

## Mother–Child Discourse, Attachment Security, Shared Positive Affect, and Early Conscience Development

*Deborah J. Laible and Ross A. Thompson*

The separate literatures on parental discipline, maternal discourse about emotion, and autobiographical memory support the idea that parent–child discourse in the context of a supportive relationship plays a role in a child’s early conscience development, and this study was designed to examine this issue. Forty-two preschool children and their mothers took part in a 45-min structured laboratory session, and at their homes, mothers completed the Attachment Q-Set. As part of the laboratory session, each mother was asked to discuss with her child one incident that occurred within the last week in which her child behaved well and one in which her child misbehaved. These conversations were transcribed verbatim and coded for maternal references to feelings, rules, consequences of the child’s actions, and moral evaluatives. Each child also took part in a behavioral measure of internalization and several compliance tasks, and mothers completed a maternal report of the child’s early conscience development. Consistent with attachment theory, attachment security predicted maternal and child references to feelings and moral evaluatives. Attachment security, shared positive affect between the mother and child, and maternal references to feelings and moral evaluatives also predicted specific aspects of early conscience development.

### INTRODUCTION

A child’s conscience emerges surprisingly early in development. Its foundations are laid in the first 3 years of life, and its development is intimately related to the growth of other competencies including self-awareness, self-control, psychological understanding of others, a network of self-conscious emotions (e.g., guilt, pride, shame), and a sensitivity to standards (Kochanska & Thompson, 1997). Especially important in the development of early conscience are a child’s early relationships within the family because it is in the context of these family relationships that children have their earliest experience with the behavioral and moral standards of the social world. A child’s daily interactions with caregivers, including shared pretend play, humor, negotiation of conflict, enforcement of behavioral standards, and conversations with family members provide children with a natural laboratory in which they learn about the social world (Thompson, 1998).

Of course, the significance of early relationships in early sociomoral and socioemotional development has long been acknowledged. Attachment theorists, for example, have stressed the importance of the parent–child bond in a child’s learning about self and others. Bowlby (1980) and other attachment theorists (e.g., Bretherton, 1990) have emphasized that young children construct “internal working models” out of the interactions they experience with attachment figures. These internal working models are dynamic representations of the self, caregivers, and relationships and are used by children to predict and interpret the

actions of partners in their social world. Thus, early relationships with caregivers provide the context in which children construct their initial mental representations of the social world—including its moral and cultural conventions. This process has been conceptualized as one of coconstruction, or appropriation, in which both the parent and child create a shared meaning out of their mutual interactions (Rogoff, 1990; Thompson, 1998). The notion of “appropriation” has evolved out of the theory and research of Lev Vygotsky (1978), who proposed that a child’s cognitive development is the result of participation in culturally organized activities. Although development, according to Vygotsky, occurs on a more “local” level, the culture provides the psychological “tools” that mediate a child’s intellectual functioning and development.

The most influential tool that a culture provides, according to Vygotsky, is language. Language not only creates for children a new context in which to participate in social activities and to experience themselves but also provides them with the ability to reflect on, represent, and communicate about the self and others. According to Vygotsky, shared discourse and interactions with older, more experienced individuals become “intramental” and thus a child’s individual mental representations (including her internal working models) have sociocultural origins. Therefore, language may be especially important in a child’s

moral and socioemotional development. The daily conversations a child shares with parents are often imbued with messages about social and moral issues and references to feelings (Dunn, 1987) and due to their emotional salience, a child is likely to internalize the messages conveyed in these conversations.

Other researchers and theorists in addition to Vygotsky have embraced the idea that parent-child discourse is important in sociomoral development. The importance of parent-child discourse has been implicitly acknowledged in the literature on both democratic/authoritative parenting styles and on inductive discipline (for a historical review of these topics see Maccoby, 1992). An important feature of democratic and authoritative parenting styles (which have been linked to a child's internalization of parental values and positive child outcomes) is open communication, negotiation, and reasoning by the parent (see e.g., Baumrind, 1971; Dornbush, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Maccoby, 1992). Likewise, socialization researchers have stressed the importance of using "other-oriented induction" in discipline encounters (i.e., discussing the effect of the child's actions on others). These researchers have demonstrated empirically that those parents who use inductive discipline techniques have children who are more likely to internalize their values than those who use power assertive techniques (Hoffman, 1975; see also Maccoby & Martin, 1983 for a review).

Surprisingly, however, the role of parent-child discourse in a child's internalization has received relatively little attention in the empirical literature. Researchers studying induction have focused exclusively on the conversations that occur immediately following misbehavior, and in doing so, may have missed an important alternative arena in which socialization occurs. Conversations about the child's transgression later in the day or even days afterwards may serve as powerful contexts for the child's internalization of behavioral standards, especially because in the discipline encounter the child's heightened negative emotions may interfere with his or her processing of the parent's message. In addition, researchers have never systematically analyzed the specific elements of these conversations that relate to a child's internalization of behavioral and moral standards. Instead, researchers have often placed these conversations in rather broad categories (e.g., other-oriented induction) and then compared them with other unequivocal discipline techniques (e.g., power assertion). Therefore, the particular elements of these conversations that are most effective in fostering children's internalization of parental values have not yet been illuminated in empirical research.

One useful insight that has emerged from the literature on parenting is that the quality of the parent-

child relationship is an important moderator of the impact of parent-child discourse involving moral themes. As Maccoby (1984) and others (e.g., Kochanska & Thompson, 1997) have argued, a mutually responsive, harmonious parent-child relationship, characterized by high levels of shared positive affect, contributes to a child's willingness to embrace parental messages and values. A history of sensitivity and responsiveness on behalf of the parent to a child's signals of distress, combined with a history of other shared positive experiences (e.g., reciprocity in mutual play), promotes a child's commitment to the relationship with the parent (Kochanska & Thompson, 1997). The development of a cooperative orientation toward the parent contributes to a child's willingness to attend to and to internalize the moral messages parents convey in their everyday discourse with children.

A second area of research that has more systematically analyzed the influence of parent-child discourse on a child's socioemotional development concerns the role of discourse in fostering emotional understanding. Recent research has linked parent-child discourse involving emotional themes to a child's socioemotional development. Dunn and her colleagues (i.e., Brown & Dunn, 1996; Dunn, Bretherton, & Munn, 1987; Dunn, Brown, & Beardsall, 1991) have found that the frequency of maternal discourse with a toddler about emotion and causality predicted the child's later use of emotional terms and subsequent level of emotional understanding (see also Denham & Auerbach, 1995). This research affirms the view that elements of parent-child discourse have an impact on a child's socioemotional development and also supports the idea that parent-child conversations concerning emotions may contribute to a child's early conscience development (Dunn, 1987). The emotional understanding that these conversations foster is often considered an important prerequisite for empathy and prosocial behavior (Eisenberg & Miller, 1987).

