Methods of, and Reasons for, Emotional Expression and Control in Children with Internalizing, Externalizing, and Somatic Problems in Urban India

Vaishali V. Raval and Tanya S. Martini, University of Windsor, Pratiksha H. Raval, Gujarat University

Abstract

Although cross-cultural research concerning children’s emotions is growing, few studies have examined emotion dysregulation in culturally diverse populations. This study compared 6- to 8-year-old children’s reported methods of expressing and controlling anger, sadness, and physical pain, and their justifications for doing so across four groups in urban India: those with internalizing problems (N = 31), externalizing problems (N = 32), somatic complaints (N = 25), and an asymptomatic control group (N = 32). Results revealed that in comparison to physical pain, Indian children were less likely to report expressing anger and sadness through direct facial/verbal means. Control-group children reported expressing anger and sadness through indirect verbal cues more so than pain, whereas the internalizing and externalizing groups considered their expressions of anger and sadness uncontrollable and reported crying and utilizing aggressive behaviors, respectively, more than the control group. The somatic complaints group considered emotions trivial and reported withdrawing more than the control group.

Keywords: Asian Indian; school-age children; emotion regulation; psychopathology

Current thinking suggests that beliefs about the appropriateness of particular emotions, decisions about whether to express or control a given emotion, and the ways in which emotions are communicated or controlled vary across cultures (Markus & Kitayama, 1991, 1994; Saarni, Campos, Camras, & Witherington, 2006). Research with White middle-class children in the West has shown that between early and middle childhood, children show more sophisticated appraisal processes in discerning their own and others’ emotions, display increased awareness of the role of emotion communication in social relationships, and further refine their skills for controlling and communicating emotions (Saarni et al., 2006). Research has also shown that appropriate control of emotion, as prescribed by their culture, has implications for Caucasian children’s day-to-day interactions with members of their social world (Denham et al.,

Correspondence should be addressed to Vaishali Raval, Department of Psychology, Miami University, 90 N Patterson Ave, Oxford, OH 45056, USA. E-mail: ravalvv@muohio.edu

© Blackwell Publishing Ltd. 2009. Published by Blackwell Publishing, 9600 Garsington Road, Oxford OX4 2DQ, UK and 350 Main Street, Malden, MA 02148, USA.
Moreover, children’s inability to control their emotions in culturally appropriate ways may have implications for their social competence and overall psychological well-being (see Eisenberg, Cumberland, et al., 2001; Eisenberg et al., 2005; Izard, Fine, Mostow, Trentacosta, & Campbell, 2002). In particular, Zeman, Shipman, and Suveg (2002) found that culturally inappropriate methods of expressing anger (i.e., slamming doors, losing one’s temper) predicted externalizing problems, whereas dysregulated expressions of sadness (i.e., prolonged crying) and anger predicted internalizing problems. Moreover, overcontrol of negative emotion (i.e., inhibition or suppression) is associated with lowered immune system activity, and increased susceptibility to physical illnesses on a long-term basis (Salovey, Rothman, Detweiler, & Steward, 2000).

Despite the significance of emotion control and expression for a variety of child outcomes and the recognition of cultural variation, very few studies have examined such links between emotion variables and child outcomes in other cultures. Eisenberg and colleagues have documented that, consistent with the research in North America, high effortful control and low negative emotionality were related to social competence and fewer externalizing problems in school-age Indonesian (Eisenberg, Liew, & Pidada, 2004) and Chinese children (Zhou, Eisenberg, Wang, & Reiser, 2004). The present study compared methods of expressing and controlling felt emotions, and reasons for doing so, across Gujarati Indian children experiencing internalizing, externalizing, and somatic problems and their asymptomatic counterparts.

**Emotion Expression and Control in South Asian Hindu Children**

Indian culture is considered primarily collectivist (Triandis, 1995) with a particular emphasis on the family. Individuals in such cultures define themselves in relation to their family, caste, and community, and prioritize the goals of these groups over their own needs. Individualistic tendencies are thought to mark people’s private worlds (i.e., their thoughts, feelings, and fantasies), although they are less likely to be expressed to others, or to guide people’s public behaviors (Saraswathi, 2005). In such a culture, emotions such as anger may be experienced but not readily expressed in the family context, as these emotions are typically associated with an individual’s own needs, and may convey a discomfort with the social world that is harmful to one’s relations with others and to family harmony (Markus & Kitayama, 1991, 1994). In contrast, expressions of physical distress are more socially acceptable than psychological processes such as emotions (Kirmayer, 1984, 2001), as public expressions of physical distress are less likely to have negative implications for one’s social world.

Hindu philosophy is also in keeping with this collectivist worldview concerning the undesirability of expressing negative emotions (Menon, 2000). The results of a few published studies are consistent with the Hindu collectivist ideology: South Asian Hindu children report feeling emotions such as anger or sadness, but control the outward expression. This pattern of expressive control over their emotions is distinct from what these children report about physical ailments. Raval and colleagues compared reports about social acceptability and control of emotions (anger and sadness) and physical pain (a physical referent) in 5- to 6- and 8- to 9-year-old Hindu upper-caste children in urban communities in Gujarat, India (Raval, Martini, & Raval, 2007). Results revealed that Gujarati children considered others to be less accepting of their expressions of anger and sadness and, in turn, reported controlling anger and sadness.
more than physical pain. These findings are consistent with cross-cultural mental health literature that suggests that in eastern cultures (including India), psychological processes are typically considered less socially acceptable than physical symptoms (Kirmayer, 1984, 2001).

The pattern of expressive control that South Asian Hindu children show is also different from children in other cultural groups. Cole, Bruschi, and Tamang (2002) compared reports about expressing emotion in three groups of 8- to 12-year-olds: upper-caste Hindu (Brahman) children and Buddhist Tamang children in rural Nepal, and White children in the United States. Whereas US and Hindu children were more likely to endorse feeling anger than Buddhist children, Hindu children reported masking the expression of anger more than Buddhist and US children.

Methods of, and Rationales for, Expression. Given the emphasis on relatively tighter behavioral control over the expression of emotion among Hindu Indians, one might ask whether negative emotions are ever communicated in this culture. If so, what might be the culturally appropriate ways of communicating such emotions? Raval et al.’s (2007) findings indicated that Gujarati Hindu children frequently reported using facial expressions and direct verbal means to communicate physical pain (i.e., telling the other person that they are experiencing pain). However, direct verbal communication was less frequently cited with respect to children’s anger or sadness. Raval et al. (2007) speculated as to whether negative emotions may be indirectly communicated. Such a speculation is consistent with Hall’s (1976) theorizing concerning preferred methods of communication in eastern collectivist and western individualistic cultures. Hall proposed that individuals in eastern collectivist cultures predominantly engage in high-context communication ‘in which most of the information is either in the physical context or internalized in the person, while very little is in the coded, explicit, transmitted part of the message’ (p. 79). Such communication relies on subtle and implicit cues to convey the intended meaning, and is distinguished from low-context communication, in which ‘the mass of the information is vested in the explicit code’ (p. 79). According to Hall, individuals in western cultures tend to engage in this type of direct, low-context form of communication. Hall’s theory about general methods of communication in the East can be used to understand emotion communication in these cultures.

