coaching and dismissing is not associated with anger for both boys and girls (Table 3).

Research Question 3: Culture

A series of ANOVAs with cultural group and gender as independent variables and MEP and emotions as dependent measures revealed that there were significant cultural group differences in child anxiety, $F(2, 116) = 9.02$, $p < .001$, and NA, $F(2, 132) = 12.57$, $p < .001$. Tukey's HSD analyses found that Indian children had higher anxiety and NA compared to Indian Americans and Caucasians (Table 4). It was also found that cultural groups significantly differed in emotion coaching, $F(2, 131) = 9.28$, $p < .001$, and dismissing, $F(2, 131) = 14.60$, $p < .001$. It was hypothesized that Indian mothers would employ more emotion dismissing and Caucasian mothers would use more of emotion coaching. Indeed, Tukey's HSD revealed that Indian mothers exhibited more emotion dismissing and significantly less emotion coaching

Table 4 Mean differences on predictor and outcome variables, separately by cultural group and gender

Variables	Cultural group				
	Mean (SD)	Indians	Indian Americans	Caucasians	Overall for all groups
Anxiety		2.13 (0.37)^A	1.84 (0.50)^B	1.78 (0.42)^B	1.97 (0.44)
Boys		2.07 (0.41)	1.77 (0.47)	1.82 (0.44)	1.93 (0.45)
<i>N</i>		31	14	16	61
Girls		2.18 (0.34)	1.92 (0.55)	1.71 (0.40)	2.03 (0.44)
<i>N</i>		31	13	12	56
Somatic		0.28 (0.21)	0.19 (0.22)	0.25 (0.25)	
Boys		0.30 (0.21)	0.22 (0.27)	0.26 (0.25)	0.27 (0.24)
<i>N</i>		31	14	16	61
Girls		0.26 (0.21)	0.16 (0.14)	0.25 (0.25)	0.24 (0.21)
<i>N</i>		31	13	12	56
Anger		4.05 (1.08)	3.62 (1.20)	3.84 (1.36)	
Boys		4.02 (1.04)	3.56 (1.02)	3.86 (1.44)	3.87 (1.15)
<i>N</i>		31	14	16	61
Girls		4.09 (1.15)	3.70 (1.41)	3.81 (1.30)	3.93 (1.22)
<i>N</i>		31	13	12	56
NA		2.9 (0.45)^A	2.37 (0.43)^B	2.57 (0.63)^B	
Boys		2.91 (0.46)	2.20 (0.39)	2.36 (0.55)	2.57 (0.57)^C
<i>N</i>		31	16	24	71
Girls		2.87 (0.45)	2.55 (0.42)	2.89 (0.61)	2.81 (0.50)^D
<i>N</i>		33	15	16	64
EC		3.1 (0.38)	3.31 (0.45)	3.31 (0.71)	
Boys		3.18 (0.45)	3.39 (0.50)	3.25 (0.59)	3.25 (0.51)
<i>N</i>		31	16	24	71
Girls		3.12 (0.31)	3.21 (0.41)	3.40 (0.85)	3.21 (0.52)
<i>N</i>		33	15	16	64
Coaching		0.71 (0.15)^A	0.79 (0.14)^B	0.84 (0.13)^B	
Boys		0.71 (0.15)	0.81 (0.12)	0.87 (0.10)	0.78 (0.14)
<i>N</i>		31	16	24	71
Girls		0.72 (0.14)	0.76 (0.16)	0.79 (0.15)	0.75 (0.15)
<i>N</i>		32	15	16	63
Dismissing		0.63 (0.14)^A	0.51 (0.16)^B	0.40 (0.15)^B	
Boys		0.63 (0.14)	0.52 (0.18)	0.47 (0.23)	0.55 (0.19)
<i>N</i>		31	16	24	71
Girls		0.63 (0.14)	0.51 (0.15)	0.41 (0.18)	0.54 (0.17)
<i>N</i>		32	15	16	63

Values that do not share a common superscript are significantly different ($p \leq .05$)

Bolded (significant, $p < .05$)

compared to Indian Americans and Caucasians. As expected, emotion coaching was used most by Caucasian mothers, but they were not very different from Indian American mothers in their MEP styles.

In terms of gender differences, girls exhibited significantly higher levels NA compared to boys, $t(133) = -2.56, p = .01$. Post hoc analysis revealed that it was specifically Indian American and Caucasian mothers who were reporting higher NA in girls than in boys. There were no significant gender by cultural group interactions for

anxiety, $F(2, 119) = .87, p = .42$, somatic problems, $F(2, 119) = .09, p = .91$, or anger, $F(2, 118) = .04, p = .96$, indicating that the relative lack of gender differences in children's emotions was steady across cultural groups.

It was expected that there would be bigger gender differences in maternal MEP across cultural groups, especially for Indian mothers' MEP with girls. However, data revealed that there were no significant gender differences on emotion coaching, $F(1, 134) = 2.04, p = .16$. Further, the interaction between gender and cultural group on

emotion coaching was not significant, $F(2, 134) = 1.03$, $p = .36$. The same pattern was found for emotion dismissing. Although it was hypothesized that Indian mothers would use more dismissing with girls, and that Caucasian mothers would show more similar MEP for boys and girls, there was no gender differences in emotion dismissing, $F(1, 134) = .59$, $p = .44$, and the interaction between gender and cultural group was not significant, $F(2, 134) = .31$, $p = .73$. These results show that the cultural group differences in maternal MEP were the same for boys and girls.

Discussion

The purpose of the current study was to examine associations between temperament, parenting, and emotional outcomes in different socio-cultural contexts for a sample of 10–13-year-old children. The main goals of this study were (a) to add to the existing literature about the relation between temperament and emotional experiences in children, (b) to understand the role of maternal emotion socialization practices in modifying relations between temperament and children's emotions, and (c) to explore potential gender and cultural differences in MEP and emotional outcomes.

Temperament, Emotions, and MEP

Substantial support was found for NA being associated with negative emotions in children across all three cultural groups, where NA was positively related with children's reports of anxiety, somatic behavior, and anger. Children who were temperamentally prone to negative feelings and emotional discomfort reported higher levels of anxiety, somatic complaints, and anger. Conversely, EC was associated with anger expression in children such that children who were higher on EC had lower anger scores as compared to children lower on EC. This finding is in line with previous research that has found children high on EC being slower to anger and expressing less intense anger (Kochanska et al., 2000). As expected, children with high NA showed higher amounts of anxiety and somatic problems, and those with low EC reported higher levels of anger (Ellis & Rothbart 2001). In a similar vein, longitudinal findings in the past have also noted that externalizing and internalizing behavior problems are associated with low EC, high impulsivity, and negative emotionality (especially anger) (Eisenberg et al., 2005).