Finally, recent empirical work suggests that parent-child discourse plays a crucial role in a child's formation of autobiographical memory (e.g., Fivush 1993, 1994; Nelson 1990, 1993; Snow, 1990). These researchers suggest that parents, in their everyday discourse with children about past events, help children to reexamine, reinstate, and bring together their memory for personal experiences. Fivush (1993) argues that the development of autobiographical memory is intimately linked to children's increasing capability to incorporate their memories into narrative forms. These "narrative forms" are provided by the culture, structured by parents, internalized by children in their participation in discourse about past events, and used by children to organize their own personal memories.

Researchers in this field have discovered that mothers structure conversations about the past with their children in different manners and that these differences have consequences for a child's memory of personal events (Fivush & Fromhoff, 1988; Hudson, 1990; McCabe & Peterson, 1991; Reese, Haden, & Fivush, 1993). Two distinct maternal styles for discussing the past have emerged consistently in the empirical work on autobiographical memory. The first style, labeled "elaborative," is characteristic of mothers who frequently discuss the past with their children, and when they do, they tend to ask many questions and provide considerable background detail about the event discussed. Mothers using the second style, labeled either "repetitive," "pragmatic," or "practical," provide few background details about the event discussed, do not refer to the past often, and when they do, tend to ask few and repetitive questions. Research suggests that children of elaborative mothers have a more comprehensive representation of their past experiences, presumably as a result of their internalization of the mother's narrative form (Fivush & Fromhoff, 1988; Hudson, 1990; Reese & Fivush, 1993).

The work on autobiographical memory suggests that the content, structure, and style of parent-child conversations about a child's past behavior may have consequences for a child's early conscience development. If children are internalizing narrative forms out of these early conversations with parents, then they may also be internalizing a framework for evaluating personal experiences (Fivush, 1993). Embedded within these conversations about the past are likely to be lessons about the self in the context of an emotional and moral framework, and a child may appropriate this framework for evaluating personal experiences (Thompson, 1998). In addition, as Miller and her colleagues (Miller, 1994; Miller, Fung, & Mintz, 1996) have suggested, these autobiographical narratives are central to a child's self-understanding, especially within the context of the culture. Parents incorporate into these early conversations cultural values that influence the children's internalized perceptions of their behavior (Mullen & Yi, 1997), and thus, early conscience development.

### The Current Study

The literatures on parental discipline, maternal discourse about emotion, and autobiographical memory therefore support the idea that parent-child discourse plays a central role in a child's early conscience development, and several tentative conclusions on its role can be derived and empirically tested. First, conversations beyond the immediate discipline encounter, especially those surrounding a child's past misbehavior

(or good behavior) should have consequences for a child's early conscience development. Second, the content, structure, and style of these early conversations between a parent and child should also have consequences for a child's early conscience development. Certain elements of these conversations (e.g., references to feelings) may advance early conscience development because they foster an understanding of the repercussions of the child's actions and emotional understanding. Finally, the nature of these conversations should be related to the affective quality and security of the relationship between the caregiver and child (Bretherton, 1990; Laible & Thompson, 1998). As Bretherton (1990) suggests, "secure" relationships should be characterized by open, fluent, and coherent discourse both within the relationship and about the relationship. Therefore, discourse about sensitive relational issues (e.g., misbehavior) is likely to be more frequent and more emotionally open between securely attached children and their mothers. In contrast, children with insecure attachments may experience greater difficulty in talking with their caregivers about misbehavior and may also tend to defensively avoid the discussion of such events.

This study was designed to examine the relations between the content of mother-child conversations about a child's past behavior, attachment security and shared positive affect in the mother-child relationship, and multiple measures of a child's early conscience development. It was expected, on the basis of previous research and theory, that attachment security would relate both to the child's early conscience development (Kochanska, 1995) and to a mother's use of feeling talk during the parent-child conversations (Farrar, Fasig, & Welch-Ross, 1997; Laible & Thompson, 1998). In addition, it was expected that maternal references to emotions (in addition to shared positive affect) would also be related to a child's early conscience development. Because of the lack of research and theory on the other potential elements in the conversations (e.g., the discussion of moral rules), no other a priori hypotheses were formed.

## METHOD

### Participants

Forty-two 4-year-old children (22 boys, 20 girls,  $M$  age = 47.8 months,  $SD$  = 9.2) and their mothers ( $M$  age = 30.2 years,  $SD$  = 6.1) took part in the study. Mothers and children were recruited with the help of local preschool/daycare centers serving predominantly middle class populations. The sample was predominantly European American (86%).

## Procedure

### Overview

Data in this study were collected in two sessions. First, at their homes with the guidance of the researcher, mothers completed the Attachment Q-Set, or AQS (Waters & Deane, 1985). Second, within two weeks of completing the AQS, each mother–child dyad took part in a 45-min videotaped laboratory session involving a series of structured laboratory tasks, including a free play and clean-up task, a conversation about a child's past behavior, and a resistance-to-temptation task. In addition, mothers completed a maternal report measure of the child's early conscience development.

### Home Visit: Attachment Q-Set

The security of attachment was assessed by the Attachment Q-Set (AQS) Version 3.0 (Waters & Deane, 1985), which mothers completed at their homes. The AQS has emerged as a psychometrically sound procedure to measure attachment behavior in children beyond infancy (Teti & McGourty, 1996). Although some disagreement exists on whether mothers or trained observers should perform the sort, recent research by Teti and McGourty (1996) suggests that because mothers have access to the most representative sample of their child's behavior, they are the best candidates to perform the sort. To ensure the validity of their sorts, however, mothers need to be properly trained, kept blind to the construct being measured, sent the AQS items to look over in advance, and supervised during their sort in case questions arise. Such procedures have yielded predictive validity (consistent with attachment theory) with maternally derived AQS security scores in studies by Teti and McGourty (1996) and Laible and Thompson (1998). Thus, these procedures were used with the mothers of our study. Sorting times ranged from about 45 min to 1 hr and 15 min.

### Laboratory Session: Paradigms and Measures

#### *Warm-Up Task (Free Play) and Compliance with Maternal Requests (Clean-Up)*

At the lab, each mother and child dyad was brought into a playroom and given a 15-min period of free play with toys scattered throughout the playroom. The toys included wooden blocks, a plastic dinner set, building blocks, several puzzles, numerous small stuffed animals, several trucks, and a set of plastic western figurines and stagecoach. The goal of the free play was to allow the mother and child to become comfortable in the lab. In contrast, the clean-up

task was designed to assess children's compliance with maternal requests (following Kochanska & Aksan, 1995). At the end of the 15-min free play, the experimenter returned briefly to ask the mother to elicit the child's help in placing all of the toys away in specific containers. The mother and child were given 15 min to accomplish this task. Dyads who finished the task in under 15 min were asked to retrieve the researcher in the room adjoined to the playroom.