Given the emphasis on tighter behavioral control of negative emotions in South Asia, another important question that emerges concerns children’s reasons for expressing felt emotion. Raval et al. (2007) found that 5- to 9-year-olds in Gujarat, India reported expectation of instrumental assistance (‘If I show that I am feeling pain, mother would give me medicine’) as the most common reason for expressing anger, sadness, or pain. Less frequently cited reasons were expectation of social support (‘My friend would be nice to me’), desire to communicate one’s feeling, and uncontrollability of expression (‘I would not be able to control it’).

Methods of, and Rationales for, Control. Despite the noted significance for behavioral control for South Asian Hindu children, relatively less attention has been paid to the specific strategies they use to control felt emotion. Raval and colleagues (Raval et al., 2007) found that of the children who reported controlling their expressions of anger and sadness, the most commonly cited method was manipulating one’s facial expression (e.g., looking neutral when one is feeling angry or looking happy when one is feeling sad).
Joshi and MacLean (1994) compared justifications for controlling negative emotion in 4- and 6-year-olds in Britain and India. Their results revealed that all children—regardless of age, sex, or culture—were most likely to refer to avoidance of reprimand from adults, although social rules, prosocial concerns, and avoidance of physical punishment were also reported. Interestingly, Indian children made more references to social rules and physical punishment than did British children. Similarly, Gujarati children in Raval et al.’s (2007) study reported controlling anger and sadness in order to avoid reprimand/reminder from parents and ridicule from peers, as well as to adhere to social rules (e.g., ‘it is not good to be angry at your elders’).

The Present Study

The present study was conducted with mother–child dyads residing in the suburbs of Ahmedabad, the largest and the most populated city in Gujarat (a north-western state of India). Its purpose was to further examine Indian children’s methods of, and reasons for, expressing and controlling anger, sadness, and physical pain. In particular, the study was designed to contrast the methods and reasons offered by asymptomatic children (those who did not display behavior or somatic problems) with methods and reasons offered by children who were identified as demonstrating internalizing and externalizing problems. Moreover, because cross-cultural mental health literature suggests that individuals in eastern cultures (including India) may be more accepting of physical complaints than psychological symptoms (i.e., symptoms of anxiety or depression), a fourth group of children presenting with somatic complaints was also included in this study. The following hypotheses were tested.

Methods of, and Rationales for, Expression. Based on Hall’s (1976) proposal concerning the eastern preference for ‘high context’ communication and Raval et al.’s (2007) preliminary findings, we expected that (a) regardless of group (asymptomatic, internalizing, externalizing, somatic), Hindu children in the present investigation would be less likely to employ direct facial or verbal means to express anger and sadness than to express physical pain; and (b) these children would be more likely to employ indirect expressions to express anger and sadness than to express pain. We expected group differences in such indirect methods of expression. In particular, children who were rated by their mothers as displaying externalizing problems (i.e., aggression) would be more likely to report aggressive behaviors to express anger than their asymptomatic counterparts. Those who were rated by their mothers as displaying internalizing problems (i.e., anxiety, depression) would be more likely to report crying to express sadness than their asymptomatic counterparts. Finally, based on the findings of Raval et al. (2007), children in the asymptomatic control group would be more likely to report indirect verbal methods of expressing anger and sadness than the three symptomatic groups. With respect to children’s rationales for expression, we anticipated that children rated as displaying externalizing and internalizing problems would be more likely to report difficulty in controlling expressions of anger and sadness, respectively, than the control group.

Methods of, and Rationales for, Control. It is reasonable to expect that the relatively low social acceptability of emotions (a psychological process) compared with physical symptoms (Kirmayer, 1984, 2001) will likely be most evident in the group of children who are rated as presenting with somatic complaints. Due to the relatively
low acceptability of emotions, we anticipated that children who were rated as
displaying somatic complaints would be more likely to inhibit emotional expression
by using regulatory withdrawal as a method to control anger and sadness than those
in the asymptomatic control group. These children would also be more likely to
minimize the significance of emotions as a justification for controlling felt emotion
than the control group.

Method

Screening Procedures

The present study was carried out with middle-class Hindu upper-caste families.
Although traditionally, caste has been a central dimension of societal hierarchy
for Hindus (Seymour, 1999), in contemporary urban India, caste along with
socioeconomic class prevails in determining the social organization, placing upper-
caste and middle-class families in a privileged position relative to the lower castes and
classes. A majority of such suburban families live in multigenerational households
with children, parents, and grandparents. Parents are educated (varying from high
school diploma to professional degrees) and the current trends of modernization have
exposed them to global media, technology, and western lifestyles. We selected Gujarati
children between six and eight years of age and their mothers because theoretical
(Kakar, 1978; Kurtz, 1992) and ethnographic accounts (Seymour, 1999) have indicated
that the pressures of socialization become more pronounced for Hindu Indian children
after they turn five. We began by screening a community sample of 6- to 8-year-old
Gujarati children for somatic, internalizing (anxiety, depression), and externalizing
(i.e., aggression) problems. Mother–child dyads were recruited from the second and
third grades of five elementary schools in the suburbs of Ahmedabad, Gujarat, India,
where the primary language of instruction is Gujarati. Of the 800 mothers contacted,
631 agreed to participate. Twenty-nine of these mothers were excluded due to incom-
plete data, rendering a sample size of 602 mother–child dyads (326 boys and 276 girls).
Mothers of these 602 children completed the child behavior checklist-Gujarati adap-
tation (CBCL-GA; Raval, Raval, Panchal, & Chakravorty, 2003). The CBCL-GA is a
parent rating scale translated from the child behavior checklist (CBCL) for ages 6–18
(Achenbach, 2001), and standardized with Gujarati mothers (further information about
the standardization is available from Raval et al. (2003). This scale asks the parent to
rate his/her child with respect to 112 different behavioral and emotional patterns that
occur in children. Although the validity of the CBCL factor structure has been dem-
onstrated in some countries (e.g., see Achenbach, 1995; Heubeck, 2000; Liu et al.,
2000), a few studies have questioned the validity of some empirically derived clinical
syndromes in other cultures (e.g., Weisz, Weiss, Suwanlert, & Chaiyasit, 2003). We
conducted an exploratory factor analysis and found that the factor structure of
CBCL-GA held in the urban middle-class population in Gujarat, India. The CBCL-GA
also showed good internal consistency (Cronbach’s alpha .83, .88, and .93 for the
internalizing, externalizing, and total problems scores), split-half reliability (.88, .83,
and .86 for internalizing, externalizing, and total problems score, respectively), and
test–retest reliability (r = .81, .87, and .83 for internalizing, externalizing, and total
problems score, respectively for administrations two weeks apart; N = 75). Mothers
also completed a demographic questionnaire, answering questions about their spouse’s
and their own education and occupation, annual family income, and household type.
Participants