MEP was also related to children's emotional outcomes such that maternal emotion coaching was associated with lower child reports of somatic complaints, and emotion dismissing was related to higher anxiety in children. As

suggested by Gottman et al. (1996, 1997), parents who engage in coaching their children about emotions, label children's feelings, and create awareness of children's emotional experiences help children cope better with emotional distress. Similarly, children in this study who received more emotion coaching had less somatization, perhaps because they could communicate their emotions maturely and did not feel the need to express them through somatic symptoms. Conversely, parents who are low in awareness of their own as well as their children's emotions, and who dismiss emotional talk/conversations may contribute to poorer emotion regulation and more behavioral problems in children (Lunkenheimer, Shields, & Cortina, 2007). Likewise, in this study, it was noted that mothers who reported using higher emotion dismissing had children with higher anxiety, and dismissing MEP accounted for a substantial proportion of anxiety in children. Usually, negative emotionality in children requires much vigilance and attention from parents in order to help children avoid emotional distress. Warm parenting as well as coaching about negative emotions could reduce their risk of emotional and behavioral problems. Thus, parents may be taught to focus more on children's understanding and regulation of negative emotions (Gottman et al., 1997; Lagattuta, 2008).

The relationship between temperament and emotional experience did vary depending on maternal MEP. Specifically, it was hypothesized that children who are high in NA may be prone to elevated levels of anxiety, anger, and somatic behavior, but especially in the context of maternal emotion dismissing. There was some support for this such that children high in NA, especially when receiving much emotion coaching by the mother, reported fewer somatic complaints. Similarly, children high in NA, when receiving much emotion coaching from the mother exhibited less anger expression compared to children who did not receive much emotion coaching. This finding relates to previous claims that emotion coaching: (a) has a protective effect for negative emotions, and (b) it does not always offer direct benefits for children's emotional and behavioral outcomes, depending on child temperament (Lunkenheimer et al., 2007). However, most of the previous research showing such links has been conducted with younger children. The current study, thus, provides an important and novel contribution to the literature by showing that coaching MEP may buffer the experience of negative emotions in young adolescents belonging to a variety of different cultural backgrounds.

Gender, Emotions, and MEP

It was hypothesized that girls would exhibit higher anxiety and somatic problems compared to boys, and boys would

show higher anger. There were no significant gender differences in the three emotional outcomes among boys and girls in this sample across all three cultural groups. Potential reasons for the null findings could be that (a) the use of self-report measures of emotion are less likely to yield clear and reliable gender differences as compared to direct observations and/or interviews (Lafrance & Banaji, 1992), and (b) the strongest evidence of gender differences in emotionality often occurs on measures of non-verbal expressivity rather than self-reports of subjective experience (King & Emmons, 1990). In the present study, self-report measures were used to assess children's subjective experience of emotions over the past few weeks, and not emotion expression itself.

It was expected that maternal use of emotion dismissing would be linked with expression of anger in boys and somatic complaints in girls. We found that maternal emotion dismissing was indeed associated with somatic complaints in girls. However, dismissive MEP was associated with negative emotions in boys, such that somatic problems increased as mothers employed more emotion dismissing. Interestingly, neither coaching nor dismissing appeared to play a role in anger and anxiety. We know that there is an attention bias in the socialization of children's emotional states, and that encouraging/discouraging of emotions is often gender differentiated (Denham, Zoller, & Couchoud, 1994; Gottman et al., 1997). Nevertheless, such gender differentiation in maternal socialization did not appear to occur in the present sample.

Culture and Temperament

Although no differences between cultural groups on temperament were hypothesized, it was found that Indian mothers reported children to be higher on NA than Indian American and Caucasian mothers. All groups had similar EC scores reported by mothers. It is widely accepted that temperament is a fairly universal construct (Thomas & Chess, 1977), but goodness of fit may be culturally embedded. Many East-Asian nations (including India) are collectivistic societies that adopt cultural norms, which promote "other-focused" emotions (e.g., sympathy, shame), and often discourage negative emotional expressions (e.g., anxiety, sadness, anger) (Friedlmeier et al., 2011). The Indian mothers here perhaps showed a low threshold for the display of negative emotionality in their children and reported higher levels of NA in children; or it could be that the Indian children were actually higher in NA.²

² We note that subsequent ANOVA analysis (not reported) revealed that the *child* reports on NA were not different across cultural groups, showing perhaps that Indian parents have a bias for a low threshold toward child negative emotion.

Some of the potential reasons for Indian American children experiencing slightly higher levels of anxiety as compared to their Caucasian counterparts could include— (a) acculturative stress and high parental expectations among Indian immigrant children/youth (Farver, Xu, Bhadha, Narang, & Lieber, 2007; Thomas & Choi, 2006), (b) underutilization of mental health services among Asian Americans (Gee, 2010), and (c) subdued expressions of emotions among Asian family members (Saw & Okazaki, 2010). In this study, the acculturative stress of the participants was not assessed, nor was the sample asked about their use of mental health services. However, emotion socialization practices were assessed, and it was noted that Indian American mothers employed similar amounts of emotion coaching and dismissing with their children as did U.S.A. Caucasian mothers. Thus, parental emotion socialization alone is not a reasonable explanation for Indian American children's anxiety levels in this sample. We had expected the Indian Americans to be similar to the Indians in their outcomes, but results suggest a possibility that the context (residing in the U.S.A.) is impacting Indian American mothers' parenting, and original Indian cultural values are not playing much of a role in their interactions with the children.

Culture, Gender, Emotions, and MEP

It was hypothesized that Indian children would report higher anxiety and somatic complaints, and the Caucasians would report more anger, with Indian Americans being in the middle. There was some support for this expectation in that children from Indian families indeed reported higher anxiety compared to Indian Americans and Caucasians. Again, there is supporting evidence from previous work that because of Indian cultural values about socializing children not to express their negative emotions, Indian parents try not to respond to their children's feelings, and rather, encourage children to control one's emotions (Khosla, 2006). This may be reason enough to see the pattern that we found in this study. Indian mothers who reported more dismissing MEP were found to see truth in statements such as "if you ignore a child's sadness it tends to go away and take care of itself," "I prefer a happy child to one that is overly emotional," "when my child gets angry, my goal is to get him to stop," and "When my child gets angry with me, I think, 'I don't want to hear this'."

