
Children's Anger, Emotional Expressiveness, and Empathy: Relations with Parents' Empathy, Emotional Expressiveness, and Parenting Practices

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Abstract

In Roberts and Strayer (1996) we described how emotional factors were strongly related to children's empathy, which in turn strongly predicted prosocial behavior. This paper focuses on how these child emotional factors, assessed across methods and sources, related to parental factors (empathy, emotional expressiveness, encouragement of children's emotional expressiveness, warmth and control) for a subset of 50 two-parent families from our earlier sample. Parents reported on their emotional characteristics and parenting; children (5 to 13 years old; 42% girls) also described parenting practices. Children's age and parenting factors accounted for an average of 32% of the variance in child emotional factors, which, with role-taking, strongly predicted children's empathy. In contrast to earlier, less comprehensive studies, we found important paths between parents' and children's empathy, mediated by children's anger. These countervailing pathways largely neutralized each other, resulting in the low correlations usually seen when parents' and children's empathy are examined in isolation. Thus our findings are an important confirmation and extension of the theoretically expected link between parents' and children's empathy.

Keywords: socialization of emotions; empathy; anger; emotional expressiveness

Emotional expression is thought to have important practical consequences for children's social competence, prosocial behavior, and psychopathology (Bretherton, 1995; Denham, 1998; Eisenberg *et al.*, 1993; Roberts, 1999; Thompson & Calkins, 1996). Empathy is considered to be a factor in all these aspects of behavior, and it, too, has been linked to children's emotional expressiveness (Eisenberg, Fabes, & Losoya, 1997; Roberts & Strayer, 1996; Saarni, Mumme, & Campos, 1998; Strayer, 1987). For example, in previous research (Roberts & Strayer, 1996), girls' and boys' empathy was strongly linked with their emotional expressiveness, their expression of anger, the frequency with which they denied feeling sad, frightened, or angry, and congruence

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between their facially expressed and verbally reported emotions. Together with children's role-taking, these factors accounted for 60% of the variance in children's empathy; and empathy, in turn, accounted for 50% of the variance in boys' prosocial behavior.

In this paper, we examine parent characteristics and parenting practices associated with children's emotional expressiveness and empathy for a subset of 50 families of our original sample ($N = 73$; see Roberts & Strayer, 1996) for whom we had both father and mother data. This added focus on parents allows us to contribute to the limited number and breadth of studies on parent-child socialization of emotion and empathy. Because of our earlier report on relations between empathy and prosocial behavior in this sample, results reported here for parenting and empathy have implications for pathways between parenting and prosocial behavior. We focus on two-parent families because fathers as well as mothers have been shown to be important players in children's emotional socialization (e.g., Boyum & Parke, 1995; Cassidy, Parke, Butkovsky, & Braungart, 1992; Roberts, 1999). The following issues guided our search for relevant socialization factors in this area.

Is There a Link Between Parental Empathy and Child Empathy?

It is plausible to think that more empathic parents are better able to read children's emotional cues and are more motivated to be responsive and warm, conditions that should facilitate the development of children's empathy (Feshbach, 1987; Zahn-Waxler, 1991). Nevertheless, surprisingly little empirical support exists for a link between parent and child empathy. Kalliopuska (1984) found correlations of only .06 for mother-child empathy and .10 for father-child empathy in 215 Finnish families. In a U.S. sample of 47 families, Bernadett-Shapiro, Ehrensaft, & Shapiro (1996) found a small, non-significant correlation between the empathy of fathers and sons. Similarly, in a Canadian sample of 51 families, Strayer and Roberts (1989) reported an average correlation of only .03 between mothers' and fathers' empathy and two measures of children's empathy.

The exceptions to this pattern have involved small samples, which are more vulnerable to sampling error and influential cases. Thus in a U.S. sample (Barnett, King, Howard, & Dino, 1980), girls' ($N = 28$) empathy had a significant positive correlation with mothers' empathy and a significant *negative* correlation with fathers' empathy. In contrast, correlations for boys ($N = 26$) were .00 and .03, respectively (Barnett, personal communication, 24 May 1999). The strongest evidence for a link between parent and child empathy has been reported by Trommsdorf (1991), who found a correlation of .61 in a sample of 33 German mothers and children.

When we used meta-analytic techniques (Hunter & Schmidt, 1990) to combine the results of these earlier studies with results to be reported below, we found a mean correlation of only .07 across a combined sample of 368 mother-child pairs. All variation across studies could be attributed to sampling error. Results for 323 father-child pairs were similar: a mean correlation of $-.01$ with a 95% confidence interval ranging from $-.13$ to $.12$. Only the small German sample studied by Trommsdorf (1991) stood outside this pattern of replicated findings. Thus the association between parent and child empathy appears to be small, despite similarity in parent and child empathy measures.

Because children's empathy and the parenting practices thought to influence it are all multiply determined (Belsky, 1984; Strayer, 1993), parental empathy may simply

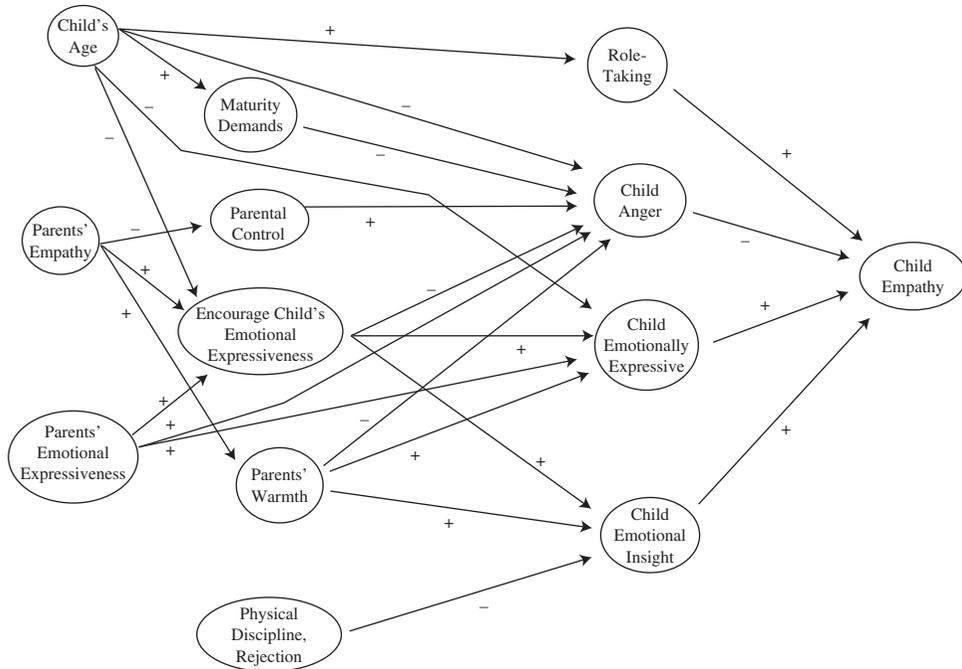


Figure 1. Proposed theoretical path model for the relations between parent and family factors and children's emotional expressiveness and empathy.

be unimportant for children's empathy. On the other hand, direct links could be moderated in important ways by other factors, such as parents' expression of warmth or anger; or links could be indirect, mediated in such ways that raw correlations are low. As well, there are certainly methodological limitations in how empathy has been assessed. In contrast to studies which relied on trait-report questionnaires, the current study assessed children's empathy across methods and sources, then aggregated these measures by a latent variable. Such an approach gives an unusually good measure of empathy as a quality 'in the child', relatively free from error variance and sources of bias inherent in single measures (Judd, Smith, & Kidder, 1991). Therefore we expected to have a better-than-usual chance of finding a positive relation between parent and child empathy, if there was one. In addition, we examined parenting practices in order to test the hypothesis that the link between parent and child empathy is mediated by intervening variables such as parental warmth, control, and encouragement (or regulation) of children's emotional expressiveness (e.g., Bugental & Goodnow, 1998; Eisenberg *et al.*, 1992; Saarni *et al.*, 1998). These were the linkages that we expected to find.