Based on the CBCL-GA scores obtained in screening phase and the following inclusion criteria, four groups were formed for the main study. Children who scored within the clinical range (at and above the 98th percentile) on somatic complaints syndrome scale and within the normal range on the remaining seven syndrome scales met criteria for the somatic complaints group. Those who scored within the clinical range (at and above the 98th percentile) on the anxious/depressed and/or the withdrawn syndrome scales, and within the normal range on the remaining syndrome scales met criteria for the internalizing group. Children who scored within the clinical range (at and above the 98th percentile) on the aggressive behavior and/or delinquent/destructive behavior syndrome scales, and within the normal range on the remaining syndrome scales met criteria for the externalizing group. Finally, children who scored within the normal range on all eight syndrome scales (below the 93rd percentile) as well as the total problems score (below the 84th percentile) met the criteria for the control group. Those who received total problems raw scores between zero and three (at the 5th percentile) were excluded (as suggested by Achenbach & Rescorla, 2001) due to the questionable validity of extremely low scores. Children in the three symptomatic groups had scores in the clinical range on only the relevant scale/subscales, with no comorbid symptoms present. Approximately, 3.3 percent of the children presented with comorbid symptoms in the clinical range (scores on *both* the internalizing subscales and both externalizing subscales, or scores on *both* somatic complaints subscale and the two internalizing subscales). These children were excluded because the purpose of the present study was to compare methods of emotion communication and control in children with specific types of symptomatology. The following number of children met the inclusion criteria: 36 in the externalizing group, 35 in the internalizing group, 29 in the somatic complaints group, and 36 in the control group. All of the children who met inclusion criteria for the three symptomatic groups were contacted for participation. Of those who met the inclusion criteria for control group, 35 were randomly chosen to be contacted for participation. Of those contacted, the following number of children actually participated with parent consent: externalizing group (N = 32; 22 boys, 10 girls), internalizing group (N = 31; 13 boys, 18 girls), somatic complaints group (n = 25; 15 boys, 10 girls), and the control group (N = 32; 17 boys, 15 girls).

Demographic Information. No statistically significant differences were found across the four groups (internalizing, externalizing, somatic complaints, and control) with respect to any of the demographic variables. Fifty-nine percent of the families lived in joint family households, whereas the remaining families were nuclear. Approximately half of the mothers and their husbands (52%) had completed a bachelor’s degree, whereas the remainder of the parents had completed either a graduate/professional degree (19.1%), or secondary school diploma or less (28.9%). A majority of mothers were homemakers (85.7%), whereas a majority of fathers were employed in clerical/technical work or owned a small business (70.8%). Other occupational categories were skilled laborer, professional/managerial, or owning a large business, which were roughly equally distributed. The mean annual family income per person in the household was Rs. 24,821 (approximately equivalent to USD 620) ranging from Rs. 4,444.44 to 300,000 (approximately equivalent to USD 111 to 7,500).
Measures and Procedure

Child Emotion Vignettes. Vignettes were developed after careful pilot testing to maximize cultural relevance and have been used in prior research with Gujarati children (Raval et al., 2007). Two factors—child feeling (anger, sadness, and physical pain) and audience figure (mother, father, peer)—were fully crossed when developing this measure, yielding nine vignettes in total (see Raval et al., 2007 for the full description of vignettes). The vignettes were read individually to each child by the interviewer in a private room at the school from which she or he was recruited. Following each vignette, the child was asked two preliminary questions to guide further inquiry: (a) How would you feel if the situation had happened to you? (child selected from among five faces—happy, sad, angry, physical pain, and neutral state); and (b) How likely is it that you would show the anger/sadness/pain that you felt toward your mother/father/peer? (on a scale of 1 to 4, where 1 = not at all, 2 = a little bit, 3 = quite a bit, and 4 = a whole lot).

If the child’s response to the second question indicated that she or he would show felt emotion (i.e., a score of 2, 3, or 4), she or he was asked questions about methods of, and reasons for, expression. Specifically, she or he was presented with the following six methods of showing felt emotion (derived from Raval et al., 2007): (a) facial expression (showing a given emotion facially); (b) direct verbal expression (verbally labeling one’s feeling, saying that one is feeling anger, sadness, or pain); (c) indirect verbal expression (using features of voice quality such as pitch and tone, the amount of speech to communicate one’s feeling); (d) communicative withdrawal (e.g., sitting in a corner, not interacting with others); (e) crying; and (f) aggressive behaviors (e.g., hitting others, screaming, throwing things). For each method, the child was asked, ‘How likely is it that you would use this method for expressing (anger/sadness/pain) to (mom/dad/peer)?’ The child responded on a 4-point scale (1 = not at all, 2 = a little bit, 3 = quite a bit, and 4 = a whole lot). The child was also presented with the following four categories of reasons for showing felt emotion: (a) uncontrollability of expression (e.g., ‘I would not be able to control it’); (b) expectation of instrumental assistance (e.g., ‘mother would give me medicine if I told her that I was feeling pain’); (c) expectation of social support (e.g., ‘my friend would behave nicely with me’ or ‘my friend would say don’t worry’); and (d) communication of one’s feelings (e.g., ‘I just want my mother to know’). The questions asked were adapted from Zeman and Garber (1996), and categories were derived from previous research with Gujarati Indian children (Raval et al., 2007). For each reason, the child was asked, ‘How likely is it that this would be your reason for expressing (anger/sadness/pain) to (mom/dad/peer)?’ The child responded on a 4-point scale (1 = not at all, 2 = a little bit, 3 = quite a bit, and 4 = a whole lot).