*Coding of compliance with maternal requests (in the clean-up task).* Compliance with maternal requests during the clean-up task was coded in 20-s intervals by using a coding schema adapted from one used by Kochanska and Aksan (1995) to code the child's behavior toward maternal prohibitions. Because the length of the clean-up task varied from dyad to dyad ( $M$  number of coded segments = 19.03;  $SD$  = 7.12, range 12–36), the scores for each coded category were divided by the total number of coded segments. Thus, this measure is reported as the proportion of coded segments for which children received each code. The five codes were mutually exclusive. Ten of the tapes (24%) were coded by two coders and the interrater reliabilities appear in parentheses (Cohen's  $\kappa$  = .75).

1. *Committed compliance* (81%). The child indicated full endorsement of the mother's agenda, for example, by working diligently and willingly on cleaning the playroom. The child's work in cleaning up was not contingent on maternal control.
2. *Situational compliance* (81%). The child displayed a general acceptance of the maternal agenda. The child was generally cooperative in cleaning up but required maternal control to stay on task. Without maternal control, the child was likely to cease working or become distracted.
3. *Passive noncompliance* (82%). The child showed general reluctance to accept the maternal agenda. The child failed to stay on task on his or her own, and when prompted by the mother to stay on task, the child ignored her.
4. *Overt resistance* (96%). The child overtly refused or protested the mother's agenda.

#### *Two Conversations About the Past*

Two conversations about the child's past behavior were next elicited by following a procedure similar to that used by Kuebli and Fivush (1992). After the clean-up, the researcher pulled the mother aside and informed her that we were interested in conversations between mothers and their children about their children's past behavior. Mothers were asked to think about two

incidents in the past week involving both herself and her child, one in which her child misbehaved and one in which her child behaved well. The researcher provided some standard examples of each. Mothers were instructed to sit comfortably with their children in the playroom and to attempt to elicit their memories about the event as naturally as possible. The length of the interview was determined by the mother, who was asked to notify the researcher when the conversation ended.

*Coding of the conversations.* The mother-child conversations concerning good behavior and misbehavior were transcribed verbatim from the videotapes. A second researcher checked the accuracy of all the transcripts. From the transcripts, all references to feelings/intentions, social/moral/family rules, consequences of actions, and moral evaluatives were identified and coded (for each speaker) in the conversations as described below (following a coding schema adapted from Dunn & Munn, 1987). To correct for the length of the conversations, the proportion of conversational turns ( $M$  number per conversation = 60.8,  $SD = 29.4$ ,  $range = 28-157$ ) containing each of the following codes was calculated separately for both the mother and child. Conversational turns included all statements made by one speaker before the other partner's response. It was possible for each conversational turn to contain more than one of the coded categories. To establish reliability, a second coder independently recoded 21 of the 42 transcripts. Percent agreements between the two coders on the number of conversational turns containing each reference for each speaker are in parentheses. Cohen's  $\kappa$  for agreement on categories of coded references for mothers was .84 and for children was .88.

*Feelings/intentions (mother 90%, child 95%).* References to the feelings, needs, or intentions of the child, mother, or another person.

*Social/moral/family rules (mother 86%, child 95%).* References to social rules (e.g., saying thank you), moral rules (e.g., do not harm others), or family rules (e.g., not eating before dinner).

*Material consequences of an action (mother 86%, child 86%).* References to the logical outcome of actions of the child.

*Moral evaluative statements (mother 95%, child 95%).* Any moral statements framed in the form of evaluatives, e.g., "good boy," "naughty girl," "that was a nice thing to do."

#### *The Child's Internalized Conduct (Resistance to Temptation, RTT)*

Following a procedure adapted from Kochanska and Aksan (1995), mothers were asked (after finishing

the conversations) to move into a room adjoining the playroom to complete a questionnaire. The experimenter explained to the child that the mother needed to work on something in the next room and that in the meantime, the researcher had "something for [the child] to do while waiting for your mother." The child was given a dull sorting task (separating plastic chips by color into separate sections of a plastic tray). The laboratory playroom contained a shelf filled with extremely attractive toys (see Kochanska & Aksan, 1995). The toys on the shelf consisted of brightly colored safari animals, a wooden train set, a noisy spinning duck game, several large stuffed animals, a Mr. Potato Head, a spinning windmill toy, a musical toy, and several plastic Disney and Sesame Street figures. Mothers were asked to verbally prohibit the child from touching any of the toys on the shelf and to remind them of this prohibition before leaving the room.

The laboratory playroom and the adjoining room were separated by a closed door, but if the child protested the door was opened a crack so that he or she could see the mother. The mother sat at a table with her back to the door, completed a maternal report of her child's internalization, and was asked not to intervene even if she sensed that her child was playing with the prohibited toys. Bids from the child to locate the mother were curtailed by the experimenter telling the child "mom is busy now" and by asking the child to play alone for a few more minutes. The child was alone in the playroom for 8 min, except for a brief time when an unfamiliar research assistant entered, greeted the child, played with three of the prohibited toys (with clear enjoyment) and returned them to the shelf, wound up a musical toy (one of the prohibited toys), and left.

*Coding of compliance with maternal prohibitions in the absence of the mother (internalization in the resistance to temptation task).* The child's behavior was coded every 5 s from the videotapes while the child was alone in the room with the forbidden toys (for a total of 8 min). The following behavior was coded (adapted from a coding procedure used by Kochanska & Aksan, 1995): looking at shelf/no attempt to touch, deviation (touched, played, or removed one of the forbidden toys), competing activity (otherwise occupied), and sorting the chips. Codes were mutually exclusive. Two coders independently coded 10 of the videotapes (24%) and percent agreement for the codes was as follows (Cohen's  $\kappa = .88$ ): looking at shelf 89%, sorting 90%, competing activity 93%, deviation 98%.

*Coding of mother-child shared positive affect.* The entire laboratory session (except for the resistance to temptation task) was coded for mother and child affect (following a coding procedure developed by Kochan-

ska & Aksan, 1995). The affect codes were assigned in 60-s intervals and affect was coded separately for the mother and the child. The codes were not mutually exclusive and thus more than one affect code could be assigned for each interval. Body language, facial expressions, and tone of voice were the basis for assigning the codes. Because the amount of time that the mother and child spent together in the laboratory varied, the score for each code was divided by the total number of coded 60-s intervals. Ten (24%) of the videotapes were coded by a second coder; overall Cohen's  $\kappa$  for child affect was .89 and for the mother's affect was .91. The following codes were used and percent agreement between the two independent coders are in parentheses.

1. *Highly negative* (mother 97%, child 96%): Clear signs of fear, distress, anger.
2. *Neutral/negative* (mother 92%, child 92%): No clear signs of negative affect but some signs of irritation, boredom, impatience, or apprehension. A general impression that he or she "would rather be elsewhere."
3. *Neutral/pleasant* (mother 88%, child 85%): No clear outright joy, but the mood is nevertheless pleasant or neutral.
4. *Highly positive* (mother 89%, child 86%): Laughing out loud, jumping with joy, singing happily, etc.

Because we were interested primarily in the presence of shared positive affect between the mother and child, we computed for each dyad the proportion of coded segments that both the mother and child spent exclusively in highly positive or neutral/pleasant affect (following Kochanska & Aksan, 1995).