Is There a Link Between Parental Emotional Expressiveness and Child Emotional Expressiveness?

Emotional expressiveness is important for social competence and peer acceptance (Denham, 1998; Saarni, 1999). Social learning and socialization theories of emotional expression (e.g., Barrett & Campos, 1991; Denham, 1998; Halberstadt, 1991) argue

that several parental processes, including modeling, influence children's emotional expressiveness, resulting in similarities between parents and children. Although these similarities are moderated by children's temperament, type of emotion, and how the emotion and the context in which it occurs are construed, we expected moderate correlations across contexts between parents' expressiveness and children's emotional behavior. There is some empirical support for this expectation (see Denham, 1998; Halberstadt, Crisp, & Eaton, 1999; and Saarni, 1999 for reviews), although most data pertain to toddlers and preschoolers (Eisenberg *et al.*, 1992, is an exception) and to mothers (but Boyum & Parke, 1995; and Cassidy *et al.*, 1992, are examples of studies that included fathers).

The current study adds to the rather sparse evidence for school-age children, and includes measures of expressiveness for fathers as well as for mothers. Furthermore, we assessed children's expressiveness across methods and sources (laboratory measures and ratings from children, parents, and teachers), allowing us to measure it as a trait across contexts (Halberstadt, 1991).

Is There a Link Between Parental Encouragement of Emotional Expressiveness and Child Emotional Expressiveness?

Although expressive children are expected to have parents who encourage (or at least tolerate) their expressiveness and who are expressive themselves (e.g., Halberstadt, 1991, 1998), other possibilities also seem plausible. There is certainly a biological component to emotional reactivity and expressiveness (e.g., Kochanska, 1994; Rothbart, 1989). Recognizing such individual differences, parents may react to children who are reserved by encouraging their expressiveness, and to temperamentally expressive children by helping them to moderate or control their expressiveness (Saarni, 1999). Children's age also seems relevant, with parents more tolerant of emotional expressiveness in young children (Denham, 1998). As well, parents may encourage the control of anger while tolerating the expression of other emotions, such as sadness or fear, especially in girls (Brody & Hall, 1993). Context, too, seems important, with parents less willing to tolerate upset or angry behavior in public settings or during parent-child conflicts (Roberts & Strayer, 1987). Thus, rather than simply encouraging or discouraging emotional expressiveness, parents may seek to help children regulate their emotional expressiveness in ways that are culturally and situationally appropriate (Kopp, 1989; Roberts, 1999; Saarni, 1999; Thompson, 1994). Because we have observational and other measures of children's emotional expressiveness in the current study, we can use converging measures to assess this construct in relation to parents' own emotional expressiveness and their tolerance or encouragement of their children's emotional expressiveness.

Is There a Link Between Parental Warmth and Children's Emotional Expressiveness and Empathy?

It has been suggested that parents' warmth, especially their sensitivity to children's emotional experiences (including accurate labeling of those experiences as well as responsiveness to children's emotional needs), is internalized and leads to children's empathic responses and appropriate expressiveness (Dix, 1991; Dunn & Brown, 1994; Zahn-Waxler, 1991). In addition to work done with families characterized as warm and responsive (Denham, 1998; Saarni, 1999), there is supporting evidence from

families characterized by harsh discipline and parental rejection. Physically abused toddlers and preschoolers, for example, react to others' distress by threatening or attacking them (Main & George, 1985). As well, conduct disordered youth (often from harsh and emotionally negligent families), are poorer than comparison youth in identifying others' emotions and have less empathy (Cohen & Strayer, 1996).

Although parental warmth and encouragement of children's emotional expressiveness are expected to facilitate children's expression of a range of emotions, these parental qualities should also lead to children who experience less sadness, anger, and fear and who are less reactive to negative emotions in others (Bretherton, 1995; Breuer & Freud, 1959; Davies & Cummings, 1994; Roberts, 1999). That is, parental warmth and encouragement of emotional expressiveness should be associated with children who are more expressive of positive emotions (happiness, interest, curiosity), and who can express negative emotions, but generally experience them less often and less intensely than do other children (Bell & Ainsworth, 1972; Halberstadt *et al.*, 1999; Parke, Cassidy, Burks, Carson, & Boyum, 1992; Saarni, 1999). Thus in Figure 1, the arrows from parents' warmth and encouragement of emotional expressiveness to children's emotional expressiveness are positive, whereas the arrows to children's anger are negative. As mentioned earlier, most of the relevant empirical data concern young children; in the current study we present data for school-age children, a period during which important changes in emotional expression and socialization are thought to occur (e.g., Saarni, 1999). By including measures of emotional expressiveness and empathy for both parents and children, we are able to assess relations between this network of emotional factors and parental warmth.

What Are the Parenting Concomitants of Children's Anger?

Aside from research concerning empathy, there is little work on general parental control practices and school-age children's expression of emotions. Parental use of induction or reasoning (a component of *Maturity Demands* in Figure 1) should lead to less anger, as children are helped to understand the consequences of their less restrained actions, thus fostering their internal regulation and planning (Thompson, 1994). As well, less anger may occur because induction makes the child's actions salient and minimizes coerced compliance, reducing resentment and the modeling of force. For these reasons, we incorporated a negative path from *Maturity Demands* to *Child Anger* in our model.

In contrast, parenting practices characterized by the arbitrary assertion of power (a component of *Parental Control* in Figure 1) are expected to increase child frustration, indignation (in older children), and anger. This relation should be stronger when power assertion is coupled with low parental warmth, or when it occurs in cultural contexts in which authoritarian parenting is not valued or perceived as normative, as generally in North America (Baumrind, 1971; Gottman, Katz, & Hooven, 1997; Kagitcibasi, 1970).

In the current study we assessed anger using reports from children, parents, and teachers. A latent variable was extracted across these sources to derive a measure of anger reflecting a response tendency 'in the child', one that cut across contexts. In Roberts and Strayer (1996) we reported that children's anger had an important negative relation with children's empathy, consistent with the view that intense negative emotions disrupt functioning (Roberts & Strayer, 1987). Given the links between anger

and parenting noted above, we thought that anger might mediate relations between parental factors and child empathy in the present study.

What Are the Parenting Concomitants of Children's Emotional Insight?