However, in this study, Indian children did not report more somatic problems as compared to their Caucasian counterparts. Physical symptoms (such as pain) are considered more tolerable and justifiable than psychological processes (like anger, anxiety, and sadness) in Asian Indian culture (Raval, 2004). In Eastern cultures, physical illness (somatic complaints like headache, stomachache) is

perceived as beyond the control of the individual so this gains attention easily and is seen as more acceptable in children. It is important to note here that there is a difference between experience and expression of an emotion. In this study, through child report, we were able to tap the experience of children's emotions, and not necessarily their overt emotional expressions. Past studies may have accounted for emotional expression as well and reported that Indian children prefer somatic behavior over anger expression in front of parents. In the current sample of Indian children, they seem to have overcome the Indian norm of suppressive regulation as they were not outwardly expressing but reporting their experience of somatic problems through questionnaires that were completed in the absence of parent(s).

As expected, both Indian and Indian American children showed similar trends in their anxiety, where girls had higher anxiety than boys (Hasumi et al., 2012). However, there were no differences in anger expression reported by children from the three cultural groups. This finding is inconsistent with previous research documenting U.S. school-aged children as more likely to express socially disengaging emotions (i.e., anger) than rural Nepali children (Cole et al., 2002) and Indian Gujarati children (Raval et al., 2010). This discrepancy in anger scores may be attributed to the fact that NCT of Delhi is different from Gujarat region in India, as well as that India and Nepal are quite different nations. Also, it is important to keep in mind that India is a vast country with numerous sub-cultures coexisting and so, the results from this study may not be generalizable to Indians in all parts of the country. Besides, the methods used to collect the data on child emotions were different—in this study, self-report measures were employed, in previous work with Gujarati children, hypothetical vignettes were used with another person present asking the participants how they would feel and whether they would be likely to explicitly express the anger (or sadness or pain) toward a parent or peer (Raval et al., 2010). It may have been easier for the Indian participants in the current study to report anger because there was no one present during the simple and anonymous self-report survey format.

As for the Indian Americans, it was expected that children and mothers would be in the middle of Indians and Caucasians on most measures. The idea was that if Indian Americans were more similar to Indians, and then the cultural norms were dominant in their influence of maternal socialization behavior and children's experience of emotions. On the other hand, if Indian Americans were more similar to Caucasians, then the social context in which mothers reside influences their socialization practices and children's emotional outcomes. However, the pattern noted in this study was that (a) Indian Americans were indeed in

the middle of Indians and Caucasians on emotion coaching, emotion dismissing, and anxiety, (b) Indian Americans were the same as Caucasians on EC, and lastly, (c) Indian Americans were lowest on NA, somatic problems, and anger. It is a known phenomenon of self-selection that those who chose to emigrate are systematically different from persons who do not choose to migrate from their native country (Borjas, 1988). Also, "immigrant advantage" is also often observed where first-generation immigrant families often show greater strengths and resilience compared to native-born and second-generation immigrant families (García Coll & Marks, 2011). The mixed findings in this study do suggest that Indian Americans as an immigrant group could be unique in and not necessarily like one group or other. There is some evidence for this where we note that the Indian Americans mothers were more educated, older in age, and had younger children compared to the other two groups.

In terms of MEP, it was expected that Indian mothers would employ more emotion dismissing and Caucasian mothers would use more emotion coaching. This was indeed supported by the findings in this study, where we noted that Indian mothers used significantly less emotion coaching and more emotion dismissing compared to Caucasian and Indian Americans. Here, it is essential to keep in mind that emotion dismissing ties well with the Indian parenting beliefs of discouraging negative emotions in children, not labeling emotions, communicating about emotional events with children, and implicitly encouraging children to rely on affect-suppression methods of managing emotions (Friedlmeier et al., 2011; Le et al., 2002; Raval & Martini, 2009).

Previously, Indian mothers have reported using more emotion dismissing, which is associated with disregarding child's emotions and showing less acceptance of child's emotional experiences. Interestingly, the current study's findings also reflect the previous finding that Indian parents (e.g., Gujarati people in Western India) discourage overt physical expression of emotion (e.g., hugging, temper tantrum, feet stomping to show anger, etc.) as they believe that it reduces the socio-emotional distance between the parent and child, which is disrespectful (Pai, 1998). Distancing is valued in Indian culture as it is believed to enhance respect (Khosla, 2010). The current findings reflected such socialization beliefs of Indian mothers, which may be adaptive within the Indian setting.

Limitations and Considerations for Future Research

There are several limitations to the present study. First, the sample size was rather small ($N = 135$), especially when broken down by cultural group, which prevented us from examining culture as a moderator of links between other

constructs observed here. Moreover, given the small sample, our findings should be considered preliminary as they are unlikely to generalize to the whole of India, as India is a diverse nation. Despite this, the sample size of the current study is similar to other recent studies also examining adolescents' problem behaviors in Indian immigrants (Atzaba-Poria & Pike, 2007). For instance, in the study by Atzaba-Poria and Pike (2007), the sample consisted of 68 young adolescents (31 Indian and 37 British) between the ages of 10 and 13. In addition, this study's findings are similar to the present study, wherein Indian adolescents exhibited more internalizing problems than did their English peers in the United Kingdom (Atzaba-Poria & Pike, 2007). There are only a handful of studies that have studied emotion socialization practices in Indian children/families (Pai, 1999; Raval & Martini, 2009, 2011), and the current study is one of its kind. Nonetheless, future research should include more participants, and also look at immigrants' acculturative stress and generational status of the Indian American group in order to further explore variations in the influences of parenting on emotional outcomes between diverse cultural groups.

Second, all the measures used were self-report whereas in an ideal study, a combination of both quantitative (e.g., questionnaires) and qualitative (e.g., observations, interviews) methods would yield the best assessment of some of the variables being used in this study, for e.g., temperament, parenting styles, and negative emotions (Cole et al., 2006; Suveg et al., 2005). Qualitative assessment methods such as interviews and observations would perhaps provide a better understanding of parents' meaning systems, personal beliefs, emotion socialization goals, and cultural values (Dumka, Gonzales, Wood, & Formoso, 1998). Furthermore, conducting the full meta-emotion interview developed by Gottman et al. (1997) could have also provided more information on maternal MEP. Using the interview method would have also dealt with our study's limitation of not having assessed the negative emotionality of the mothers (i.e., the lack of data on maternal anxiety, somatization, and anger), as that indeed contributes to child's emotionality and their socio-emotional competence (Eisenberg et al., 1998b). Information about negative emotions may be obtained more easily through interviews than self-report measures (Pai, 1998). Finally, in this study, the true/false self-report measure of MEP was employed to assess mothers' emotion socialization style, which may not be the best report. There now is a Likert-scale version of the ERPSST measure which appears to show better reliability and validity than the ERPSST-T/F, the version used in this study (Hakim-Larson et al., 2006). Thus, future investigation should perhaps use that scale.