#### *Maternal Report of Internalization*

Mothers completed a 100-item questionnaire developed by Kochanska, DeVet, Goldman, Murray, and Putnam (1994) to assess multiple dimensions of a young child's conscience. This measure includes behaviors such as compliance with family rules and completing family chores without the presence of an adult. Mothers were asked to rate each of the items on a 1- to 7-point scale, ranging from "extremely untrue" to "extremely true" of the child. The measure contains 10 subscales of which only three are reported here: (1) guilt, remorse/other emotional reactions after transgressions, mishap, or wrongdoing (sample item "feels bad when reminded about past mischief or wrongdoing," 18 items = .84, (2) internalized self-conduct (sample item, "rarely repeats prohibited behavior even if adult is not present," 20 items = .86), and (3) concern over good feelings with parent after

wrongdoing (sample item "when she or he does something forbidden, seems to feel relieved when forgiven," 8 items = .82). Scores for items within each subscale were averaged to create a single summary score for each child.

## RESULTS

### **Descriptive Statistics and Preliminary Data Reduction**

Descriptive statistics for all measures appear in Table 1. To reduce the number of other variables available for analyses, the following coded categories were reduced by using principle components factor analytic techniques (with varimax rotation). Variables loading on a factor higher than .3 were retained and used to interpret the factor (Tabachnick & Fidell, 1996). The results of these analysis can be seen in Table 2.

#### *Maternal References to Feelings, Rules, Evaluatives, and Consequences of Actions*

Two factors were retained from a principle components analysis of the four maternal discourse codes (i.e., maternal references to feelings, rules, evaluatives, and consequences of actions): maternal references to feelings and evaluatives and maternal references to rules and consequences.

#### *Child References to Feelings, Rules, Evaluatives, and Consequences of Actions*

Two roughly parallel factors emerged from a principle components analysis of the child discourse codes: child references to feelings and evaluatives and child references to consequences of actions. Child references to rules were infrequent and therefore failed to load on any factor.

#### *Behavioral Internalization*

Two factors were extracted and retained from a principle components analysis of the four coded categories (deviation, looking at shelf, competing activity, and sorting) from the resistance to temptation task: "engagement" and "deviation." Scores from the "deviation" factor were reverse scored and this factor was relabeled as "behavioral internalization."

### **Bivariate Correlations among Variables**

Bivariate correlations were examined to understand the network of relations between attachment,

**Table 1** Descriptive Data

Variable	<i>M</i>	<i>SD</i>	<i>Range</i>
Attachment security	.46	.15	.11–.73
Shared positive affect composite	.85	.17	.32–1.0
Internalized self-conduct subscale <sup>a</sup>	4.07	.77	2.20–5.65
Guilt over wrongdoing subscale <sup>a</sup>	4.76	.74	2.56–6.17
Concern with parent's feelings subscale <sup>a</sup>	5.21	.93	2.50–6.88
Committed compliance <sup>b</sup>	.61	.31	0–1.0
Situational compliance <sup>b</sup>	.23	.20	0–.72
Passive noncompliance <sup>b</sup>	.15	.18	0–.67
Overt resistance <sup>b</sup>	.02	.04	0–.20
Maternal reference to feelings/intentions <sup>c</sup>	.16	.12	0–.52
Child references to feelings/intentions <sup>c</sup>	.05	.04	0–.14
Maternal references to social/moral/ family rules <sup>c</sup>	.02	.02	0–.09
Child references to social/moral/ family rules <sup>c</sup>	.002	.006	0–.03
Maternal references to consequences <sup>c</sup>	.05	.05	0–.15
Child references to consequences <sup>c</sup>	.01	.02	0–.12
Maternal references to moral evaluatives <sup>c</sup>	.15	.09	0–.41
Child references to moral evaluatives <sup>c</sup>	.01	.02	0–.08
Looking at forbidden shelf <sup>d</sup>	22.60	15.20	3–70
Sorting <sup>d</sup>	54.55	26.86	0–90
Competing activity <sup>d</sup>	12.83	14.50	0–61
Deviation <sup>d</sup>	6.05	18.00	0–83

<sup>a</sup> From maternal questionnaire.

<sup>b</sup> Coded during clean-up task.

<sup>c</sup> Coded from transcripts of mother-child conversations about child's past behavior.

<sup>d</sup> Coded during resistance-to-temptation task.

shared positive affect, the discourse variables, and measures of child conscience to provide a preliminary assessment of the research hypotheses and theoretical predictions (see Table 3). Consistent with predictions

of attachment theory (Bretherton, 1990), attachment security was significantly correlated with maternal and child references to feelings and evaluatives, with secure children and their mothers more likely to make such references. As we expected, secure children also had higher scores on the three maternal report subscales of early conscience development (internalized self-conduct, guilt after wrongdoing, concern over good feelings with the parent), showed more engagement during the resistance-to-temptation task, and tended to have higher scores on behavioral internalization. Attachment security was not, however, significantly related to shared positive affect.

Consistent with the findings of Kochanska and colleagues (e.g., Kochanska & Aksan, 1995; Kochanska, Aksan, & Koenig, 1995), children from dyads high in shared positive affect had higher scores on maternal reports of conscience development (internalized self-conduct, guilt, concern over good feelings with the parent), committed compliance, and the behavioral internalization factor. Shared positive affect was not correlated with the discourse measures, however.

As expected from prior research, mothers who made frequent references to feelings and moral evaluatives had children who were not only higher in their own references to feelings and evaluatives but who also had higher scores on two maternal report conscience subscales (guilt and concern over good feelings with the parent) and behavioral internalization. Likewise, mothers who made more frequent references to the consequences of actions and rules had children who also made frequent references to the same. These findings offer initial support to the rela-

**Table 2** Data Reduction from Principle Components Factor Analyses

Factor Label	Eigenvalue	% Variance	Variables Loading and Loading Value
Maternal references to feelings, rules, evaluatives, and consequences of actions			
Maternal references to feelings and evaluatives	1.25	31.3	References to feelings/intentions (.73) References to moral evaluatives (.78)
Maternal references to rules and consequences	1.00	25.2	References to rules (.35) References to consequences (.94)
Child references to feelings, rules, evaluatives, and consequences of actions			
Child references to feelings and evaluatives	1.38	34.7	References to feelings/intentions (.53) References to moral evaluatives (.89)
Child references to consequences	1.00	25.2	References to moral evaluatives (–.48) References to consequences (.88)
Behavioral internalization (resistance-to-temptation task)			
Engagement	2.03	50.6	Looking from a distance (.81) Other activity (.78) Sorting (–.82)
Deviation <sup>a</sup>	1.20	31.0	Deviation (.99) Sorting (–.58)

<sup>a</sup> Factor was reverse scored and labeled behavioral internalization.