As assessed in our model, emotional insight comprises two related abilities: awareness of one's feelings (i.e., congruence or agreement between facially expressed and verbally reported emotions) and low levels of denial (i.e., facial expressions of distress coupled with verbal assertions of feeling happy or neutral). Thus denial is a theoretically interesting special case of incongruence. Both were assessed as part of our laboratory measure of empathy.

Low levels of agreement between facially expressed and verbally reported emotions have been reported in several studies (Chisholm & Strayer, 1995; Eisenberg & Fabes, 1998; Strayer & Roberts, 1997). These findings are disquieting for several reasons. They may indicate a distancing from one's own emotional experience, with diminished emotional competence (Saarni, 1999) and implications for psychopathology (Bowlby, 1973; Bretherton, 1995). At the same time, low levels of congruence between facially expressed and verbally reported emotions suggest possible discrepancies between emotional experience as construed by the individual and the public messages accompanying that experience, as conveyed by facial expressions. In contrast to contexts in which such discrepancies reflect emotional display strategies (Saarni, 1999), our laboratory-based data are more private and less governed by social scripts or consequences. Thus if such discrepancies are even more marked in social contexts, as Saarni (1999) has argued, a variety of misunderstandings may ensue between the child and others.

Several aspects of parenting may be related to facial-verbal congruence. One important factor may be the extent to which parents accurately identify or label children's expressed emotions (Dunn & Brown, 1994). In home observations, however, parents seldom label feelings when confronted with an upset preschool-age child (Roberts & Strayer, 1987)—although positive emotions may fare better. In addition to labeling emotions, we expected denial, in particular, to be associated with parenting practices that over-emphasize emotional control (e.g., deliberate suppression of children's feelings) or that were punitive or experienced as aversive by the child. In contrast, parental warmth and encouragement of emotional expression would be expected to minimize denial (Figure 1).

Although we did not directly observe parents' identification of children's facial expressions, we did assess parents' reported encouragement of emotional expression, their emphasis on emotional control, and their empathy. We expect empathic parents to accurately assess and respond to their children's emotions, encouraging its expression and thus promoting expression-experience congruence—although such an effect might be overwhelmed by the demand characteristics of children's emotional distress: to comfort, to resolve a difficulty, to obtain compliance, or to teach regulation and self-control (Roberts, 1999).

Although we focus on parental causal paths in our model, we recognize that child characteristics influence parenting. For example, parents may react to denial of transgressions with frustration and coercive parenting (Dodge, 2002; cf. Piaget's 1983 discussion of lying in young children), whereas children who accept responsibility for their actions often elicit parental tolerance and warmth. We will return to this possibility when we discuss the empirical model presented below.

Method

Participants

Current analyses were based on 50 families who provided parenting data for both fathers and mothers. Study children fell in three age groups spanning the primary school age range. Group 1 consisted of 13 boys and 13 girls (mean age = 5.2 years, range = 4.6 to 5.7); Group 2 consisted of eight boys and three girls ($M = 9.0$ years, range = 8.5 to 9.7); and Group 3 consisted of eight boys and five girls ($M = 13.0$ years, range = 12.2 to 13.5). Gender composition did not differ significantly across groups, $\chi^2(2, N = 50) = 1.73, p > .40, V = .19$. Mean age for mothers was 37 years ($SD = 6.0$), for fathers, 39 ($SD = 7.0$).¹ Families came from predominantly white, middle-class backgrounds in a metropolitan area in western Canada.

Procedures

The laboratory procedures from which we derived six of our nine measures of emotional expressiveness and insight and one of our four measures of empathy are described below. They took place during a two-hour session at the end of which children completed self-report measures of their own empathy and the parenting practices of their mothers and fathers. This was followed by a lunch/play break, after which the laboratory measures of role-taking and prosocial behavior described in Roberts and Strayer (1996) were administered. While children were engaged in laboratory procedures, their attending parent (usually mother) completed the questionnaires described below and in Table 1, after telling us how to contact their child's best friend and teacher. After obtaining permission from their parents, best friends confirmed their reciprocal friendship and completed their questionnaires during a visit by a research assistant to their home (made within the following two weeks, on average). Teachers were mailed their material with an explanatory letter, were phoned regarding any questions, and mailed back their material within two to three weeks, on average. Finally, the attending parent took home a full set of questionnaires for the absent parent. These were returned in a prepared envelope within about two weeks. Phone call reminders were made as needed. Written as well as verbal instructions were clear about the importance of not consulting each other when completing the measures.

Laboratory Procedures

Vignette Viewing. Using a ceiling-mounted camera, children were unobtrusively videotaped while they watched six emotionally evocative vignettes on a TV monitor. Each child was alone during this procedure. The vignettes portray primarily dysphoric affect (e.g., a child is unjustly punished when another child lies), but positive emotions occur briefly across vignettes, and are prevalent in the last vignette, which portrays a trip to the circus. Additional details may be found in Strayer (1993).

Coding of Facial Expressions. A three-minute baseline videotape for each subject was viewed initially to familiarize coders with idiosyncratic facial characteristics. Facial expressions were scored by coders trained to recognize expressive changes in upper, middle, and lower facial regions (Izard & Dougherty, 1982). In addition to intensity, coders judged children's predominant facial expression during each vignette: happy (including positive surprise), sad, angry, afraid, startled (including negative surprise),

concerned-worried, disgusted (yucky), or neutral.² These same categories were used for children's reports during the vignette interview, below. (These facial emotion codes, when combined with child-reported emotions, formed the basis for our measures of emotional insight.) Percent agreement exceeded 80% for all categories.

Congruent with their verbal reports of emotion, most children were rated as facially expressive: 62% of the sample had a facial emotion coded for five or more of the six vignettes. In contrast, more than one-third (39%) of all 'neutral' codes were obtained from the least expressive 12% of the sample.

Vignette interviews. Children were individually interviewed after first watching all vignettes. Each vignette was cued by a picture, and children described the vignette's content as a check on memory and comprehension (100%). They were then asked to report each character's emotion and its intensity. After instructions that children differ widely in their responses, they were asked whether they themselves had felt neutral ('OK,' 'like usual') or an emotion (and if so, its intensity) in response to the vignette. The memory check and interview were conducted for each vignette in turn. The emotion categories listed above for facial expressions were used across all ages. If children's spontaneous emotion attributions were unclear (e.g., 'feels bad'), they were queried for best fit to one of these choices.

It is doubtful that any set of stimuli can adequately sample the range of meaningful or evocative emotional events across age. Our objective was to provide a broader range of emotional stimuli (within reasonable ethical restraints) than had previously been used in such research with children. With this limitation in mind, the stimulus materials appear to have been effective elicitors of emotion for most children: 78% of the sample reported emotions for five or more of the six episodes. In contrast, over half (51%) of all 'neutral' responses were given by just 12% of the sample. Thus, neutral responses appear to be a function of child variables rather than primarily an artifact of low-intensity stimulus materials.

Measures

We used multiple sources and methods to assess children's emotional expressiveness and empathy. In contrast, our measures of parent characteristics and parenting practices were based only on self-reports from parents and children. The variables initially used to measure the constructs in Figure 1 are summarized in Table 1; however, because of space limitations, only those variables that survived to enter our empirical model (indicated in **bold** in Table 1; Table 2 and Figure 2) will be described below. Details on excluded measures are available from the authors.