Another concern in the present study, as it is in most cross-cultural research, is the use of survey measures and

constructs that have been developed and validated in one cultural setting in another cultural setting with limited evidence yet of measurement and construct equivalence being present across cultural groups. Further, although seemingly reasonable given the status of the English language in India and prior research, we administered the surveys in English to all participants. Although others have used these measures with Indian groups (Holder, Coleman, & Singh, 2012; Rai, Pandey, & Kumar, 2009), and reasonable internal consistency reliabilities were found here on most instruments within all three groups, the Indian group did consistently show the lowest alphas across all measures, with reliability for emotion dismissing, emotion coaching, and EC falling below traditionally acceptable levels. Thus, the results found here should be considered preliminary. Clearly, additional measurement development and validation work across multiple cultural groups are needed for cross-cultural research on family emotional socialization processes to advance further. Finally, although we found no differences between responses on any of the measures between those who did the surveys online versus paper and pencil, this lack of control over administration could have introduced additional measurement error.

Although temperament is arguably best assessed in infancy with multiple methods, maternal report at around age 10, which was used here, may not be the most appropriate method of measuring temperamental traits. Previous research has shown cultural differences in temperament early in life, as well as its links with anxiety in school-age children (Repetti et al., 2002), and it is well known that NA is correlated with both anxiety and somatic behavior. Research claims that the temperamental trait, NA, closely corresponds to the dominant personality factor of anxiety/neuroticism within the Big Five personality traits (Watson & Clark, 1984). However, in this study, we did not consider NA and anxiety as the same constructs. NA was looked at as a predispositional factor that is associated with an individual's vulnerability to the feeling of anxiety. The two concepts were measured differently, that is, child participants reported anxiety as their experience of the emotion, and mothers reported NA as their perception of their child's trait of negative emotionality. Hence, single-source bias was reduced in this case because we had different informants for each of these constructs. For future studies, use of other methods (such as interview, observation) to gather data on the variables as well as longitudinal analysis of bidirectional relations between MEP and child characteristics (temperament, gender) may help identify how parents and children's responses shape each other's emotional development over time in varied cultural contexts. Finally, this study is correlational in nature and thus causal links between emotion socialization,

temperament, and emotional outcomes as recorded from participants belonging to different cultural groups cannot be made. Future studies should focus on recruiting more participants, ensuring that the groups are given the measures in a consistent manner (same method of test administration), and are from equitable SES backgrounds. Furthermore, previous research shows that individuals from an immigrant group (such as IAs in this study) often develop bicultural identities (Phinney, Horenczyk, Liebkind, & Vedder, 2001), which is often affected by age at time of immigration as well as generation of immigration, so understanding and assessing level of acculturation is important. Thus, it is important in the future to account for acculturative stress to determine if some of the emotional outcomes seen in the immigrant group of Indian Americans are attributable to their immigration status and/or generation effect (being 1st or 2nd generation).

Finally, the current study examined only maternal MEP, but there is growing evidence that fathers' MEP plays an important role in children's emotional development as well (Bowie et al., 2013; Hunter et al., 2010). Hunter et al. (2010) found that fathers' MEP makes unique contributions to predicting adolescents' emotional knowledge, awareness, and emotional adjustment. In fact, once fathers' MEP was taken into account, mothers' contributions dropped below statistical significance, suggesting that fathers may play a particularly important role in the development of adolescents' emotional competence (Hunter et al., 2010). In addition, family structure also plays a crucial role in emotion socialization, especially in the presence of mental and behavioral problems and in the Indian context (Reddy & Chandrashekar, 1998). One important aspect of family structure not accounted for in the present study is nuclear (single) versus joint (or extended) families. Living in a nuclear family provides fewer opportunities for learning about relatedness, harmony, and complex emotion display rules (Gordon, 1989). On the other hand, children living in nuclear families are at higher risk of psychopathology relative to extended families (Reddy & Chandrashekar, 1998). It is possible that in the current study's sample, most children came from nuclear families, and thereby reducing chances to learn about negative emotions. But we do not know for sure because we did not collect information on the number of people living at home. Future studies should take this into consideration and examine how fathers' involvement, number of siblings, in a cross-cultural scenario may play a role in children's emotional competence and well-being. Additional research is needed to explore both the unique contributions and interactions of parent (mother and father) and other emotion socialization agents (teachers, siblings, and peers) in the development of children's emotional competencies.

Implications

This comparative study examining cross-cultural and within-context differences in mothers' socialization of children's negative emotions could help in developing a cultural understanding of emotion socialization in middle childhood. Moreover, understanding normative patterns of maternal behaviors in response to children's emotions in a non-Western culture, such as India, helps inform the study of parenting associated with child psychopathology, which has practical implications for the development and evaluation of culturally sensitive interventions. For instance, an emotion-coaching intervention such as Tuning into Kids, a six-session emotion-focused parenting intervention with school-going children, has been found to significantly improve parental emotion coaching particularly related to expressiveness and emotion-focused responses to children, and reductions in punitive, minimizing reactions to children's emotions (Havighurst, Wilson, Harley, & Prior, 2009). It is unknown at present how well such interventions work with children from diverse immigrant backgrounds, but there is some evidence from the present study that some of the same associations between MEP and child emotional experience are similar for Indian and Indian American groups as they are for Caucasians. Similarly, emotion-coaching interventions could be incorporated into a public health system to be offered to all families in need (including Indian Americans) to improve children's emotional competence.

It is indeed important to translate these empirical findings on risk and adaptation into culturally appropriate preventive interventions (Havighurst, Harley, & Prior, 2004). Some of the preventive interventions that could be targeted at adolescents and their parents could include (a) increasing parental understanding of emotional development in adolescence, (b) enhancing understanding of parents' regulation of emotions, (c) increasing supportive parenting in the context of children's emotional repertoire, and (d) acquiring skills that serve to facilitate parent emotion coaching (Gottman & DeClaire, 1997; Havighurst et al., 2009). Moreover, parents could be made aware of emotion coaching as being a potentially helpful form of parenting, and that it may help buffer the detrimental effects of temperamental negative emotionality in children. The home environment is a safe haven to teach children about emotions, and help them cope better with negative emotions, as emotion socialization is found to contribute to emotional intelligence (Gottman, 2001) as well as academic success (Rosenzweig, 2001).

The current study investigated links between child temperament and maternal socialization to note how it may play a role in emotional experiences of Indian, Indian American, and Caucasian children. It is important to

further this research to identify family processes that may be contributing to early negative emotions in young children as well as develop interventions to reduce their for later anxiety disorders (Havighurst et al., 2009). Although the present study comparing groups of individuals from two nations can inform as to *how* adults in these groups differ in socialization, which in turn impacts differences observed in children's emotional experiences. Future research still needs to determine *why* emotional processes differ (Cole & Tan, 2007). Moreover, when dealing with participants from collectivistic societies, the other agents of socialization—grandparents, peers, siblings, teachers, the media as well as the larger society, need to be accounted for to generate a comprehensive understanding of the emotion socialization process. Comparative studies attempting to evaluate cross- and within-culture differences in maternal socialization of children's emotions will help develop a culturally informed theory of emotion socialization in childhood and adolescence.