If the child responded that she or he would NOT show felt emotion, she or he was asked questions about methods of, and reasons for, control. Specifically, she or he was presented with following five methods of not showing felt emotion (derived from Raval et al., 2007): (a) manipulating facial expression (masking or substituting emotional expression e.g., looking neutral when one is feeling sad, or looking happy when one is feeling sad); (b) verbal concealment (e.g., saying ‘I’m happy for you, when one is feeling sad); (c) distraction (directing one’s attention to some other activity, e.g., doing something else when one is angry to divert one’s attention away from the feeling); (d) physically hiding (e.g., covering one’s face or hiding under a bed so that others cannot see one’s face); and (e) regulatory withdrawal (e.g., not interacting with others, leaving
the scene so that others would not know what one is feeling). For each method, the child was asked ‘How likely is it that you would use this method for NOT expressing (anger/sadness/pain) to (mom/dad/peer)?’. The child responded on a 4-point scale (where, 1 = not at all, 2 = a little bit, 3 = quite a bit, and 4 = a whole lot). The child was also presented with following eight reasons for not showing felt emotion (derived from Raval et al., 2007): (a) norm maintenance (e.g., ‘it is not good to be angry’); (b) avoid spanking (e.g., ‘I don’t want my mother to spank me’); (c) avoid scolding (e.g., ‘I don’t want my father to scold me’); (d) avoid parental reminder regarding social rules (e.g., ‘my mother would not scold me but tell me why I shouldn’t be angry and I don’t want her to do that’); (e) maintaining self-esteem (e.g., I don’t want to be ashamed in front of other children’); (f) prosocial reasons (e.g., ‘I don’t want my friend to feel bad’); (g) futility of expression (e.g., ‘nothing would happen/change if I showed how I feel’); and (h) minimizing significance of the event (e.g., ‘it is really not a big deal’). For each reason, the child was asked, ‘How likely is it that this would be your reason for NOT expressing (anger/sadness/pain) to (mom/dad/peer)?’ The child responded on a 4-point scale (1 = not at all, 2 = a little bit, 3 = quite a bit, and 4 = a whole lot).

A measure of child temperament, Gujarati translation of the children’s behavior questionnaire (Rothbart, Ahadi, & Hershey, 1994), was completed by mothers. However, no significant main effects of child temperament or interactions with type of psychopathology (internalizing, externalizing, somatic, control) or child feeling (anger, sadness, pain) were found for children’s decisions to regulate felt emotion or their mothers’ responses to children’s emotions. Hence, this measure and the related findings are not described here, and this information is available from the first author.

Results

Owing to high intercorrelations across some of the children’s reasons and methods (regardless of type of feeling and psychopathology), a number of children’s reasons and methods were combined to create composites. In terms of methods, verbal and facial methods of expression (e.g., saying that one is angry, or looking angry on the face, respectively) were combined to create a ‘direct expression’ composite. These methods were highly correlated ($r = .58, p < .001$), showed identical patterns of findings with respect to each of the independent variables, and they both provided explicit information regarding one’s emotion to others in contrast to indirect verbal expression, which entailed providing implicit cues about one’s emotional state that required further interpretation by others. Thus, five methods of expression were analyzed: direct expression, indirect verbal expression, communicative withdrawal, crying, and aggressive behavior. In terms of reasons, two reasons for control that focused on social rules (norm maintenance and parental reminder of social rules; $r = .40, p < .05$) were combined to form a ‘social rules’ composite, and two reasons for control that focused on parental punitiveness (scolding, spanking; $r = .58, p < .001$) were combined to form an ‘avoidance of punishment’ category. Finally, two reasons for control that focused on triviality of emotion (futility of expression, minimizing the significance of the situation $r = .62, p < .001$) were combined to form a ‘triviality’ composite. Thus, five reasons for control were analyzed: social rules, avoidance of punishment, maintenance of self-esteem, prosocial, and triviality.

Children’s methods of expression were analyzed using a 3 (feeling) $\times$ 5 (methods of expression) $\times$ 4 (type of psychopathology) repeated measures analysis of variance...
(ANOVA), and their reasons for expression were analyzed using a 3 (feeling) × 4 (reasons for expression) × 4 (type of psychopathology) repeated measures ANOVA. Children’s methods of control were analyzed using a 3 (feeling) × 5 (methods of control) × 4 (type of psychopathology) repeated measures ANOVA, and their reasons for control were analyzed using a 3 (feeling) × 5 (reasons for control) × 4 (type of psychopathology) repeated measures ANOVA. Preliminary analyses that included child sex as an independent variable yielded no significant main effects or interactions of child sex. Thus, child sex was excluded from the analyses presented here. Because the results of both multivariate and univariate solutions were similar, univariate solutions are reported (Tabachnick & Fidell, 2006). For those main effects or interactions where the sphericity assumption was violated (as per the Bartlett’s and/or Mauchly’s tests), Greenhouse–Geisser and Huynh–Feldt tests that adjust for such violation are reported (Tabachnick & Fidell).

Feeling (anger, sadness, physical pain), methods of expression (direct, indirect, communicative withdrawal, crying, aggressive behavior), reasons for expression (expression uncontrollable, instrumental help, emotional support, communication), methods of control (facial concealment, verbal concealment, distraction, regulatory withdrawal, hiding), and reasons for control (social rules, avoidance of punishment, maintenance of self-esteem, prosocial, triviality) were within-subject factors, whereas psychopathology (somatic complaints, internalizing, externalizing, control) was a between-subjects factor. For all analyses, the dependent variables were children’s mean ratings on the 4-point scales. The Bonferroni correction that is used to assess the significance of all effects was computed as \( \alpha' = .05 \) per number of comparisons for each main effect or interaction.

**Children’s Methods of Expression**

Significant main effects of method of expression \( (F (4, 368) = 40.85, p < .001, \eta^2 = .31) \) and psychopathology \( (F (3, 92) = 4.23, p < .01, \eta^2 = .12) \) were qualified by two significant two-way interactions: feeling × method of expression \( (F (8, 736) = 29.91, p < .001, \eta^2 = .23) \) and psychopathology × method of expression \( (F (12, 368) = 6.49, p < .001, \eta^2 = .16) \), and a significant three-way interaction: feeling × psychopathology × method of expression \( (F (24, 736) = 5.23, p < .001, \eta^2 = .15) \).

As predicted, across all but the externalizing group, Gujarati children were more likely to report using direct means (either facial or verbal) to express physical pain than anger or sadness (see Table 1). Children in the externalizing group reported more direct expression of anger and pain than sadness. Moreover, as expected, children in the control group reported indirect verbal means to express anger more than all of the other groups, and sadness more than the externalizing and somatic complaints groups (see Table 1). Children in the externalizing group reported aggressive behaviors to express anger and sadness more than the other groups, and children in the internalizing group reported crying to express anger and sadness more than all the other groups.