Child Empathy

The Empathy Continuum (Strayer, 1993). This scoring system was applied to the vignettes-based interviews. It integrates degree of affective sharing experienced (i.e., degree of match between their own and the stimulus persons' emotions, as identified by the child) with children's cognitive attributions for their emotions. It contains seven different levels of cognitive mediation, derived from models of empathy development (Feshbach, 1975; Hoffman, 1975), and levels of interpersonal understanding (Hughes, Tingle, & Sawin, 1981; Shantz, 1983). Scores were derived for each of the main characters in the vignettes, then averaged to form an overall score. Further details are given in Table 1.

Table 1. Constructs, Variables, and Sources

Construct Variable	Measure and Comments
Child Measures	
<i>Child Empathy</i>	
Empathy Continuum	EC Interview, Strayer (1993). Range: 0.7 to 13.7 (19 possible), $M = 5.4$, $SD = 3.4$.
Best-Friend-rated Empathy	Roberts & Strayer (1996). 6 items rated 0 (= not at all) to 2 (= a lot); $\alpha = .78$. Range: .2 to 1.7, $M = 1.2$, $SD = .4$.
Teacher-rated Empathy	Child Rating Questionnaire; 2 items; 5-point scales; $\alpha = .74$. Range: 1.5 to 5, $M = 3.6$, $SD = .9$.
Index of Empathy for Children	Bryant (1982); Self-report questionnaire, 22 items. Range: 5 to 18, $M = 11.1$, $SD = 3.0$.
<i>Role-Taking</i>	
Role-Taking	Global score, Selman & Jaquette (1977). Range: 1 to 7, $M = 4.2$, $SD = 2.0$.
<i>Child Anger</i>	
Teacher-rated Anger	$\alpha = .78$. Range: 1.0 to 4.5; $M = 2.3$, $SD = .8$.
Mother-rated Anger	$\alpha = .65$. Range: 2.0 to 5.0; $M = 3.3$, $SD = .8$.
Self-reported Anger	$\alpha = .62$. Range: 0 to 3, $M = 1.4$, $SD = 1.1$.
<i>Child Emotionally Expressive</i>	
Positive Intensity	Self-reported intensity. $M = 1.4$, $SD = .7$.
Negative Intensity	Self-reported intensity. $M = 1.2$, $SD = .5$. For positive and negative intensity, $r(48) = .34$, $p < .025$.
Facially Expressive (negative)	EC videotapes (Strayer, 1993); observer-rated intensity (0 = neutral to 3 = high intensity) coded for 91 ten-second intervals during 5 vignettes with predominantly negative affect. $M = 1.0$, $SD = .4$.
Facially Expressive (positive)	EC videotapes (Strayer, 1993); observer-rated intensity coded for 25 ten-sec. intervals during the vignette that featured positive affect. $M = .3$, $SD = .4$. For Facially Expressive positive and negative, $r(48) = .26$, $p < .07$.
<i>Child Emotional Insight</i>	
Denial	Range: 0 to 6, $M = 1.9$, $SD = 1.6$
Congruence	Range: 0 to 3, $M = .9$, $SD = .9$.
<i>Child's Age</i>	
Age	Mean age = 8.1 years, $SD = 3.4$.
Mothers and Fathers	
<i>Maturity Demands</i>	
Encourage	For mothers, $M = 5.3$ ($SD = .6$); for fathers, $M = 5.1$
Independence	($SD = .5$).

Table 1. Continued

Construct Variable	Measure and Comments
Rational Control and Praise	For both mothers and fathers, $M = 6.0$ ($SD = .8$).
Supervise and Overprotect	CRP-Q (Block, 1965; modified); 5 items. For fathers, $M = 3.5$ ($SD = 1.1$); for mothers $M = 4.2$ ($SD = 1.0$).
<i>Parental Control</i>	
Authoritarian Control	For fathers, $M = 3.7$; for mothers, $M = 3.5$ (both $SDs = .6$).
Anxiety and Guilt Control	For fathers, $M = 3.6$ ($SD = 1.3$); for mothers, $M = 3.3$ ($SD = 1.0$).
<i>Encourage Child's Emotional Expressiveness</i>	
Encourage Expressiveness	Two items; for mothers, $r(48) = .48$; for fathers, $r(47) = .53$, both $ps < .001$. For mothers, $M = 4.0$ ($SD = .8$); for fathers, $M = 3.6$ ($SD = .8$).
Permits Expression	Parent Attitude towards Children's Expressiveness, Saarni (1990); 20 items scored 1 to 4 as specified by Saarni. Reflected so that high scores = permissive of expression (range: 2.4–3.6).
<i>Parents' Warmth</i>	
Family Cohesion	For fathers, $M = 4.9$ ($SD = .7$); for mothers, $M = 5.1$ ($SD = .6$).
Low Family Conflict and Anger	11 items. For mothers, $M = 4.3$ ($SD = .7$); for fathers, $M = 4.5$ ($SD = .7$).
Nurturance	Child-reported parenting. $M = 3.9$ for mothers and fathers, $SDs = 1.2$ and 1.1 , respectively.
<i>Physical Discipline, Rejection</i>	
Physical Discipline	$M = 2.0$ for children's reports of fathers ($SD = 1.3$); $M = 2.1$ for their reports of mothers ($SD = 1.1$).
Permissive, Non-punitive	$M = 2.0$ for children's reports of fathers, 2.1 for mothers; $SDs = .8$ and $.7$.
Rejection, Love Withdrawal	$M = 2.1$ for children's reports of mothers, 1.9 for fathers (both $SDs = .7$).
Achievement—Responsibility Demands	Cornell Parent Behavior Inventory; 2 items. For children's report of mothers, $M = 3.5$ ($SD = .8$); for fathers, $M = 3.4$ ($SD = .9$).
Inductive Discipline	Cornell Parent Behavior Inventory 2 items. For children's reports of mothers, $M = 3.4$, $M = 3.2$ for fathers; $SDs = 1.4$.
Deprivation of Privileges	Cornell Parent Behavior Inventory; 2 items. $M = 2.4$ for children's reports of mothers and fathers, $SDs = 1.2$ and 1.3 , respectively.

Table 1. Continued

Construct Variable	Measure and Comments
<i>Parents' Empathy</i>	
Emotional Empathy	Mehrabian & Epstein (1972). Means were .7 (<i>SD</i> = .6) and 1.3 (<i>SD</i> = .5) for fathers and mothers respectively, matched $t(43) = 6.60, p < .0001, r_{pb} = .71$.
<i>Parents' Emotional Expressiveness</i>	
Emotionality	Means were 6.2 (<i>SD</i> = 1.0) and 7.1 (<i>SD</i> = .9), respectively, for fathers and mothers, matched $t(48) = 4.84, p < .0001, r_{pb} = .58$.
Expressive	$\alpha = .52$ for each parent. Means were 3.5 (<i>SD</i> = .6) and 4.1 (<i>SD</i> = .5), for fathers and mothers respectively, matched $t(48) = 6.16, p < .0001, r_{pb} = .67$.
Father Expressive	Parent Affectivity Report (Barnett <i>et al.</i> , 1980a), rated by child for each parent. Three items, rated 0 to 2; $\alpha = .63$ for fathers. Mother scale deleted ($\alpha = .36$).
Expression of affect	Expression of Affect Questionnaire (Strayer, 1985). Mothers: 11 items, rated -2 to +2; $\alpha = .80$. Fathers: eight items; $\alpha = .69$.
Approval of Expressiveness	Survey of Parents' Quality of Emotional Life (Malatesta, 1982); seven items rated on 10-point scales. Range: 1.4 to 10.0.