References

- Atzaba-Poria, N., & Pike, A. (2007). Are ethnic minority adolescents at risk for problem behavior? Acculturation and intergenerational acculturation discrepancies in early adolescence. *British Journal of Developmental Psychology*, 25(4), 527–541. doi:10.1348/026151006X173053.
- Averill, J. R. (1982). *Anger and aggression: An essay on emotion*. New York, NY: Springer.
- Ball, J. (2011). *Enhancing learning of children from diverse language backgrounds: Mother tongue-based bilingual or multilingual education in the early years*. Analytical review commissioned by the UNESCO education sector. Retrieved from <http://unesdoc.unesco.org/images/0021/002122/212270e.pdf>
- Bijapurkar, R. (2007). *We are like that only*. New Delhi: Penguin Portfolio.
- Bittner, A., Egger, H. L., Erkanli, A., Costello, E. J., Foley, D. L., & Angold, A. (2007). What do childhood anxiety disorders predict? *Journal of Child Psychology and Psychiatry*, 48(12), 1174–1183. doi:10.1111/j.1469-7610.2007.01812.x.
- Borjas, G. J. (1988). *Immigration and self-selection*. Working paper no. 2566. National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w2566.pdf?new_window=1
- Bowie, B. H., Carrere, S., Cooke, C., Valdivia, G., McAllister, B., & Doohan, E. (2013). The role of culture in parents' socialization of children's emotional development. *Western Journal of Nursing Research*, 35(4), 514–533. doi:10.1177/0193945911411494.
- Brody, L. (2000). The socialization of gender differences in emotional expression: Display rules, infant temperament, and differentiation. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives. Studies in emotion and social interaction* (pp. 24–47). New York, NY: Cambridge University Press.
- Bugental, D. B., & Grusec, J. E. (2006). Socialization processes. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (6th ed., Vol. 3, pp. 366–428). Hoboken, NJ: Wiley.
- Butler, E. A., Lee, T. L., & Gross, J. J. (2007). Emotion regulation and culture: Are the social consequences of emotion suppression culture-specific? *Emotion*, 7(1), 30–48. doi:10.1037/1528-3542.7.1.30.
- Capaldi, D. M., & Rothbart, M. K. (1992). Development and validation of an early adolescent temperament measure. *The Journal of Early Adolescence*, 12(2), 153–173. doi:10.1177/0272431692012002002.
- Cassano, M., Perry-Parrish, C., & Zerman, J. (2007). Influence of gender on parental socialization of children's sadness regulation. *Social Development*, 16(2), 210–231. doi:10.1111/j.1467-9507.2007.00381.x.
- Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental socialization of emotion expression: Gender differences and relations to child adjustment. *Emotion*, 5(1), 80–88. doi:10.1037/1528-3542.5.1.80.
- Cole, P. M., Bruschi, C. J., & Tamang, B. L. (2002). Cultural differences in children's emotional reactions to difficult situations. *Child Development*, 73(3), 983–996. doi:10.1111/1467-8624.00451.
- Cole, P. M., Tamang, B. L., & Shrestha, S. (2006). Cultural variations in the socialization of young children's anger and shame. *Child Development*, 77(5), 1237–1251. doi:10.1111/j.1467-8624.2006.00931.x.
- Cole, P. M., & Tan, P. Z. (2007). Emotion socialization from a cultural perspective. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 516–542). New York, NY: Guilford.
- Costello, E., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry*, 60(8), 837–844. doi:10.1001/archpsyc.60.8.837.
- Cowan, P. A. (1996). Meta-thoughts on the role of meta-emotion in children's development: Comment on Gottman et al. (1996). *Journal of Family Psychology*, 10(3), 277–283. doi:10.1037/0893-3200.10.3.277.
- Cunningham, J. N., Kliewer, W., & Garner, P. W. (2009). Emotion socialization, child emotion understanding and regulation, and adjustment in urban African American families: Differential associations across child gender. *Development and Psychopathology*, 21(1), 261–283. doi:10.1017/S0954579409000157.
- Davenport, E., Yap, M. B. H., & Allen, N. B. (2010). *Maternal and adolescent temperament as predictors of maternal emotional behavior during mother-adolescent interactions*. Australia: Orygen Youth Health Research Center, University of Melbourne.
- Davenport, E., Yap, M. B. H., Simmons, J. G., Sheeber, L. B., & Allen, N. B. (2011). Maternal and adolescent temperament as predictors of maternal affective behavior during mother-adolescent interactions. *Journal of Adolescence*, 34(5), 829–839. doi:10.1016/j.adolescence.2011.02.003.
- Denham, S. A., Bassett, H. H., & Wyatt, T. (2007). The socialization of emotional competence. In J. Grusec & P. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 614–637). New York, NY: Guilford.
- Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialization of preschoolers' emotion understanding. *Developmental Psychology*, 30(6), 928–936. doi:10.1037//0012-1649.30.6.928.
- Dufton, L. M., Dunn, M. J., & Compas, B. E. (2009). Anxiety and somatic complaints in children with recurrent abdominal pain and anxiety disorders. *Journal of Pediatric Psychology*, 34(2), 176–186. doi:10.1093/jpepsy/jsn064.
- Dumka, L. E., Gonzales, N. A., Wood, J. L., & Formoso, D. (1998). Using qualitative methods to develop contextually relevant measures and preventive interventions: An illustration. *American*