Additionally, children in the somatic complaints group reported communicative withdrawal to express sadness but not anger more than children in the externalizing and control groups. Examining the effects within groups and across feeling, children in the control group reported using indirect verbal means to express anger and sadness more than physical pain.
Table 1. Means and Standard Deviations for Child Feeling Type × Child Psychopathology × Methods of Expression Type Interaction in Children’s Methods of Expression (N = 97)

<table>
<thead>
<tr>
<th>Child feeling</th>
<th>Method of expression</th>
<th>Type of psychopathology</th>
<th>Externalizing (N = 28)</th>
<th>Internalizing (N = 22)</th>
<th>Somatic complaints (N = 21)</th>
<th>Control group (N = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Anger</td>
<td>Direct</td>
<td>2.36,1,a</td>
<td>1.79,1,2,a</td>
<td>.81</td>
<td>.84</td>
<td>1.63,2,a,b</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>1.20,1,b</td>
<td>1.55,1,a,b</td>
<td>.38</td>
<td>.98</td>
<td>1.35,1,a</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>1.36,1,b</td>
<td>1.81,1,a</td>
<td>.72</td>
<td>1.07</td>
<td>1.92,1,a</td>
</tr>
<tr>
<td></td>
<td>Crying</td>
<td>1.46,1,b</td>
<td>2.29,2,c</td>
<td>.61</td>
<td>.81</td>
<td>1.63,1,a,b</td>
</tr>
<tr>
<td></td>
<td>Aggressive</td>
<td>2.06,1,a</td>
<td>1.15,2,b</td>
<td>.77</td>
<td>.37</td>
<td>1.17,2,b</td>
</tr>
<tr>
<td>Sadness</td>
<td>Direct</td>
<td>1.96,1,a</td>
<td>1.85,1,a</td>
<td>.88</td>
<td>.56</td>
<td>1.64,1,a,b</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>1.36,1,b</td>
<td>1.68,1,2,a</td>
<td>.65</td>
<td>.51</td>
<td>1.33,1,a,b</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>1.49,1,2,a,b</td>
<td>2.21,2,3,a</td>
<td>.76</td>
<td>.87</td>
<td>2.40,3,c</td>
</tr>
<tr>
<td></td>
<td>Crying</td>
<td>1.79,1,a,b</td>
<td>2.44,2,c</td>
<td>.75</td>
<td>.88</td>
<td>1.54,1,a,b</td>
</tr>
<tr>
<td></td>
<td>Aggressive</td>
<td>1.55,1,a</td>
<td>1.15,2,b</td>
<td>.51</td>
<td>.25</td>
<td>1.11,2,b</td>
</tr>
<tr>
<td>Pain</td>
<td>Direct</td>
<td>2.61,1,c</td>
<td>2.83,1,c</td>
<td>.74</td>
<td>.75</td>
<td>2.52,1,c</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td>1.19,1,b</td>
<td>2.00,2,a</td>
<td>.44</td>
<td>1.05</td>
<td>1.43,1,a,b</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>1.45,1,2,a,b</td>
<td>2.11,2,a</td>
<td>.64</td>
<td>1.21</td>
<td>1.85,1,2,a,b</td>
</tr>
<tr>
<td></td>
<td>Crying</td>
<td>1.40,1,a,b</td>
<td>1.54,1,a,b</td>
<td>.71</td>
<td>.78</td>
<td>1.39,1,a,b</td>
</tr>
<tr>
<td></td>
<td>Aggressive</td>
<td>1.12,1,b</td>
<td>1.00,1,b</td>
<td>.26</td>
<td>.00</td>
<td>1.06,1,b</td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share numerical subscripts differed at p < .05 in the Bonferroni multiple comparisons. Means in the same column that do not share alphabetical subscripts differed at p < .05 in the Bonferroni multiple comparisons.
Children's Reasons for Expression

Significant main effects of feeling \( (F(2, 184) = 27.54, p < .001, \eta^2 = .25) \), psychopathology \( (F(3, 92) = 2.77, p < .05, \eta^2 = .09) \), and reason for expression \( (F(4, 368) = 28.75, p < .001, \eta^2 = .27) \) were qualified by feeling \( \times \) reason for expression interaction \( (F(8, 736) = 23.41, p < .001, \eta^2 = .22) \), and feeling \( \times \) psychopathology \( \times \) reason for expression interaction \( (F(24, 736) = 2.26, p < .01, \eta^2 = .08) \).

As expected, children in the externalizing group reported *uncontrollability* as a reason to express anger more than the control group, and children in the internalizing group cited *uncontrollability* as a reason to express sadness more than the control group (see Table 2). Additionally, examining the effects within groups and across feeling, all children reported expectation of *instrumental help* as a reason to express physical pain more than for anger or sadness (see Table 2), and children in all but internalizing group also cited expectation of *instrumental help* more than all other reasons in response to physical pain.

Children's Methods of Control

Significant main effects of feeling \( (F(2, 166) = 42.95, p < .001, \eta^2 = .34) \) and method of control \( (F(4, 332) = 15.92, p < .001, \eta^2 = .15) \) were qualified by feeling \( \times \) method of control interaction \( (F(8, 664) = 3.16, p < .01, \eta^2 = .04) \), psychopathology \( \times \) method of control interaction \( (F(12, 332) = 3.72, p < .001, \eta^2 = .12) \), and a significant three-way interaction: feeling \( \times \) psychopathology \( \times \) method of control \( (F(24, 664) = 2.11, p < .01, \eta^2 = .07) \).

As predicted, children in the somatic complaints group reported *regulatory withdrawal* to control anger and sadness more than children in the control group. Those in the internalizing group also reported *regulatory withdrawal* to control anger more than those in the control group (see Table 3). Additionally, children in the control group reported *facial concealment* (masking facial expression) and *verbal concealment* (saying that one is okay when experiencing felt emotion) to control anger and sadness more than physical pain (see Table 3). They also reported *distraction* to control anger more than sadness or pain.

Children's Reasons for Control

Significant main effects of feeling \( (F(2, 166) = 43.56, p < .001, \eta^2 = .41) \) and reason for control \( (F(4, 332) = 11.46, p < .001, \eta^2 = .15) \) were qualified by feeling \( \times \) reason for control interaction \( (F(8, 664) = 11.73, p < .001, \eta^2 = .16) \), psychopathology \( \times \) reason for control interaction \( (F(12, 332) = 5.32, p < .001, \eta^2 = .19) \), and a significant three-way interaction: feeling \( \times \) psychopathology \( \times \) reason for control \( (F(24, 664) = 4.50, p < .001, \eta^2 = .16) \).