Note: Variables retained in the path analysis are indicated in **bold**.

Best-friend-rated empathy. Best friends rated the empathy of participating children on six items, such as 'Does (child's name) feel bad if s/he sees another kid without a friend to play with?'

Teacher-rated empathy. Teachers rated the empathy of participating children on two items ('Is generally sensitive and responsive to others' emotions'; 'empathic') from the Child Rating Questionnaire, a 47-item instrument assembled from the Prosocial Behavior Questionnaire (Weir, Stevenson, & Graham, 1980) and the Affect Expression Questionnaire (Buck, 1977). It assessed prosocial behaviors, emotional expressiveness, and peer relationships, as well as empathy.

Role-taking

Role-taking. Because empathy contains cognitive as well as emotional components (Strayer, 1993), we included a general measure of role-taking ability. A global score for each child was based on responses to a series of story dilemmas, using materials, interview methods, and scoring criteria detailed in Selman and Jaquette (1977).

Child Anger

Teacher-rated anger. A four-item scale from the Child Rating Questionnaire (e.g., 'Displays anger frequently and sometimes inappropriately').

Mother-rated anger. A four-item scale from the parent version of the Child Rating Questionnaire, completed by mothers. Mother and teacher scales utilized the same items.

Self-reported anger. Three items from the Expression of Affect Questionnaire (Strayer, 1985), e.g., 'When I feel angry, it's hard to show how I feel to my family.' Responses were scored as yes (= 1) or no (= 0), reflected so that higher scores indicate greater expressiveness, and summed for a total score.

Child Emotionally Expressive

Positive intensity. Self-reported intensity for the one positive vignette from the Vignettes Interview described above (Strayer, 1993), scored 0 = none, 1 = a little, 2 = a lot.

Negative intensity. Mean self-reported intensity from the Vignettes Interview for the five vignettes with negative emotional content.

Child Emotional Insight

Because the laboratory procedure yields both facial and self-reports of emotion, we were able to generate two indices assessing the degree of correspondence between these measures.

Congruence. Congruence was the number of exact matches between facially rated and self-attributed emotions across all six vignettes.

Denial. Denial was the number of vignettes in which observer-coded negative facial emotions (e.g., sad, angry, afraid) occurred with self-reported emotions of 'happy' or 'neutral, nothing much'. Although denial is a special case of congruence, they were only moderately correlated; $r(48) = -.39, p < .01$.

Maturity Demands

Both parents completed a modified version of the Child Rearing Practices Q-sort (CRP-Q; Block, 1965). We used a total of 77 items, 51 from the original Q-set, 23 from Moos and Moos (1974), and three items devised for this study. Mothers and fathers distributed these items equally across seven categories, from most to least characteristic of their parenting practices and beliefs, using the procedure described by Block (1965). Parents were instructed to complete this measure independently and confirmed that they had.

Consistent with their derivation by orthogonal factor rotation (Block, 1965), CRP-Q scales were only modestly correlated. They were placed in two groups (Maturity Demands and Parental Control) on the basis of a principal components analysis for the current sample.

Encourage independence. A seven-item scale from the CRP-Q, e.g., 'I let my child make many decisions for him/herself.'

Rational control and praise. A three-item scale from the CRP-Q, e.g., 'I talk it over and reason with my child when s/he misbehaves.'

Parental Control

Authoritarian control. A nine-item scale from the CRP-Q, e.g., 'I believe physical punishment to be the best way of disciplining.'

Anxiety and guilt control. A three-item scale from the CRP-Q, e.g., 'I let my child know how ashamed and disappointed I am when s/he misbehaves.'

Encourage Child's Emotional Expressiveness

Encourage expressiveness. A two-item scale from the Parent Affectivity Report (Barnett *et al.*, 1980a), e.g., 'The extent to which I encourage my child to show or discuss his/her own negative feelings is' Items were rated from 1 (= very little) to 5 (= very much) and averaged to derive a total score.

Parents' Warmth

Family cohesion. A nine-item scale from Moos and Moos (1974). Items were incorporated into Child Rearing Practices Q-sort, as described above.

Low family conflict and anger. An 11-item scale from Moos and Moos (1974). High scores = warmth (low conflict).

Nurturance. The Cornell Parent Behavior Inventory (Devereux, Bronfenbrenner, & Rogers, 1969) was completed by children for each parent. The youngest children used 3-point response scales (1 = never, 3 = a little, 5 = a lot); the two older groups used 5-point scales (1 = never to 5 = very often). Summary scales for warmth (nurturance) and control, each of two items, were constructed following the factor analysis in Devereux *et al.* (1969).

Physical Discipline, Rejection

Physical discipline. A two-item scale from the Cornell Parent Behavior Inventory. Because scales in this section (Physical Discipline, Rejection) failed to correlate with parents' CRP-Q scales, they were grouped separately.

Permissive, non-punitive. A two-item scale from the Cornell Parent Behavior Inventory.

Rejection, love withdrawal. A two-item scale from the Cornell Parent Behavior Inventory.

Parents' Empathy

Emotional empathy. Mothers and fathers reported on their own empathy using Mehrabian and Epstein's (1972) questionnaire. Items were rated on a 9-point scale, from -4 ('very strongly disagree') to +4 ('very strongly agree'). Total scores were derived by averaging across all 33 items.

Parents' Emotional Expressiveness

Emotionality. This was a seven-item scale from the Survey of Parents' Quality of Emotional Life (Malatesta, 1982). Items (e.g., 'How frequently do you experience emotions?') were rated on 10-point scales, with higher values indicating greater emotionality.

Expressive. This was a three-item scale (e.g., 'The affection I openly express towards my child is . . .') from the Parent Affectivity Report (Barnett *et al.*, 1980) described above. For mothers, the item assessing expression of negative affect was negatively correlated with the two items assessing positive affect, and it was, therefore, reversed for the maternal scale. Thus high scores for mothers indicate the expression of positive feelings and the inhibition of negative ones, whereas high scores for fathers indicate expressiveness of both positive and negative emotions.

Results

We began by assessing whether the present sample of 50 two-parent families differed in systematic ways from the full sample, which included 15 single-parent families and eight two-parent families for whom we were missing father data. The differences we found were few and small. Thus we were satisfied that relations for empathy and prosocial behavior reported for the whole sample (Roberts & Strayer, 1996) applied to this sub-sample.

We then assessed gender differences, because their presence would influence our choice of analysis strategies. Following this, we used a latent variables path analysis (Lohmüller, 1984; Wold, 1980a) to summarize relations between parenting and children's emotional expressiveness and empathy. We use these results to address issues posed in the Introduction.