- Journal of Community Psychology*, 26(4), 605–637. doi:10.1023/A:1022145022830.
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998a). Parental socialization of emotion. *Psychological Inquiry*, 9(4), 241–273. doi:10.1207/s15327965pli0904_1.
- Eisenberg, N., Spinrad, T. L., & Cumberland, A. (1998b). The socialization of emotion: Reply to commentaries. *Psychological Inquiry*, 9(4), 317–333. doi:10.1207/s15327965pli0904_17.
- Eisenberg, N., Spinrad, T. L., Eggum, N. M., Silva, K. M., Reiser, M., Hofer, C., et al. (2010). Relations among maternal socialization, effortful control, and maladjustment in early childhood. *Development and Psychopathology*, 22(3), 507–525. doi:10.1017/S0954579410000246.
- Eisenberg, N., Zhou, Q., Spinrad, T. L., Valiente, C., Fabes, R. A., & Liew, J. (2005). Relations among positive parenting, children's effortful control, and externalizing problems: A three-wave longitudinal study. *Child Development*, 76(5), 1055–1071. doi:10.1111/j.1467-8624.2005.00897.x.
- Ellis, L. K., & Rothbart, M. K. (2001). *Revision of the early adolescent temperament questionnaire*. Paper presented at the meeting of the Society of Research in Child Development, Minneapolis, MN.
- Farver, J. M., Xu, Y., Bhadha, B. R., Narang, S., & Lieber, E. (2007). Ethnic identity, acculturation, parenting beliefs, and adolescent adjustment: A comparison of Asian Indian and European American families. *Merrill-Palmer Quarterly*, 53(2), 184–215. doi:10.1353/mpq.2007.0010.
- Fox, N. A. (1998). Temperament and regulation of emotion in the first years of life. *Pediatrics*, 102(Supplement E1), 1230–1235.
- Friedlmeier, W., Corapci, F., & Cole, P. M. (2011). Emotion socialization in cross-cultural perspective. *Social and Personality Psychology Compass*, 5(7), 410–427. doi:10.1111/j.1751-9004.2011.00362.x.
- García Coll, C., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., García, H. V., et al. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, 67(5), 1891–1914.
- García Coll, C., & Marks, A. (Eds.). (2011). *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?*. Washington, DC: American Psychological Association.
- Garralda, M. E. (2000). The links between somatization in children and adults. In P. Reeder, M. McClure, & A. Jolley (Eds.), *Family matters: Interfaces between child and adult mental health* (pp. 122–134). Philadelphia, PA: Routledge.
- Gee, C. B. (2010). Assessment of anxiety and depression in Asian American youth. *Journal of Clinical Child and Adolescent Psychology*, 33(2), 269–271. doi:10.1207/s15374424jccp3302_7.
- Gordon, S. L. (1989). The socialization of children's emotions: Emotional culture, competence, and exposure. In C. I. Saarni & P. Harris (Eds.), *Children's understanding of emotion* (pp. 319–349). New York, NY: Cambridge University Press.
- Gottman, J. (2001). Meta-emotion, children's emotional intelligence, and buffering children from marital conflict. In C. D. Ryff & B. H. Singer (Eds.), *Emotion, social relationships, and health. Series in affective science* (pp. 23–40). New York, NY: Oxford University Press.
- Gottman, J., & DeClaire, J. (1997). *Raising and emotionally intelligent child: The heart of parenting*. New York, NY: Fireside.
- Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10, 243–268. doi:10.1037/0893-3200.10.3.243.
- Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion: How families communicate emotionally*. Hillsdale, NJ: Erlbaum.
- Gryczkowski, M. R., Jordan, S. S., & Mercer, S. H. (2010). Differential relations between mothers' and fathers' parenting practices and child externalizing behavior. *Journal of Child and Family Studies*, 19(5), 539–546.
- Hakim-Larson, J., Parker, A., Lee, C., Goodwin, J., & Voelker, S. (2006). Measuring parental meta-emotion: Psychometric properties of the emotion-related parenting styles self-test. *Early Education and Development*, 17(2), 229–251. doi:10.1207/s15566935eed1702_2.
- Hannesdottir, D., & Ollendick, T. (2007). The role of emotion regulation in the treatment of child anxiety disorders. *Clinical Child and Family Psychology Review*, 10, 275–293.
- Hasumi, T., Ahsan, F., Couper, C. M., Aguayo, J. L., & Jacobsen, K. H. (2012). Parental involvement and mental well-being of Indian adolescents. *Indian Pediatrics*, 49(11), 915–918.
- Havighurst, S. S., Harley, A. E., & Prior, M. R. (2004). Building preschool children's emotional competence: A parenting program. *Early Education and Development*, 15, 423–447. doi:10.1207/s15566935eed1504_5.
- Havighurst, S. S., Wilson, K. R., Harley, A. E., & Prior, M. R. (2009). Tuning into kids: An emotion-focused parenting program—Initial findings from a community trial. *Journal of Community Psychology*, 37, 1008–1023. doi:10.1111/j.1469-7610.2010.02303.x.
- Holder, M., Coleman, B., & Singh, K. (2012). Temperament and happiness in children in India. *Journal of Happiness Studies*, 13(2), 261–274. doi:10.1007/s10902-011-9262-x.
- Huang, H., Li, Y., Zhang, F., & Li, W. (2013). Maternal meta-emotion philosophy and children's emotion regulation: The mediating role of maternal emotion regulation. *Chinese Journal of Applied Psychology*, 19(2), 126–135.
- Hunter, E. C., Katz, L. F., Shortt, J. W., Davis, B., Leve, C., Allen, N. B., et al. (2010). How do I feel about feelings? Emotion socialization in families of depressed and healthy adolescents. *Journal of Youth and Adolescence*, 40(4), 428–441. doi:10.1007/s10964-010-9545-2.
- Joinson, A. (1999). Social desirability, anonymity, and Internet-based questionnaires. *Behavior Research Methods, Instruments, and Computers*, 31(3), 433–438. doi:10.3758/BF03200723.
- Jylha, P., & Isometsa, E. (2006). The relationship of neuroticism and extraversion to symptoms of anxiety and depression in the general population. *Depression and Anxiety*, 23(5), 281–289. doi:10.1002/da.20167.
- Kao, H. S. R., & Sinha, D. (1997). *Cross-cultural research and methodology series (vol. 1): Asian perspectives on psychology*. New Delhi: Sage.
- Katz, L. F., Maliken, A. C., & Stettler, N. M. (2012). Parental meta-emotion philosophy: A review of research and theoretical framework. *Child Development Perspectives*. doi:10.1111/j.1750-8606.2012.00244.x.
- Kellner, R. (1987). A symptom questionnaire. *Journal of Clinical Psychiatry*, 48(7), 268–274.
- Kench, S., & Irwin, H. J. (2000). Alexithymia and childhood family environment. *Journal of Clinical Psychology*, 56(5), 737–745. doi:10.1002/(SICI)1097-4679(200006)56:6.
- Kerr, M. A., & Schneider, B. H. (2008). Anger expression in children and adolescents: A review of the empirical literature. *Clinical Psychology Review*, 28(4), 559–577. doi:10.1016/j.cpr.2007.08.001.
- Khosla, M. (2006). Positive affect and coping with stress. *Journal of the Indian Academy of Applied Psychology*, 32(3), 185–192.
- Khosla, M. (2010). Understanding emotions from an Indian perspective: Implications for well-being. In A. Freitas-Magalhães (Ed.),