As predicted, children in the somatic complaints group cited *triviality of emotion* as a justification to control anger and sadness more than the control group, and more than other reasons (prosocial, maintenance of self-esteem, and prosocial, social rules, and avoidance of punishment) to control anger and sadness, respectively (see Table 4). Additionally, children in the control group cited *social rules* as a justification to control anger more than all the other groups, and more than all the other reasons for controlling anger except *maintenance of self-esteem* (see Table 4). Children in the internalizing group cited *avoidance of punishment* to control anger more than the control group, and
Table 2. Means and Standard Deviations for Child Feeling Type × Child Psychopathology × Reason for Expression Type Interaction in Children’s Reasons for Expression

<table>
<thead>
<tr>
<th>Child feeling</th>
<th>Reason for expression</th>
<th>Type of psychopathology</th>
<th>Externalizing (N = 28)</th>
<th>Internalizing (N = 22)</th>
<th>Somatic complaints (N = 21)</th>
<th>Control group (N = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Anger</td>
<td>Uncontrollable</td>
<td>2.25₁,a</td>
<td>.90</td>
<td>2.03₁,₂,a</td>
<td>.81</td>
<td>1.94₁,₂,a, c</td>
</tr>
<tr>
<td></td>
<td>Instrumental help</td>
<td>2.19₁,a</td>
<td>.91</td>
<td>2.28₁,a</td>
<td>.99</td>
<td>1.87₁,a,c</td>
</tr>
<tr>
<td></td>
<td>Emotional support</td>
<td>1.69₁,b</td>
<td>.76</td>
<td>2.00₁,a</td>
<td>.80</td>
<td>1.48₁,a</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>1.43₁,b</td>
<td>.78</td>
<td>2.05₁,a</td>
<td>.97</td>
<td>1.54₁,a</td>
</tr>
<tr>
<td>Sadness</td>
<td>Uncontrollable</td>
<td>1.96₁,₂,a</td>
<td>.86</td>
<td>2.38₁,a</td>
<td>.77</td>
<td>1.71₁,₂,a,c</td>
</tr>
<tr>
<td></td>
<td>Instrumental help</td>
<td>2.02₁,a,b</td>
<td>.91</td>
<td>2.40₁,a</td>
<td>.85</td>
<td>1.87₁,a,c</td>
</tr>
<tr>
<td></td>
<td>Emotional support</td>
<td>1.90₁,a,b</td>
<td>.90</td>
<td>2.17₁,a</td>
<td>.70</td>
<td>1.82₁,a,c</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>1.55₁,a,b</td>
<td>.89</td>
<td>2.08₁,a</td>
<td>.96</td>
<td>1.75₁,a,c</td>
</tr>
<tr>
<td>Pain</td>
<td>Uncontrollable</td>
<td>1.74₁,a,b</td>
<td>.88</td>
<td>2.47₁,a,b</td>
<td>1.03</td>
<td>2.17₁,a,c</td>
</tr>
<tr>
<td></td>
<td>Instrumental help</td>
<td>3.24₁,c</td>
<td>.65</td>
<td>3.22₁,b</td>
<td>.89</td>
<td>3.25₁,b</td>
</tr>
<tr>
<td></td>
<td>Emotional support</td>
<td>2.23₁,a</td>
<td>1.19</td>
<td>2.57₁,a,b</td>
<td>.94</td>
<td>2.10₁,c</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>1.76₁,a</td>
<td>1.08</td>
<td>2.53₁,a,b</td>
<td>1.28</td>
<td>2.12₁,c</td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share numerical subscripts differed at \( p < .05 \) in the Bonferroni multiple comparisons. Means in the same column that do not share alphabetical subscripts differed at \( p < .05 \) in the Bonferroni multiple comparisons.
<table>
<thead>
<tr>
<th>Child Feeling</th>
<th>Method of control</th>
<th>Type of psychopathology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Externalizing (N = 17)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Anger</td>
<td>Facial</td>
<td>1.49&lt;sub&gt;1,a,b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Verbal</td>
<td>1.37&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Distraction</td>
<td>1.31&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>1.39&lt;sub&gt;1,2,a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Sadness</td>
<td>Facial</td>
<td>2.14&lt;sub&gt;1,b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Verbal</td>
<td>1.47&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Distraction</td>
<td>1.53&lt;sub&gt;1,a,b&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>1.26&lt;sub&gt;1,2,a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Pain</td>
<td>Facial</td>
<td>1.22&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Verbal</td>
<td>1.04&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Distraction</td>
<td>1.00&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>1.12&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>Hiding</td>
<td>1.06&lt;sub&gt;1,a&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share numerical subscripts differed at \( p < .05 \) in the Bonferroni multiple comparisons. Means in the same column that do not share alphabetical subscripts differed at \( p < .05 \) in the Bonferroni multiple comparisons.
Table 4. Means and Standard Deviations for Child Feeling Type × Child Psychopathology × Reason for Control Type Interaction in Children’s Reasons for Control