Gender Differences

Because functional gender differences have been found in other samples, we compared the strength of correlations for girls and boys across the set of 30 variables assessing parental empathy, emotional expressiveness, and encouragement of children's emotional expressiveness, on the one hand, and children's age, empathy, and emotional expressiveness, on the other. Significant differences occurred less often than one would expect by chance; across all comparisons, the average difference was less than .01. Therefore, boys and girls were analyzed together in the path analysis which addressed the central issues of this study.

Path Analysis of Family Factors, Emotional Expressiveness, and Empathy

In order to summarize and integrate multiple measures across diverse conceptual domains, we performed a latent variables path analysis with partial least squares estimation procedures (PLS). Although PLS has been used by developmental researchers for over a decade (e.g., Cowan, Cowan, Heming, & Miller, 1991), many researchers remain unfamiliar with this approach, which was developed by Wold (1980a, 1980b) for cases in which it is not possible to meet the restrictive assumptions required by software such as LISREL and EQS. Thus it is particularly appropriate when relations between theoretical constructs cannot be specified exactly, when empirical measures have some degree of unreliability, when there are many manifest and latent variables, and when sample sizes are small (Chin, Marcolin, & Newsted, 1996; Falk & Miller, 1992; Wold, 1985). By creating latent variables based on shared variance, this technique reduces error variance and offers a view of children's emotional expressiveness, anger, and empathy that cuts across sources and methods. Thus we have in this study an unusually good measure of children's empathy. Similarly, by extracting a latent

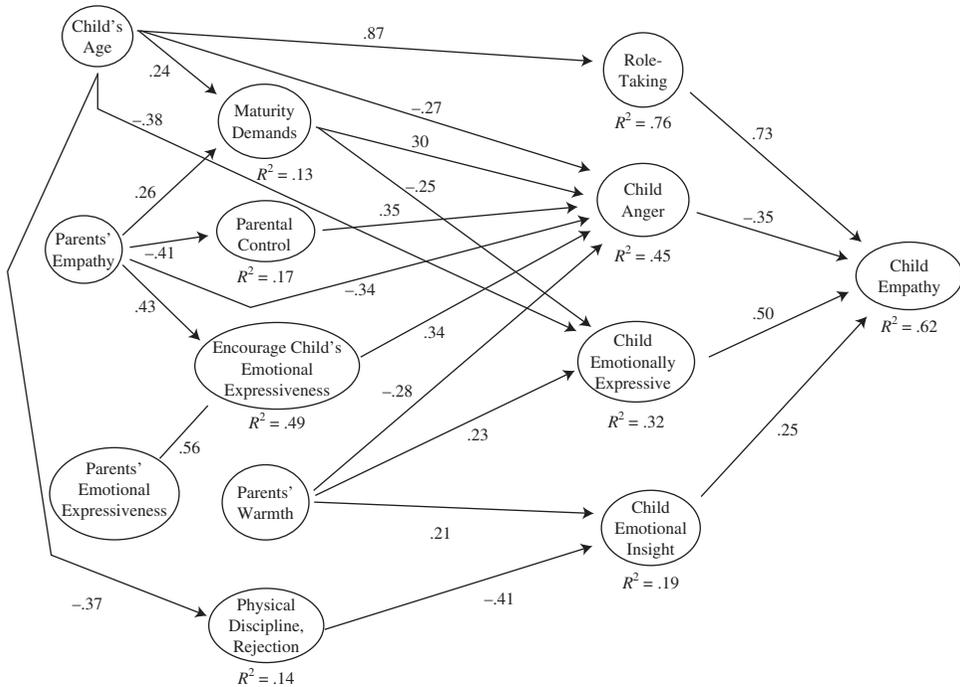


Figure 2. Empirical path model for the obtained relations between parent and family factors and children's emotional expressiveness and empathy. See Table 2 and text for further details.

measure of children's anger across sources (teachers, parents, and children), we avoid problems of validity that arise with single measures. Finally, an examination of factor loadings allows us to assess the relative importance of fathers' and mothers' characteristics and socialization practices.

Given the large number of constructs and variables we examined (Table 1), a major goal of the path analysis was to simplify the model in Figure 1 by eliminating weak paths and those variables that contributed little to underlying constructs (survivors are listed in Table 2 and shown in Figure 2). We did this in a stepwise fashion, using criteria in Falk and Miller (1992). Individual variables were eliminated if they shared less than 30% of their variance with the latent variable they indexed. Paths were eliminated if they accounted for less than 5% of the variance independently of other predictors. We evaluated our final model by examining variance accounted for, path coefficients, mean communality, and an overall non-probability fit index, the mean correlation between the residuals of the manifest variables and the residuals of the latent variables.

The Model

As shown in Figure 2, parents' empathy was significantly related to several parenting constructs (the surprising exception was parental warmth), and parental constructs (including warmth) accounted for significant amounts of the variance in children's

Table 2. Latent Variables, Manifest Variables, and Factor Loadings for the Empirical Model (Figure 2)

Latent Variables	Manifest Variables	Loadings
<i>Child Empathy</i>	Empathy Continuum	91
	Best-Friend-rated Empathy	58
	Teacher-rated Empathy	37 ^a
<i>Role-Taking</i>	Role-Taking	100
<i>Child Anger</i>	Teacher-rated Anger	81
	Self-reported Anger	65
	Mother-rated Anger	45
<i>Child Emotionally Expressive</i>	Positive Intensity	85
	Negative Intensity	79
<i>Child Emotional Insight</i>	Denial	-89
	Congruence	76
<i>Child Age</i>	Age in Years	100
<i>Maturity Demands</i>	Encourage Independence (mo)	90
	Rational Control and Praise (mo)	82
	Encourage Independence (fa)	50
<i>Parental Control</i>	Authoritarian Control (fa)	74
	Anxiety and Guilt Control (mo)	78
	Encourage Expressiveness (mo)	83
<i>Encourage Child's Emotional Expression</i>	Encourage Expressiveness (fa)	81
	Family Cohesion (fa)	91
<i>Parents' Warmth</i>	Family Cohesion (mo)	62
	Low Family Conflict and Anger (mo)	61
	Nurturance (fa)	57
	Low Family Conflict and Anger (fa)	52
	Physical Discipline (mo)	88
<i>Physical Discipline, Rejection</i> [child rates parent]	Physical Discipline (fa)	75
	Rejection, Love Withdrawal (fa)	62
	Permissive-Non-punitive (fa)	58
<i>Parents' Empathy</i>	Emotional Empathy (fa)	96
	Emotional Empathy (mo)	61
<i>Parents' Emotional Expressiveness</i>	Expressive (mo)	79
	Expressive (fa)	66
	Emotionality (mo)	55

Note: Mo = mother; fa = father. Decimals omitted.