**Table 3** Intercorrelations among Attachment Security, Discourse Measures, Shared Positive Affect, and Multiple Measures of Early Conscience Development

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Attachment security		.27	.44**	-.14	.36*	-.28	.30 <sup>+</sup>	.45**	.34*	.40*	.32*	-.02	.02	.01
2. Shared positive affect			.15	-.14	.11	-.11	.35*	.08	.31*	.56**	.31 <sup>+</sup>	.35*	-.29	-.19
3. Maternal references to feelings/ evaluatives factor				.00	.37*	.24	.41**	.02	.39*	.24	.36*	-.18	-.11	-.14
4. Maternal references to consequences/ rules factor					-.27	.48**	-.13	-.01	-.06	-.24	-.10	-.10	.16	-.02
5. Child references to feelings/evaluatives factor						.00	.19	-.16	.12	.09	.15	.08	.03	-.21
6. Child references to consequences factor							-.05	-.31*	-.05	-.22	-.01	.13	-.10	-.16
7. Internalization factor								.00	.04	.53**	.01	.43**	-.27	-.34*
8. Engagement factor									.19	.24	-.01	-.50**	.45**	.43**
9. Guilt after wrongdoing										.21	.67**	.00	-.07	.12
10. Internalized self-conduct											.11	.23	-.21	-.10
11. Concern over good feelings with parent after wrongdoing												.01	-.14	.17
12. Committed compliance													-.81**	-.76**
13. Situational compliance														.28
14. Passive noncompliance														

<sup>+</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ .

tion between maternal discourse factors and the child's developing understanding of feelings and behavioral expectations, as well as emerging conscience.

Finally, there was evidence for consistency among the dependent measures of conscience. The internalization factor was significantly, and positively, correlated with internalized self-conduct and committed compliance and was negatively correlated with passive noncompliance, as would be expected. In addition, measures of guilt and concern over good feelings with the parent after wrongdoing were significantly, and positively, correlated.

### Predicting Early Conscience Development: Overview of Data Analytic Strategy

Attachment security, shared positive affect, and the maternal discourse measures served as predictors in hierarchical regressions designed to predict all of the early conscience measures. For the models, age and gender were entered on the first step of all models because previous researchers have found age and gender to be related to aspects of early conscience development (see, e.g., Kochanska & Aksan, 1995; Kochanska, Aksan, & Koenig, 1995). Whenever age or gender differences were found, they are noted.

### Predicting Behavioral Internalization

Age and gender entered on the first step of the model predicting behavioral internalization failed to account for a significant amount of the variance in the

model (see Table 4). The addition of the subsequent variables, however, led to a significant increase in the variance accounted for and a significant overall predictive model. None of the variables made significant independent contributions to predicting the internalization factor (because of the collinearity amongst predictors), although shared positive affect and maternal references to feelings and moral evaluatives each made marginally significant contributions. There was substantial collinearity between attachment security and maternal references to feelings and moral evaluatives in predicting internalization. A reduced model (eliminating attachment security) accounted for as much variance as the full model and had two significant predictors (i.e., shared positive affect and maternal references to feelings and evaluatives). Although at first glance, it appears as if the emotion-laden discourse factor mediates the relationship between attachment security and internalization, a test using Baron and Kenny's model (1986) suggested that it did not. Children from dyads high in shared positive affect and whose mothers made frequent references to feelings and evaluatives were high in internalization.

### Predicting Engagement

The addition of age and gender on the first step in the hierarchical regression model predicting engagement led to a significant increase in the variance accounted for in the model (see Table 5). The addition of attachment security, the maternal discourse variables, and shared positive affect on the second step also led



**Table 4** Regression Models Predicting the Internalization Factor

Predictor	$\beta$ at Final Step	$R^2$	$R^2$ Change	$F$ Change
1. Age	.26			
Gender	.20	.09	.09	1.9
2. Attachment security	.14			
Shared positive affect	.28 <sup>+</sup>			
Maternal references to feelings/moral evaluatives	.31 <sup>+</sup>			
Maternal references to consequences/rules	-.05	.38**	.28**	3.9*

<sup>+</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ .

to a significant increase in variance accounted for by the model. In the full model, however, only gender and attachment security made significant independent contributions to the model (although age made a marginally significant contribution). Securely attached children, boys, and younger children were more likely to show engagement in the resistance to temptation task than girls, insecure children, or older children.

### Predicting Maternal Report of Conscience Development Subscales

In predicting guilt after wrongdoing, the addition of age and gender on the first step of the model failed to increase significantly the amount of variance accounted for in the subscale (see Table 6). The addition of the maternal discourse factors, shared positive affect, and attachment security on the second step led to a significant increase in the variance accounted for in the guilt subscale. None of the variables made a significant independent contribution to the model; however, maternal references to feelings and evaluatives made a marginally significant contribution. Once again, collinearity among attachment security and maternal references to feelings and moral evaluatives prevented either predictor from making an independent contribution to the model. Reduced models

eliminating one of the two predictors accounted for as much variance as the full model and with significant predictors. Mothers who made frequent references to feelings and moral evaluatives had children who had higher scores on the guilt subscale.

The addition of age and gender on the first step of the model predicting internalized self-conduct did not increase significantly the amount of variance accounted for by the model. The addition of attachment security, shared positive affect, and the maternal discourse factors (on the second step) led to a significant increase in the variance accounted for in the model. Only shared positive affect made a significant contribution to the model; dyads higher in shared positive affect had children who scored higher on the internalized self-conduct scale than those from dyads low in shared positive affect. Again, collinearity among attachment security and maternal references to feelings and moral evaluatives prevented attachment security from making an independent contribution to the model. A reduced model without the feelings and moral evaluatives factor worked as well as the full model with both attachment and shared positive affect making significant independent contributions to the model.

Finally, as with the other maternal report measures, the addition of age and gender on the first

**Table 5** Regression Model Predicting Engagement Factor

Predictor	$\beta$ at Final Step	$R^2$	$R^2$ Change	$F$ Change
1. Age	-.23 <sup>+</sup>			
Gender	-.31*	.25**	.25	6.30**
2. Attachment security	.50**			
Shared positive affect	-.07			
Maternal references to feelings/evaluatives	-.18			
Maternal references to consequences/rules	.03	.43**	.18	2.73*

<sup>+</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ .

**Table 6** Regression Models Predicting Maternal Report Subscales

Predictor	$\beta$ at Final Step	$R^2$	$R^2$ Change	$F$ Change
Model predicting guilt after wrongdoing				
1. Age	.10			
Gender	.05	.01	.01	.09
2. Attachment security				
Shared positive affect	.22			
Maternal references to feelings/moral evaluatives	.28 <sup>+</sup>			
Maternal references to consequences/rules	.22	.25 <sup>+</sup>	.24 <sup>*</sup>	2.76
Model predicting internalized self-conduct				
1. Age	.08			
Gender	.05	.00	.00	.04
2. Attachment security				
Shared positive affect	.47 <sup>**</sup>			
Maternal references to feelings/moral evaluatives	.06			
Maternal references to consequences/rules	-.13	.41 <sup>**</sup>	.41 <sup>**</sup>	6.00
Model predicting concern over good feelings with parent				
1. Age	-.01			
Gender	.03	.02	.02	.05
2. Attachment security				
Shared positive affect	.23			
Maternal references to feelings/moral evaluatives	.27			
Maternal references to consequences/rules	-.04	.23	.21 <sup>+</sup>	2.26

<sup>+</sup>  $p < .10$ ; <sup>\*</sup>  $p < .05$ ; <sup>\*\*</sup>  $p < .01$ .

step of the model predicting concern over good feelings with the parent after wrongdoing failed to increase the variance accounted for in the model. The addition of all the variables on the second step of the model only marginally increased the variance accounted for by the model and none of the variables made significant independent contributions to the model. There was substantial collinearity between attachment security and maternal references to feelings and moral evaluatives in predicting concern over good feelings with the parent. A reduced model (eliminating attachment security) accounted for as much variance as the full model with one significant predictor (maternal references to feelings and moral evaluatives).

### Predicting Compliance with Maternal Requests

In the model predicting committed compliance, the addition of age and gender on the first step led to a significant increase in the variance accounted for by the model (see Table 7). The addition of the subsequent variables on the second step also significantly increased the variance accounted for in committed compliance. Age, gender, and shared positive affect all made significant contributions to the model. Older children, girls, and children from dyads high in shared

positive affect were the most likely to show high levels of committed compliance during the clean-up task.

In the model predicting situational compliance, the addition of age and gender on the first step significantly increased the variance accounted for by the model. The addition of the subsequent variables on the second step, however, only marginally increased the variance accounted for in the model. Shared positive affect made the only significant independent contribution to predicting committed compliance, although age and gender made marginally significant contributions. Boys, younger children, and those from dyads low in shared positive affect displayed the most situational compliance during the clean-up task.

Finally, in the model predicting passive noncompliance, the addition of age and gender on the first step significantly increased the variance accounted for by the model. The addition of attachment security, shared positive affect and the maternal discourse factors on the second step only marginally increased the amount of variance accounted for in the model. Only gender made a significant independent contribution to the model, although age made a marginally significant independent contribution to the model. Boys and younger children were more likely to show high levels of passive noncompliance during the clean-up task than girls or older children.

Table 7 Regression Models Predicting Committed, Situational, and Passive Noncompliance

Predictor	$\beta$ at Final Step	$R^2$	$R^2$ Change	$F$ Change
Committed compliance				
1. Age	.39**			
Gender	.33*	.29**	.29	7.86**
2. Shared positive affect	.40**			
Attachment security	-.08			
Maternal references to feelings/evaluatives	.09			
Maternal references to consequences/rules	.00	.45**	.15**	2.49 <sup>+</sup>
Situational compliance				
1. Age	-.29 <sup>+</sup>			
Gender	-.25 <sup>+</sup>	.17*	.17*	3.92*
2. Shared positive affect	-.32*			
Attachment security	.10			
Maternal references to feelings/evaluatives	-.11			
Maternal references to consequences/rules	.10	.29 <sup>+</sup>	.12	1.49
Passive noncompliance				
1. Age	-.30 <sup>+</sup>			
Gender	-.31*	.20*	.20	4.81*
2. Shared positive affect	-.22			
Attachment security	.03			
Maternal references to feelings/evaluatives	-.12			
Maternal references to consequences/rules	-.08	.26 <sup>+</sup>	.06	.78

<sup>+</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ .

### Does Discourse in the Context of a Supportive Relationship Matter? An Exploratory Analysis

To test the idea that parent-child discourse in the context of a supportive relationship is especially influential in early conscience development, we examined the interactions between the maternal references to feelings and evaluatives factor and both attachment security and shared positive affect. To maximize statistical power, we looked only at hierarchical regression models with main effects and the interaction terms. Although these interactions were tested for all of the early conscience variables, the interaction terms were significant for only one of the early conscience measures—the behavioral internalization factor from the resistance to temptation task. The two models (the first with the interaction between attachment security and maternal references to feelings and evaluatives and the second with the interaction between shared positive affect and maternal references to feelings and evaluatives), in addition to the full model (with both interaction terms) appear in Table 8. For all three models, the main effects of each variable were entered on the first step and any interactions were entered on the second step. In all three models, both the addition of the main effects on Step One and the interaction(s) on Step Two increased significantly the variance ac-

counted for in internalization. In the first model, both the main effect of the maternal references to feelings and evaluatives factor and the interaction term (between the maternal reference to feelings and evaluatives and attachment security) made significant independent contributions to the model. In the second model, both the discourse factor and the interaction term (between the discourse factor and shared positive affect) made significant independent contributions to predicting internalization. Finally, in the full model with both interaction terms, both interactions, in addition to the main effect of the feelings and evaluatives factor, made significant contributions to the model. The overall variance accounted for by all three models was impressive (ranging from 41% to 55% of the variance) because of the substantial size of the interaction.

To examine the first interaction, the relationship between maternal references to feelings and evaluatives and behavioral internalization was graphed at 1 *SD* above, 1 *SD* below, and the mean of attachment security, and this graph appears in Figure 1. The maternal references to feelings and moral evaluatives factor was related to increases in internalization for all three levels of attachment security (i.e., the slopes of all three lines are positive). The most dramatic increases in internalization, however (based upon increases in maternal references to feelings and evaluatives) were

**Table 8 Regression Models Predicting Internalization: Exploratory Interaction Analyses**

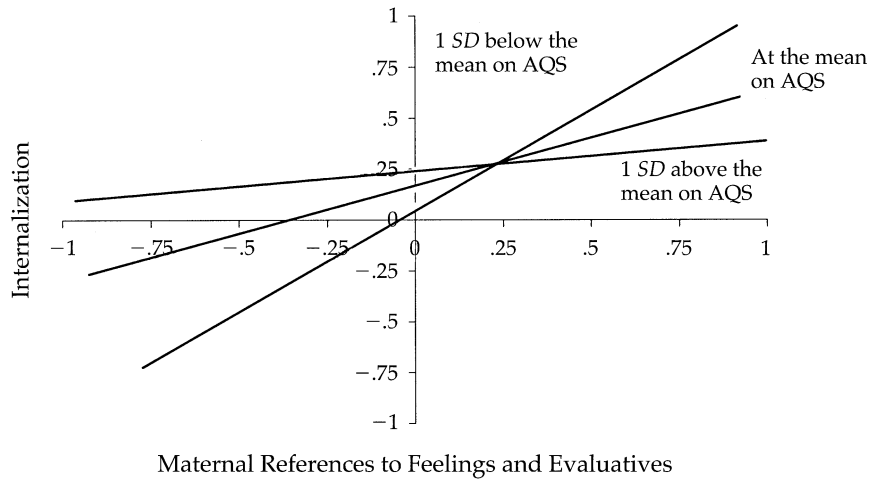
Predictor	$\beta$ at Final Step	$R^2$	$R^2$ Change	$F$ Change
<b>Model 1</b>				
1. Attachment security	.09			
Maternal references to feelings/evaluatives	.45**	.19*	.19	4.42*
2. Interaction between attachment and maternal references to feelings/evaluatives	-.49**	.41**	.22	14.63**
<b>Model 2</b>				
1. Shared positive affect	.05			
Maternal references to feelings/evaluatives	.35**	.25**	.25	6.63**
2. Interaction between shared positive affect and maternal references to feelings/evaluatives	-.50**	.41**	.16	10.41**
<b>Full model with both interactions</b>				
1. Attachment security	.05			
Shared positive affect	.07			
Maternal references to feelings/evaluatives	.40**	.26*	.26	4.38*
2. Interaction between attachment and maternal references to feelings/evaluatives	-.38**			
Interaction between shared positive affect and maternal references to feelings/evaluatives	-.39*	.55**	.29	11.86**

+  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ .

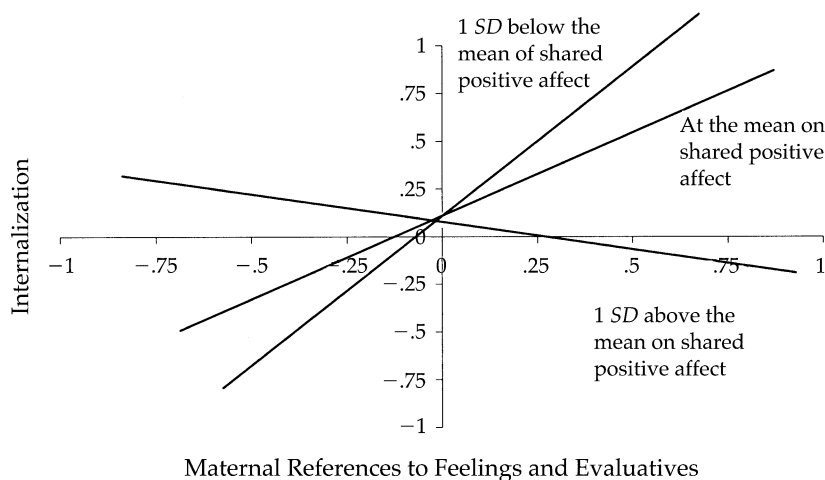
apparent for insecure children (those one standard deviation below the mean of AQS) and the next largest increase was associated with those children near the mean of the attachment measure. For secure children (those one standard deviation above the mean of the AQS measure), maternal references to feelings and evaluatives were also associated with an increase in internalization, but not a significant one.

To examine the second interaction, the relationship between maternal references to feelings and evaluatives and behavioral internalization was graphed at

one standard deviation above, one standard deviation below, and the mean of shared positive affect, and this graph appears in Figure 2. Increases in maternal references to feelings and moral evaluatives were related to increases in internalization for those children from dyads low in shared positive affect and for those with average shared positive affect (with the most dramatic increases in internalization associated with children from dyads below the mean in shared positive affect). For children 1 SD above the mean in shared positive affect, increases in maternal refer-



**Figure 1 Interaction between attachment security and maternal references to feelings and moral evaluatives in predicting behavioral internalization.**



**Figure 2** Interaction between shared positive affect and maternal references to feelings and moral evaluatives in predicting behavioral internalization.

ences in feelings and evaluatives were associated with a slight decrease (although not a significant one) in internalization.

## DISCUSSION

The purpose of this study was to examine the relations between parent–child discourse, attachment security, shared positive affect, and early conscience development. The results of this study suggest a complex pattern of relations among these variables, generally in the directions predicted.

First, as predicted, emotion-laden discourse was related to the security of the attachment relationship between the mother and child. Mother–child dyads with secure attachment relationships were composed of mothers and children who made more frequent references to feelings and moral evaluatives when discussing the child's past behavior than did insecure dyads. The idea that discourse between a securely attached child and his or her mother is more emotionally open is consistent with several formulations of attachment theory (e.g., Bretherton, 1990; Cassidy, 1988; Laible & Thompson, 1998; Main, Kaplan, & Cassidy, 1985) that maintain that discourse about sensitive issues is likely to be more frequent, coherent, and emotionally open between a securely attached child and his or her mother. This study adds support to these formulations of attachment theory and suggests that securely attached dyads discuss a potentially threatening topic (i.e., past misbehavior) with more emotional openness than insecurely attached dyads. These differences in communication between secure and insecure dyads are consistent with previous re-

search (Farrar et al., 1997) and may have important implications for a child's internal working models and memories of personal experiences (Bretherton, 1990; Fivush, 1993; Fivush & Fromhoff, 1988). Emotion-laden discourse about a child's past experiences may make emotions more accessible and less threatening for a child when reflecting upon past personal experiences (particularly negatively charged emotional experiences). This idea is supported by the significant association between the child references to feelings and evaluatives factor and attachment security and is consistent with previous research that suggests a secure attachment is important in fostering the understanding of negative emotions (see Laible & Thompson, 1998).

The results from this study also suggest that children are learning communication patterns from early conversations with parents (Oppenheim & Waters, 1995). In this study, mothers who made frequent references to feelings and moral evaluatives during the conversations about the child's past behavior had children who also made frequent references to feelings and moral evaluatives during these conversations. Likewise, mothers who made frequent references to the material consequences of the child's actions and to rules had children who made frequent references to consequences of actions. Although it is possible that a child's references to feelings (or consequences) were driven by the mother's choice of events to discuss, the longitudinal research by Dunn and her colleagues (Brown & Dunn, 1996; Dunn et al., 1987; Dunn et al., 1991) suggests that differences in maternal references to emotions early in life influence the child's subsequent use of emotional language and emotional under-

standing. Therefore, it seems likely that children acquire from these early conversations discourse tendencies concerning the content and style of conversing about emotions and values.

Second, as predicted, emotion-laden discourse by the mother was related to multiple dimensions of a child's early conscience development. Mothers who made frequent references to feelings and moral evaluatives had children who showed more behavioral internalization and who were more likely to express guilt after wrongdoing. Thus, as others have speculated (e.g., Dunn, 1987), emotion-laden discourse may indeed have consequences for a child's early conscience development, likely because it fosters emotional understanding, which, in turn, relates to empathy and early conscience development. Interestingly, maternal references to the material consequences of the child's actions or to moral, social, or family rules were unrelated to any dimensions of early conscience development, which suggests that not all elements of parent-child discourse are related to moral understanding. These findings have important implications for future research on socialization and inductive discipline techniques. Researchers should consider that not all inductive discipline techniques are equal in fostering conscience development, and as a result, it is important to consider the particular elements of discourse that are or are not effective in early moral socialization.