- Emotional expression: The brain and the face* (Vol. 2). Porto: University Fernando Pessoa.
- King, L. A., & Emmons, R. A. (1990). Conflict over emotional expression: Psychological and physical correlates. *Journal of Personality and Social Psychology*, *58*, 864–877. doi:10.1037//0022-3514.58.5.864.
- Kirmayer, L. J. (1984). Culture, affect and somatization. *Transcultural Psychiatric Research Review*, *21*, 159–188. doi:10.1177/136346158402100401.
- Kochanska, G. (1993). Towards a synthesis of parental socialization and child temperament in early development of conscience. *Child Development*, *64*(2), 324–347. doi:10.1111/j.1467-8624.1993.tb02913.x.
- Kochanska, G., Murray, K. T., & Harlan, E. T. (2000). Effortful control in early childhood: Continuity and change, antecedents, and implications for social development. *Developmental Psychology*, *36*(2), 220–232. doi:10.1037/0012-1649.36.2.220.
- Lafrance, M., & Banaji, M. (1992). Toward a reconsideration of the gender–emotion relationship. In M. S. Clark (Ed.), *Emotion and social behavior* (pp. 178–201). Newbury Park, CA: Sage.
- Lagacé-Seguin, D. G., & Coplan, R. J. (2005). Maternal emotional styles and child social adjustment: Assessment, correlates, outcomes and goodness of fit in early childhood. *Social Development*, *14*(4), 613–635.
- Lagattuta, K. H. (2008). Young children’s knowledge about the influence of thoughts on emotions in rule situations. *Developmental Science*, *11*, 809–818. doi:10.1111/j.1467-7687.2008.00727.x.
- Le, H., Berenbaum, H., & Raghavan, C. (2002). Culture and alexithymia: Mean levels, correlates, and the role of parental socialization of emotions. *Emotion*, *2*(4), 341–360. doi:10.1037/1528-3542.2.4.341.
- Löwe, B., Spitzer, R. L., Williams, J. B., Mussell, M., Schellberg, D., & Kroenke, K. (2008). Depression, anxiety and somatization in primary care: Syndrome overlap and functional impairment. *General Hospital Psychiatry*, *30*(3), 191–199.
- Luce, K. H., Winzelberg, A. J., Das, S., Osborne, M. I., Bryson, S. W., & Taylor, C. B. (2007). Reliability of self-report: Paper versus online administration. *Computers in Human Behavior*, *23*(3), 1384–1389. doi:10.1016/j.chb.2004.12.008.
- Lunkenheimer, E. S., Shields, A. M., & Cortina, K. S. (2007). Parental emotion coaching and dismissing in family interaction. *Social Development*, *16*(2), 232–248. doi:10.1111/j.1467-9507.2007.00382.x.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review*, *98*(2), 224–253. doi:10.1037/0033-295X.98.2.224.
- Mesquita, B. (2001). Culture and emotion: Different approaches to the question. In T. J. Mayne & G. A. Bonanno (Eds.), *Emotions: Current issues and future directions. Emotions and social behavior* (pp. 214–250). New York, NY: Guilford.
- Mineka, S., & Zinbarg, R. (2006). A contemporary learning theory perspective on the etiology of anxiety disorders: It’s not what you thought it was. *American Psychologist*, *61*(1), 10–26. doi:10.1037/0003-066X.61.1.10.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. (2007). The role of family context in the development of emotion regulation. *Social Development*, *16*, 361–388. doi:10.1111/j.1467-9507.2007.00389.x.
- Muris, P., Meesters, C., & Blijlevens, P. (2007). Self-reported reactive and regulative temperament in early adolescence: Relations to internalizing and externalizing problem behavior and “Big Three” personality factors. *Journal of Adolescence*, *30*(6), 1035–1049. doi:10.1016/j.adolescence.2007.03.003.
- Muris, P., & Ollendick, T. H. (2005). The role of temperament in the etiology of child psychopathology. *Clinical Child and Family Psychology Review*, *8*(4), 271–289. doi:10.1007/s10567-005-8809-y.
- Nahm, E. Y. (2007). A cross-cultural comparison of Korean American and European American parental meta-emotion philosophy and its relationship to parent–child interaction. Unpublished doctoral dissertation. University of Washington, Seattle. *Dissertation abstracts international: Section B: The sciences and engineering*, *67*, 4136.
- Oldehinkel, A. J., Hartman, C. A., De Winter, A. F., Veenstra, R., & Ormel, J. (2004). Temperament profiles associated with internalizing and externalizing problems in preadolescence. *Development and Psychopathology*, *16*, 421–440. doi:10.1017/S0954579404044591.
- Pai, S. G. (1998). Socialization of emotion in Asian Indian children: Child and parent perspectives. Unpublished doctoral dissertation. Pennsylvania State University (UMI No. AAT 9915915). *Dissertation abstracts international: Section B: The sciences and engineering*, *60*(1-B), 0391.
- Perry-Parrish, C., & Zeman, J. (2011). Relations among sadness regulation, peer acceptance, and social functioning in early adolescence: The role of gender. *Social Development*, *20*, 135–153. doi:10.1111/j.1467-9507.2009.00568.x.
- Pettit, F. A. (2002). A comparison of World-Wide Web and paper-and-pencil personality questionnaires. *Behavior Research Methods, Instruments, and Computers*, *34*(1), 50–54. doi:10.3758/BF03195423.
- Phinney, J. S., Horenczyk, G., Liebkind, K., & Vedder, P. (2001). Ethnic identity, immigration, and well-being: An interactional perspective. *Journal of Social Issues*, *57*(3), 493–510. doi:10.1111/0022-4537.00225.
- Prior, M., Smart, D., Sanson, A., & Oberklaid, F. (2000). Does shy-inhibited temperament in childhood lead to anxiety problems in adolescence? *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*(4), 461–468. doi:10.1097/00004583-200004000-00015.
- Putnam, S. P., Ellis, L. K., & Rothbart, M. K. (2001). The structure of temperament from infancy through adolescence. In A. Elias & A. Angleitner (Eds.), *Advances in research on temperament* (pp. 165–182). Lengerich: Pabst Science.
- Rai, R. N., Pandey, R. C., & Kumar, K. (2009). Perceived parental rearing style and personality among Khasi adolescents. *Journal of the Indian Academy of Applied Psychology*, *35*, 57–60.
- Rathert, J., Fite, P. J., Gaertner, A. E., & Vitulano, M. (2011). Associations between effortful control, psychological control and proactive and reactive aggression. *Child Psychiatry and Human Development*, *42*(5), 609–621. doi:10.1007/s10578-011-0236-3.
- Raval, V. V. (2004). *Psychopathology in Asian Indian children: Links with emotion regulation and socialization*. Unpublished doctoral dissertation. University of Windsor, Canada (UMI No. AAT NQ92549). *Dissertation abstract international*.
- Raval, V. V., & Martini, T. S. (2009). Maternal socialization of children’s anger, sadness, and physical pain in two communities in Gujarat, India. *International Journal of Behavioral Development*, *33*(3), 215–229. doi:10.1177/0165025408098022.
- Raval, V. V., & Martini, T. S. (2011). “Making the child understand”: Socialization of emotion in urban India. *Journal of Family Psychology*, *25*(6), 847–856. doi:10.1037/a0025240.
- Raval, V. V., Martini, T. S., & Raval, P. (2010). Methods of, and reasons for, emotional expression and control in children with internalizing, externalizing, and somatic problems in urban India. *Social Development*, *19*(1), 93–113. doi:10.1111/j.1467-9507.2008.00528.x.
- Raval, V. V., Raval, P. H., Salvina, J. M., Wilson, S. L., & Writer, S. (2012). Mothers’ socialization of children’s emotion in India and