^aWe retained teacher-rated empathy, even though it shared only 15% of its variance with latent empathy, because children's empathy is a central construct in this study, and we felt that this communality was high enough that the retention of this third measurement source enhanced the interest and validity of the latent variable.

anger, emotional expressiveness, and insight. Child constructs (including role-taking) accounted for a significant amount of the variance in children's empathy. Notably, pathways from parents' empathy to children's empathy were focused largely through child anger. All p -values were less than .01, except for maturity demands, $R^2 = .13$, $p < .05$. All path coefficients exceeded .20, many exceeded .30, and some exceeded .40, indicating small to moderately strong relations between individual constructs. The manifest variables in this model shared an average of 56% of their variance with the latent variables they defined (i.e., the mean factor loading was .75; see Table 2), indicating generally good convergence on underlying constructs. The fit index had a value of .081, indicating a satisfactory fit between model and data. (Because this index represents variance *not* accounted for by the model, low values indicate good fit.³)

We further tested our final empirical model by comparing it with two alternative models: the full model (the model that included all possible paths) and a child-causal model, in which paths were reversed so that child characteristics predicted parenting. The comparison with the full model indicated that our empirical model was parsimonious—with far fewer paths, it fit the data as well as the full model (the fit index declined by only .002, to .079). The comparison with the child-causal model indicated that the model in Figure 2 showed the stronger direction of influences. Child factors (age, anger, emotional expressiveness, and emotional insight) predicted an average of 16% of the variance in the seven parenting factors shown in Figure 1. In contrast, parental factors accounted for an average of 32% of the variance in children's anger, emotional expressiveness, and insight. These results are consistent with the position that children and parents influence each other, but that parental influences are stronger at this age.

These results indicate that our path model is reasonably good. We now apply specific findings to the conceptual issues raised earlier, and conclude with two new issues rising from these results.

Age-related Trends. As illustrated in Figure 2, age was related to children's emotional expressiveness and role-taking. Path coefficients indicated that older children were less angry than younger ones and described their other emotional reactions as less intense, consistent with developmental trends towards greater emotional regulation and self-control. As in other samples, empathy increased with age. The indirect paths from age to empathy (chiefly through role-taking) were equivalent to a direct path coefficient of .52.

Despite these age-related findings, our cross-sectional data gave no indication that parents expected greater emotional control from older children than from younger. The correlation of age with the latent variable for parental encouragement of emotional expressiveness was only $-.04$.

Is There a Link Between Parental Empathy and Child Empathy? As anticipated, links between parents' and children's empathy were mediated by other factors, notably children's anger. As Figure 2 illustrates, two of these four pathways were negative and two were positive. More empathic parents had children who were less angry, an effect we had expected to be mediated by parenting. Such mediated effects were present—empathic parents were less controlling (i.e., empathic fathers were less authoritarian and empathic mothers made less use of anxiety and guilt control), as expected, a condition associated with less child anger. However, parental empathy was also

associated with *increased* child anger because more empathic parents encouraged (or tolerated) their children's emotional expressiveness. These opposing paths tend to cancel each other out, so that the total effect of parental empathy on children's empathy is small (equivalent to a path coefficient of .06). Therefore even though these paths are moderately strong (mean absolute coefficient = .36), they are consistent with the near-zero correlations between parents' empathy and children's empathy seen in this sample (across eight comparisons, mean $r < .01$). These findings suggest that we have been misled by the null results of previous research that compared only parent and child empathy without assessing possible mediators. Links do exist from parents to children.

Is There a Link Between Parental Expressiveness and Child Expressiveness? Contrary to expectation, we failed to find a direct link between parents' emotional expressiveness and children's self-reported expressiveness of negative and positive emotions. In the path analysis, these two latent variables were orthogonal ($r = .04$). In light of findings reviewed above for preschoolers, these null findings suggest that the processes that lead to a similarity in the emotional expressiveness of parents and young children may become attenuated with age.

Is There a Link Between Parental Encouragement of Emotional Expression and Children's Expressiveness? Contrary to expectation, we failed to find a link between parents' encouragement of children's emotional expressiveness and children's self-reported expressiveness. In the path analysis, these two latent variables were orthogonal, $r = .03$.

It may be that the expressions of sadness and fear (prominent in our laboratory stimuli) fail to correlate with parent measures because when parents report encouraging children's negative emotions, they may have anger in mind. A better alternative, perhaps, is that school-age children's expressions of sadness and fear are more strongly influenced by peer socialization and cultural gender stereotypes than by parenting.

Is There a Link Between Parental Warmth and Child Expressiveness and Empathy? As expected, warm parents had children who expressed more happiness, sadness, and fear during the Empathy Continuum procedure, and less anger across social contexts. These child emotional factors mediated the relation between parental warmth and children's empathy (see Figure 2), yielding an expected but modest association of parental warmth and children's empathy equivalent to a direct path coefficient of .26.

Maturity Demands and Child Expressiveness. Greater maturity demands were unexpectedly associated with less child-reported emotional expressiveness during the Empathy Continuum procedure. As the factor loadings in Table 2 indicate, this construct primarily reflects mothers' rational control and demands for child independence, although fathers play a role as well. This suggests that mothers' maturity demands may include implicit demands for emotional control or regulation. The matter merits further investigation.

Parenting Concomitants of Children's Anger. As partly described in the section on parental empathy, children who were angry (defined chiefly by teacher and child reports) had parents who made greater demands that children be autonomous, fathers who were authoritarian, and mothers who used anxiety and guilt control. These parents

were relatively low on empathy and warmth, but encouraged emotional expression. Thus the expression of anger in children seems to be encouraged by authoritarian parenting (high demands, low warmth) coupled with lower demands for self-regulation or restraint in expressing anger—a combination that may account for the contrary-to-expected sign for the path from encourage emotional expressiveness to anger.

Parenting Concomitants of Children's Emotional Insight. Children's perceptions of greater physical discipline and rejection and parents' reports of lower levels of warmth were both associated with lower levels of child insight (that is, with greater denial by children and lower levels of congruence between their facially expressed and verbally reported emotions).

Discussion

Although findings from our path analysis are exploratory, raising issues and suggesting solutions that need to be replicated, we believe that they merit attention because of the conceptual breadth of the study (Figure 1) and the multiple sources and methods utilized for assessing children's emotional expressiveness and empathy. Some of our findings have important theoretical implications.

Empathy

Consistent with findings from other samples (Barnett *et al.*, 1980b; Kalliopuska, 1984; Bernadett-Shapiro *et al.*, 1996; Strayer & Roberts, 1989), we found little direct relation between parents' empathy and children's empathy. As we described in the Introduction, our meta-analysis (which included results from the present study) found a mean correlation of only .07 for mother-child empathy and a 95% confidence interval ranging from -.13 to .12 for father-child empathy.

The results from this meta-analysis are strikingly similar to the net path coefficient we found in our model for parent and child empathy (.06). Nevertheless, it is clear from our path model that parent empathy is far from unimportant. It plays a central role in children's anger, affecting it directly, and indirectly via the other parenting constructs associated with it.

We are not aware of any other research that has tried to assess so comprehensively the family concomitants of children's empathy. Our analysis raises the possibility that parental empathy plays a much more important role in the development of children's empathy than suggested by previous research using simple correlations. It is tempting to suppose that our path model is showing a pattern that is present in other samples; but only an actual replication study can tell us if this is so.

Parental Responses to Children's Expression of Anger and Other Emotions

Anger. Older children in our sample were, as expected, less angry and less expressive of other emotions as well. They were also more empathic, reflecting greater role-taking skills and less interference from anger with increasing age. Thus, middle childhood appears to be a period in which the regulation of emotions continues to undergo important changes, as others have suggested (e.g., Thompson, 1994).