<table>
<thead>
<tr>
<th>Child feeling</th>
<th>Reason for control</th>
<th>Externalizing (N = 17)</th>
<th>Internalizing (N = 20)</th>
<th>Somatic complaints (N = 22)</th>
<th>Control group (N = 29)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Anger</td>
<td>Social rules</td>
<td>1.13&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.26</td>
<td>1.35&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td>Avoid punishment</td>
<td>1.79&lt;sub&gt;1,2,b&lt;/sub&gt;</td>
<td>.59</td>
<td>1.95&lt;sub&gt;2,b&lt;/sub&gt;</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>Maintain self-esteem</td>
<td>1.07&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.26</td>
<td>1.31&lt;sub&gt;1,2,a,c&lt;/sub&gt;</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td>Prosocial</td>
<td>1.15&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.35</td>
<td>1.02&lt;sub&gt;1,c&lt;/sub&gt;</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>Triviality</td>
<td>1.16&lt;sub&gt;1,2,a&lt;/sub&gt;</td>
<td>.27</td>
<td>1.30&lt;sub&gt;1,2,a,c&lt;/sub&gt;</td>
<td>.37</td>
</tr>
<tr>
<td>Sadness</td>
<td>Social rules</td>
<td>1.57&lt;sub&gt;1,b&lt;/sub&gt;</td>
<td>.79</td>
<td>1.62&lt;sub&gt;1,a,b&lt;/sub&gt;</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td>Avoid punishment</td>
<td>1.33&lt;sub&gt;1,a,b&lt;/sub&gt;</td>
<td>.49</td>
<td>1.55&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td>Maintain self-esteem</td>
<td>1.47&lt;sub&gt;1,b&lt;/sub&gt;</td>
<td>.81</td>
<td>1.31&lt;sub&gt;1,a,c&lt;/sub&gt;</td>
<td>.46</td>
</tr>
<tr>
<td></td>
<td>Prosocial</td>
<td>1.40&lt;sub&gt;1,b&lt;/sub&gt;</td>
<td>.68</td>
<td>1.22&lt;sub&gt;1,a,c&lt;/sub&gt;</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>Triviality</td>
<td>1.48&lt;sub&gt;1,2,b&lt;/sub&gt;</td>
<td>.76</td>
<td>1.30&lt;sub&gt;1,a,c&lt;/sub&gt;</td>
<td>.43</td>
</tr>
<tr>
<td>Pain</td>
<td>Social rules</td>
<td>1.00&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.00</td>
<td>1.07&lt;sub&gt;1,c&lt;/sub&gt;</td>
<td>.17</td>
</tr>
<tr>
<td></td>
<td>Avoid punishment</td>
<td>1.17&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.31</td>
<td>1.27&lt;sub&gt;1,c&lt;/sub&gt;</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td>Maintain self-esteem</td>
<td>1.13&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.35</td>
<td>1.17&lt;sub&gt;1,c&lt;/sub&gt;</td>
<td>.38</td>
</tr>
<tr>
<td></td>
<td>Prosocial</td>
<td>1.00&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.00</td>
<td>1.00&lt;sub&gt;1,c&lt;/sub&gt;</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Triviality</td>
<td>1.00&lt;sub&gt;1,a&lt;/sub&gt;</td>
<td>.00</td>
<td>1.08&lt;sub&gt;1,c&lt;/sub&gt;</td>
<td>.26</td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share numerical subscripts differed at p < .05 in the Bonferroni multiple comparisons. Means in the same column that do not share alphabetical subscripts differed at p < .05 in the Bonferroni multiple comparisons.
children in both the externalizing and internalizing groups cited *avoidance of punishment* to control anger more than all of the other reasons.

**Discussion**

The present findings take us a step further in understanding normative emotion expression in the South Asian Hindu children and demonstrate that the patterns of emotion expression and control in children with psychopathology clearly differ from this norm. The present findings indicate that although South Asian Hindu children report tight behavioral control over their emotions, they are still adept at communicating how they feel using display rules of their culture. Whereas felt emotion may not be directly communicated, behavioral cues may be provided for the interactive partner to determine what the child is feeling. Undoubtedly, Gujarati children in the present sample were more likely to use explicit *facial* (e.g., showing a facial expression) or *verbal means* to express physical pain than anger or sadness. Consistent with Hall's (1976) proposal of eastern preference for *high context* communication, the methods that children in the present investigation reported to communicate anger and sadness tended to be *indirect*, although the specific indirect means differed across children in the control group and the three symptomatic groups. This difference in children’s methods of communicating physical pain and emotions (direct versus indirect) is consistent with relatively higher social acceptability of physical complaints than psychological processes in eastern cultures (Kirmayer, 1984, 2001).

**Group Differences in Methods of, and Reasons for, Communicating or Controlling Emotion**

**Asymptomatic Group.** As expected, Gujarati Hindu children in the asymptomatic control group reported communicating anger through *indirect verbal means* more than all the other groups, and sadness indirectly more than the externalizing and somatic complaints groups. In such indirect verbal expressions, the tone of the voice (e.g., ‘I would not talk like usual,’ ‘mother would know from my voice [unusually monotone or loud]) or the amount of talking (e.g., ‘I would not talk much’) communicated the feeling rather than the actual content of the verbal message. These high-context communications are considered to be more typical in eastern cultures in which minimal explicit information is transmitted through the verbal message, and the communication relies on the information contained either in the physical context or internalized in the receiver (Hall, 1976). This implicit emotion communication in South Asian children is interesting given the western emphasis on clear and direct communication. In fact, western parenting and child guidance literature emphasizes teaching children to ‘use their words’ and to ‘label’ their emotions as a part of their emerging emotional competence (e.g., Gottman & Declaire, 1998). For individuals in the West, the information about how one is feeling is in the explicit verbal code of the communication. In contrast, it seems that the interactive partners of children in the control group in the present sample likely rely more on contextual cues to receive the information that the child is feeling angry. When asked, ‘How would your mother know that you are angry?’, Gujarati children in the present sample commonly stated ‘she would just know’ or ‘she would know because she is mother’—responses that refer to the information internalized in the receiver. Overall, these reports were consistent with
those of Gujarati parents in Pai’s (1998) sample, which indicated that the parents ‘just knew’ that their child was experiencing a particular emotion.

High-context communications require individuals to be more attuned to and be better able to read non-verbal cues of others around them in order to decipher the meaning of what is being communicated (Hall, 1976). How might Gujarati children be socialized to learn such implicit and subtle emotional communications? Prior research has shown that Gujarati mothers engage in the process of making their child understand the nuances of emotion-eliciting situations and display rules (Raval & Martini, 2009). In fact, asymptomatic children in the present study cited social rules and parental reminders of those rules as a justification to control their anger more than the three symptomatic groups, in which avoidance of parental reprimand/physical punishment was more common. Prior research has shown that these two justifications—social rules and a desire to avoid punishment—were reported more commonly by 4- and 6-year-old Indian than White British children (Joshi & MacLean, 1994). The present findings take us a step further and indicate individual differences in Hindu Indian children’s perceptions of consequences of displaying felt emotion (parental reminder versus reprimand/punishment), which may be linked to different outcomes (asymptomatic versus symptomatic status). Perhaps the specific transactions between asymptomatic children and their parents facilitate these children’s learning of cultural display rules, which the children use to regulate their emotions in culturally appropriate ways.

Internalizing and Externalizing Groups. The present findings indicate that pattern of emotion expression in the three symptomatic groups not only differed from the control group, but that children in the three symptomatic groups also showed distinct patterns of emotion expression. Children in the externalizing group considered their expressions of anger uncontrollable more than the control group, and reported aggressive behaviors to express anger and sadness more than all other groups. In contrast, children in the internalizing group considered their expressions of sadness uncontrollable more than then control group, and cited crying as a mode of expressing anger and sadness more than all other groups. Although such methods—crying and aggression—reported by children in internalizing and externalizing groups represent overt signs of one’s distress, these methods do not contain the intended message in the explicit verbal code (e.g., stating that one is angry), and rely on behavioral means to communicate the feeling. Consistent with high-context communications, the onus remains on the interactive partner to interpret these behaviors and recognize the intended meaning.