- the USA: A cross- and within-culture comparison. *Social Development*, doi:10.1111/j.1467-9507.2012.00666.x.
- Reddy, M. V., & Chandrashekar, C. R. (1998). Prevalence of mental and behavioral disorders in India: A meta-analysis. *Indian Journal of Psychiatry*, 40(2), 149–157.
- Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, 128(2), 330–336. doi:10.1037//0033-2909.128.2.330.
- Rosenzweig, C. (April, 2001). *A meta-analysis of parenting and school success: The role of parents in promoting students' academic performance*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: Origins and outcomes. *Journal of Personality and Social Psychology*, 78, 122–135. doi:10.1037/0022-3514.78.1.122.
- Rothbart, M. K., & Bates, J. E. (2006). Temperament. In W. Damon (Series Ed.), & N. Eisenberg (Vol. Ed.), *Handbook of child psychology, Vol. 3. Social, emotional, personality development* (6th ed., pp. 99–166). Hoboken, NJ: Wiley.
- Rothbart, M. K., & Putnam, S. P. (2002). Temperament and socialization. In L. Pulkkinen & A. Caspi (Eds.), *Paths to successful development: Personality in the life course* (pp. 19–45). New York, NY: Cambridge University Press.
- Rubdy, R. (2013). Hybridity in the linguistic landscape: Democratizing English in India. In R. Rubdy & L. Alsagoff (Eds.), *The global-local interface and hybridity: Exploring language and identity* (pp. 43–65). Tonawanda, NY: Multilingual Matters.
- Saw, A., & Okazaki, S. (2010). Family emotion socialization and affective distress in Asian American and White American college students. *Asian American Journal of Psychology*, 1(2), 81–92. doi:10.1037/a0019638.
- Shariff, A. (2009). Ethnic identity and parenting stress in South Asian families: Implications for culturally sensitive counseling. *Canadian Journal of Counselling*, 43(1), 35–46.
- Shweder, R. A., & Haidt, J. (2000). The cultural psychology of the emotions: Ancient and new. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 397–414). New York, NY: Guilford.
- Silk, J. S., Shaw, D. S., Prout, J. T., O'Rourke, F., Lane, T. J., & Kovacs, M. (2011). Socialization of emotion and offspring internalizing symptoms in mothers with childhood-onset depression. *Journal of Applied Developmental Psychology*, 32, 127–136. doi:10.1016/j.appdev.2011.02.001.
- Spear, L. P. (2000). Neurobehavioral changes in adolescence. *Current Directions in Psychological Science*, 9(4), 111–114. doi:10.1111/1467-8721.00072.
- Spielberger, C. D. (1973). *Preliminary test manual for the State-Trait Anxiety Inventory for children*. Palo Alto, CA: Consulting Psychologists.
- Steele, R. G., Legerski, J., Nelson, T. D., & Phipps, S. (2009). The anger expression scale for children: Initial validation among healthy children and children with cancer. *Journal of Pediatric Psychology*, 34(1), 51–62. doi:10.1093/jpepsy/jsn054.
- Super, C. M., & Harkness, S. (2002). Culture structures the environment for development. *Human Development*, 45, 270–274. doi:10.1159/000064988.
- Suveg, C., Zeman, J., Flannery-Schroeder, E., & Cassano, M. (2005). Emotion socialization in families of children with an anxiety disorder. *Journal of Abnormal Child Psychology*, 33(2), 145–155. doi:10.1007/s10802-005-1823-1.
- Talbani, A., & Hasanali, P. (2000). Adolescent females between tradition and modernity: Gender role socialization in South Asian immigrant culture. *Journal of Adolescence*, 23, 615–627. doi:10.1006/jado.2000.0348.
- Thomas, A., & Chess, S. (1977). *Temperament and development*. New York, NY: Brunner/Mazel.
- Thomas, M., & Choi, J. B. (2006). Acculturative stress and social support among Korean and Indian immigrant adolescents in the United States. *Journal of Sociology and Social Welfare*, 33, 123–143.
- Trommsdorff, G., & Cole, P. M. (2011). Emotion, self-regulation, and social behavior in cultural contexts. In X. Chen & K. H. Rubin (Eds.), *Socioemotional development in cultural context* (pp. 131–163). New York, NY: Guilford.
- Vallejo, M. A., Jordan, C. M., Diaz, M. I., Comeche, M. I., & Ortega, J. (2007). Psychological assessment via the internet: A reliability and validity study of online (vs. paper-and-pencil) versions of the General Health Questionnaire-28 (GHQ-28) and the Symptoms Check-List-90-Revised (SCL-90-R). *Journal of Medical Internet Research*, 9(1), e2. doi:10.2196/jmir.9.1.e2.
- Verma, S., & Saraswathi, T. S. (2002). Adolescence in India: Street urchins or Silicon Valley millionaires. In B. B. Brown, R. W. Larson, & T. S. Saraswathi (Eds.), *The world's youth: Adolescence in eight regions of the globe* (pp. 105–140). Cambridge, MA: Cambridge University.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience negative aversive emotional states. *Psychological Bulletin*, 96, 465–490. doi:10.1037/0033-2909.96.3.465.
- Zahn-Waxler, C. (2010). Socialization of emotion: Who influences whom and how? In A. Kennedy Root & S. Denham (Eds.), *The role of gender in the socialization of emotion: Key concepts and critical issues. New directions for child and adolescent development* (vol. 128, pp. 101–109). San Francisco: Jossey-Bass.
- Zahn-Waxler, C., Klimes-Dougan, B., & Slattery, M. (2000). Internalizing problems of childhood and adolescence: Prospects, pitfalls, and progress in understanding the development of anxiety and depression. *Development and Psychopathology*, 12(3), 443–466. doi:10.1017/S0954579400003102.
- Zeman, J., & Garber, J. (1996). Display rules for anger, sadness, and pain: It depends on who is watching. *Child Development*, 67, 957–973. doi:10.2307/1131873.