As expected, children's anger was linked to parenting. Angry children had mothers and fathers who were less empathic and less warm, and who made greater (perhaps

age- or child-inappropriate) maturity demands. Their fathers were more authoritarian, and their mothers more often used anxiety and guilt control. The fact that the paths from maturity demands and encourage expressiveness were positive, rather than negative as expected, suggests that parenting practices need to be considered in context and as they interact. We might see different relations for maturity demands that are child-appropriate and for encouragement of expressiveness when control is moderate and warmth high.

Although angry children are undoubtedly more difficult to parent, and children's anger may well result in lower levels of parental warmth, our data appear to be more consistent with a parent-effects model than with a child-effects model, both because of statistical differences in our comparison of the two models, and because a child-effects model predicts that parents of angry children would make greater demands for children's emotional self-restraint, not less. Thus our data are consistent with the view that parents both cause and permit anger and its expression.

Sadness, Fear, and Happiness. Although we found a moderate relation between parents' tolerance or encouragement of children's emotional expressiveness and children's anger, no relation was found with children's expressiveness of other emotions. In part, this may be because any laboratory-based measure of emotional expressiveness is ecologically limited (a problem not shared by our measures of child anger), as well as because parents are not the only factor involved. Children of this age span experience demands from peers, teachers, and other adults to regulate their emotions, and they see emotional expression and control modeled in the media and in many everyday settings. (It should be noted, however, that the media treat anger differently than sadness and fear. Film, TV, and cartoon presentations often model the forceful expression of anger and violence, not its control.) Children also adopt certain standards, including gender-role stereotypes (Brody & Hall, 1993) which may constrain parent effects. Moreover, as suggested by the cognitive-emotional processing model (Breuer & Freud, 1959; Bretherton, 1995; Davies & Cummings, 1994; Roberts, 1999), emotionally laden events may fall into relatively intractable patterns, placing constraints on expected socialization effects (Kochanska, 1994; Kopp, 1989). Although relations between parents and children might be clearer if we could independently distinguish temperamental differences in school-age children, transactional views of development suggest that this is difficult to do. Finally, it may be that relations between children's emotional expressiveness and parents' reactions to that expressiveness are obscured because these constructs are complex and our measures do not differentiate them as they should, a point made by Grusec and Goodnow (1994) for other aspects of parenting. (It may be worth noting that this problem was not shared by our construct of anger.) Type of emotion, context, and gender may need to be 'unpacked' from the global constructs of emotional expressiveness and parents' reactions to expressiveness. For example, our results indicate the importance of distinguishing children's anger from other emotions and suggest that it may be useful to look at how both mothers and fathers react to or socialize children's expression of anger in particular. Other emotions may also merit separate consideration.

Children's Emotional Insight

Two variables from our laboratory procedure—denial and lack of congruence between facially and verbally expressed emotions—are of special interest because they suggest

some degree of distancing from (or lack of processing of) one's own emotional experiences. They were related most strongly to children's reports of parental use of physical discipline and rejection, a combination of factors that might be expected to lead to emotional distancing in children (Bowlby, 1973). Our findings suggest that such critical incidents may be salient for children even if they are relatively infrequent (and thus not salient for parents). This issue merits further research.

Direction of Causality and Omitted Factors

Every model is a simplification of reality. This is necessary for practical as well as conceptual purposes. The issue is whether a given model captures enough of the phenomena to be useful in leading to more adequate research and understanding. We believe our model makes such a contribution.

The model which guided this research represents a simplification in three major ways: necessarily omitted factors, a unidirectional consideration of causality, and an inability to test for moderating effects because of our sample size and the complexity of the conceptual model in Figure 1. Based on present objectives and findings, a number of omitted factors seem especially relevant to pursue. For example, given present findings for anger, emotional expressiveness, and empathy, it seems relevant to learn more about relationships between parents themselves and between siblings and peers (Brown, Donelan-McCall, & Dunn, 1996), especially to learn how anger is expressed, the frequency of conflict, and whether and how such conflicts are resolved. Parent-child interactions vary with context (Grusec & Goodnow, 1994; Roberts & Strayer, 1987), and attention to context effects (e.g., parent-child conflict, sibling play, peer interactions) would clarify and extend the results presented here.

Another important but omitted domain is socialization experiences with peers and teachers. This domain is relevant for learning emotion display rules, especially gender-related display rules (Brody & Hall, 1993). Peers also extend the range of emotions experienced by the child and play a central role in cognitive decentration (Piaget, 1983), both of which are important in the development of empathy (Strayer, 1993). We think these non-familial socialization experiences would show important relations with family measures.

It is common to acknowledge that bidirectional effects are present in families (Grusec & Goodnow, 1994; Parke & Buriel, 1998). Children affect parents as well as vice versa—e.g., children's anger no doubt adversely affects parental warmth, as well as the reverse. We do not believe that our analytic focus on parental effects contradicts this view—rather, it simply reflects the belief that during middle childhood parental effects are stronger than child effects (Baumrind, 1991; see also Denham, 1998, p. 146). This point of view was supported by our comparison of the parent-effects model in Figure 2 with the equivalent child-effects model. In addition, because family interventions are aimed at parents, not children (e.g., Patterson, 1982), it is important to understand what influence parents may have on child outcomes.

Generally, the limitations of models which consider only how parents affect children are indicated by the modest child variance that they account for—typically 10% to 25% (Maccoby & Martin, 1983). In this respect, the current study fares well. Parent characteristics and practices accounted for 45% of the variance in children's anger, and parenting practices and children's age accounted for 32% of the variance in children's emotional expressiveness. Together with role-taking and emotional insight, these child emotional factors accounted for 62% of the variance in children's empathy.

Moreover, our model identifies important links between the empathy of parents and children overlooked in earlier research, and highlights the role of anger in understanding the socialization of empathy. We believe that our results contribute to our understanding of the socialization of emotional expression and empathy by identifying these issues and suggesting directions for future research.

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Acknowledgments

Our sincere thanks to the children and their parents, teachers, and best friends, whose patience, thoughtfulness, and help made this project possible. Funding was provided by a Social Sciences and Humanities Research Council of Canada Strategic Grant to Janet Strayer.

Notes

1. In comparison to the original sample of 73 families, there were proportionately fewer girls (42% vs. 52%; $\chi^2(1, N = 73) = 6.43, p < .02, V = .30$). Children's ages and the ages of mothers and fathers were nearly identical in the full and sub-samples.

2. 'Concerned' is not a facial code in Izard's system. It represents our raters' judgment that 'startled' and 'fear' were too extreme for what they saw. It therefore reflects a combination of moderate

apprehension, negative surprise, and agitated interest on the part of the children so coded. In this sense, we believe that it parallels the use of 'concerned' by other researchers.

3. We follow Falk and Miller (1992) in not reporting other reliability coefficients or standard errors for path coefficients, since these statistics are based on assumptions (such as multivariate normality) which are not met in situations calling for soft modeling. We emphasize again that these path analyses are exploratory, not confirmatory.

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