The patterns of emotion expression in the internalizing and externalizing groups in the present sample are somewhat consistent with the findings concerning White-American children. Although the link between dysregulation of anger and externalizing problems is quite robust (Eisenberg et al., 2005; Keltner, Moffitt, & Stouthamer-Loeber, 1995; Zahn-Waxler et al., 1994), the one between dysregulation of sadness and internalizing problems is less consistent (Eisenberg, Shepard, Fabes, Murphy, & Guthrie, 1998; Keltner et al., 1995; Zahn-Waxler et al., 1994; Zeman et al., 2002). Western literature also links children’s behavior problems with parental socialization of emotion, in particular parental responses that punish or minimize the significance of the child’s feeling (Denham et al., 2000; Eisenberg, Losoya, et al., 2001). Such links between parental response to children’s emotions and child psychopathology may also be evident in Gujarati Indian children. When children in the internalizing and externalizing groups in the present sample indicated that they would control anger, they were more likely to report a desire to avoid being scolded or spanked than any
other justification. Parental behaviors such as spanking or scolding may characterize emotion-related mother–child interactions in the internalizing and externalizing groups, and these interactions may not effectively facilitate children’s acquisition of culture-specific emotion display rules. Although children in these groups may be aware of cultural display rules, these rules may not be easily accessible to them during emotion-eliciting situations, or they may lack effective strategies to help regulate their behavioral expression. Further research is needed to understand parental contributions to children’s emotion socialization in South Asian Hindu culture, and the implications of individual differences in parental socialization for child outcomes.

Somatic Complaints Group. In addition to internalizing and externalizing problems, the present findings support the occurrence of somatic problems in Gujarati children (Of the 602 children in the screening, 29 presented with somatic complaints in the clinical range). However, contrary to the literature that suggests that people in eastern collectivist cultures tend to present with more somatic complaints than psychological difficulties (Kirmayer, 1984, 2001), somatic problems were not the only, or even the predominant, form of difficulties presented by Gujarati children. Although physical phenomena (i.e., physical pain) may be considered more acceptable than emotions, and the two processes may involve distinct behavioral scripts (direct versus indirect expression) in Gujarati culture, emotions and emotional problems are a part of daily life for Gujarati children. Children who presented with somatic complaints considered their emotions trivial and tended to withdraw in response to emotions more than the control group. Western literature has linked some physical problems with the suppression of negative emotions (Salovey et al., 2000). It is unclear whether children in the somatic complaints group in the present study ‘suppressed’ felt emotion; however, they endorsed a belief that emotions are insignificant and that expressing how one feels may be useless. These children tended to report regulatory withdrawal to control anger and sadness more than the control group, as well as a communicative withdrawal to express sadness more than internalizing and externalizing groups. It is unclear whether communicative or regulatory withdrawal is used as a purposeful mechanism to indirectly communicate or control one’s feelings, or whether it is a state of resignation with the recognition that communication may be ineffective. Further research is needed to understand processes concerning emotion expression and control in South Asian children with somatic complaints.

It is noteworthy that child gender did not emerge as a statistically significant variable impacting on children’s methods of expression and control in the present analyses. This is surprising given prior research (e.g., Joshi & MacLean, 1994) that showed a gender difference in Indian children’s display rule knowledge. Perhaps the unequal distribution of girls and boys across the four groups and an overall sample with fewer girls restricted the possibility of statistically significant gender effects.

Limitations and Future Directions

The present research focused on a single sample of Indian children and their mothers, with data collected at one point in time. Comparative studies of children’s emotion expression and control in Indian and western White samples are needed to directly examine differences in cultural models of emotion communication across these groups. Moreover, longitudinal research designs with prospective measures of children’s emotion expression/control and behavior problems in Gujarati Indian
culture would be useful to directly examine the developmental mechanisms through which children’s emotionally expressive behaviors and parenting may influence child outcomes. An examination of patterns of emotional expression and control in children with and without behaviour problems at different points in development (e.g., late middle childhood and adolescence) would also be useful.

The mother–child dyads in the present sample were from middle-class, Gujarati-speaking, Hindu, urban families. In a diverse country such as India where people live in different socioeconomic conditions with varying levels of literacy and education, follow different religions, and belong to various regional/language groups that represent distinct subcultures (Office of the Registrar General, India, 2003), considerable caution should be exercised in generalizing the present findings to all Indian children. To better understand intracultural variation in emotion communication among Indian children, further research is warranted.

Child behavior problems were examined in a community sample and rated by only one informant (the child’s mother). Moreover, we collected only self-reported data concerning children’s expression and control of anger, sadness, and pain. Future research should include children who present with comorbid symptoms, and examine psychiatric disorders in Asian Indian children based on specific criteria outlined in a diagnostic classification system (e.g., American Psychiatric Association, 2000). Ideally, future researchers will also gather information from children’s mothers, fathers, extended family members, peers, and teachers. Observational studies with South Asian children may also be useful in examining the subtle non-verbal aspects of emotion communication.

Despite these limitations, the present study provides valuable information concerning patterns of emotion expression and control in South Asian Hindu children with internalizing, externalizing, and somatic problems as compared with their asymptomatic counterparts. Further work is needed to determine whether the patterns found in the three symptomatic groups are indeed maladaptive with respect to the control group. If so, an important implication of the present research would be to construct a model of intervention for Gujarati children that aims to replace maladaptive patterns of emotion expression with adaptive, culturally appropriate variants, and to examine their efficacy. Such a model may focus on training Gujarati children in subtle aspects of emotion communication (i.e., using indirect verbal cues) rather than teaching them to ‘use their words’ and label their emotions, as is typical in western interventions.

References
role of parental socialization and emotion expression. Development & Psychopathology, 12, 23–45.


**Author Note**

 Portions of the results were presented at the biennial meeting of Society for Research in Child Development in Atlanta in April 2005. This study was funded by Social Sciences and Humanities Research Council of Canada Doctoral Fellowship to Vaishali Raval. We are thankful to a great team of research assistants (Ila Panchal, Manjari Bhatt, Kosha Thaker, Hardik Thaker, Amit Shah, and Danny Raval), and to the principals and staff of participating schools from Ahmedabad, Gujarat for their co-operation. We particularly value the time and commitment of all the children who participated and their parents. We sincerely acknowledge three anonymous reviewers and the editor for their helpful comments on previous drafts.

 Please note that Vaishali Raval is now an Assistant Professor in the Department of Psychology at Miami University, Ohio, and Tanya Martini is an Associate Professor at Brock University, Ontario, Canada. Pratiksha Raval is now a retired Professor from Gujarat University, India.