It is also important to note that for at least one dimension of early conscience development, behavioral internalization, maternal references to feelings and moral evaluatives interacted with both attachment security and shared positive affect (in contrast to what may have been expected). For insecure children and for dyads low in shared positive affect, higher amounts of emotion-laden discourse by the mother were associated with the largest increases in behavioral internalization. For children who were moderately secure (i.e., around the mean on attachment security) and from dyads with average amounts of shared positive affect, enhanced maternal references to feelings and moral evaluatives were also linked with increases in internalization. These increases, however, were not as large as those for insecure children or for children from dyads low in shared affect. Finally, for those children who were from highly secure dyads or dyads high in shared positive affect, maternal references to feelings and evaluatives were not associated with increases in internalization. Therefore, for internalization, maternal references to feelings and evaluatives seemed to serve mostly as a protective factor that buffered children against the ill effects of an insecure attachment and negative affect for early conscience

development. It appears, in other words, that having a mother who frequently and freely discusses feelings and values fosters early conscience growth particularly for young children who, owing to problems in the mother-child relationship (attachment insecurity, low positive affect), may otherwise have difficulty sharing with her. Alternatively, the form of conscience development for these children may be different, with maternal discourse fostering greater anxiety about rule violation—Hoffman's (1975) conventional conscience—than for children with more positive mother-child relationships. These possibilities are intriguing and clearly an area for future research.

In addition, this study provides further evidence for the importance of attachment security and shared positive affect in fostering early conscience development. Bivariate relations suggested that attachment security was related to high scores on the internalized self-conduct scale and (marginally) to high levels of behavioral internalization. Interestingly, attachment security in the study was also significantly related to interest in the forbidden toys during the resistance to temptation task (i.e., secure children had high scores on the engagement factor). Despite this interest, however, children with secure attachments were still less likely to transgress in the mother's absence, which suggests that despite their curiosity, they had high levels of behavioral self-restraint. Shared positive affect between the mother and the child in this study was also consistently related to early conscience development. Mother-child dyads high in positive affect had children who had higher scores on the internalized self-conduct scale and who displayed more behavioral internalization and committed compliance than those dyads low in shared positive affect. The relations between shared positive affect and early conscience development and between attachment and early conscience development observed in this study are consistent with previous research (e.g., Kochanska, 1995; Kochanska & Aksan, 1995; Kochanska et al., 1995) and support Maccoby's (1984) argument that high levels of mutually positive affect and harmony between the mother and the child contribute to a child's willingness to embrace maternal values.

Furthermore, our findings support Kochanska and Aksan's (1995) argument that compliance needs to be considered a multidimensional construct composed of motivationally distinct forms of child compliance. Our study found that situational compliance, committed compliance, and passive noncompliance were distinct in their developmental influences and correlates. Committed compliance, but not situational compliance, was related to shared positive affect and

gender, increased across age, and predicted internalization. Dyads high in shared positive affect and girls were more likely to show committed compliance when compared with dyads low in positive affect and boys. In contrast, situational compliance was unrelated to internalization, decreased across age, and was also related to gender (i.e., boys were more likely to show higher levels of situational compliance than girls). Finally, passive noncompliance, which followed a similar developmental course to situational compliance (i.e., decreased across age), predicted lower internalization, and was also comparably related to gender (i.e., boys engaged in more passive noncompliance than girls). These patterns of relations are similar to those in Kochanska and Aksan's (1995) study and support their argument that there is a developmental progression of compliance (to eventual internalization) that involves a transition from external to internal regulation.

The results of this study highlight the complex and multidimensional nature of early conscience development. Early conscience development involves the acquisition of multiple components (e.g., committed compliance, behavioral internalization, guilt), some of which are related (committed compliance and behavioral internalization) and some of which are unrelated (guilt and committed compliance). Furthermore, these skills appear to follow different developmental courses and have different correlates. Specific correlates (e.g., maternal references to feelings and moral evaluatives) that are related to particular aspects of conscience (e.g., internalization) are not necessarily related to other aspects of conscience development (e.g., committed compliance). Therefore, to gain a clear picture of the developmental antecedents of early conscience development, researchers need to consider conscience not as a homogenous and global "trait," but as a combination of many separate skills and motivations. When considered together, however, these findings confirm the view that a warm, supportive mother-child relationship and early conversations about the child's behavior infused with discussions of feelings and values advance a child's early conscience development.

Although the current study raises some provocative possibilities about the relation between parent-child discourse, attachment, and early conscience development, confirmation of these conclusions in the context of follow-up research is needed, especially given the weak variable-to-subject ratio of this study. Because all measures were taken at one developmental time point, the direction of the effects observed in this study is unsubstantiated. It would be plausible to argue that children who are compliant and able to

converse about emotions elicit from mothers warmth, sensitivity, and open discussions about emotions. Given, however, previous longitudinal research with these constructs (see, e.g., Brown & Dunn, 1996; Dunn et al., 1991; Kochanska et al., 1995), this interpretation seems unlikely. Nevertheless, more longitudinal research is needed to clarify the direction of the effects observed in this study because it seems likely that many of the influences are bidirectional.

Finally, it is important to note that our sample consisted of predominantly White, middle-class mothers and children and thus our results cannot be generalized to dyads from other cultures or economic groups. Research has, in fact, suggested that the content and structure of parent-child conversations about the past differ between cultures (see, e.g., Mullen & Yi, 1995) and that these differences may relate to differences in socialization goals.

## ACKNOWLEDGMENTS

The authors thank Grazyna Kochanska for her feedback on an earlier draft of this paper. In addition, they are grateful to Laura Senft, Elizabeth Baadte, Gina Babka, and Eve Herrera for their help with data collection and coding. This research was supported in part by a National Institute of Health Pre-doctoral National Research Service Award Fellowship awarded to Deborah Laible.

## ADDRESSES AND AFFILIATIONS

Corresponding author: Deborah J. Laible, Department of Psychology, 238 Burnett Hall, University of Nebraska-Lincoln, Lincoln, NE 68502; e-mail: dlaible@unlserve.unl.edu. Ross A. Thompson is also at the University of Nebraska-Lincoln.

## REFERENCES

- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 56-95.
- Baumerind. (1971). Current patterns of parental authority. *Developmental Psychology Monographs, 4* (1, Pt. 2).
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss: Sadness and depression*. New York: Basic.
- Bretherton, I. (1990). Open communication and internal working models: Their role in the development of attachment relationships. In R. A. Thompson (Ed.), *Nebraska Symposium on Motivation: Vol. 36. Socioemotional development* (pp. 57-113). Lincoln, NE: University of Nebraska Press.
- Brown, J., & Dunn, J. (1996). Continuities in emotional un-

- derstanding from 3 to 6 years. *Child Development*, 67, 789–802.
- Cassidy, J. (1988). Child-mother attachment and the self in six-year-olds. *Child Development*, 59, 121–134.
- Denham, S., & Auerbach, S. (1995). Mother-child dialogue about emotions and preschoolers' emotional competence. *Genetic, Social, and General Psychology Monographs*, 121, 313–337.
- Dornbush, S., Ritter, P., Leiderman, P., Roberts, D., & Fraleigh, M. (1987). The relation of parenting style to adolescent school performance. *Child Development*, 58, 1244–1257.
- Dunn, J. (1987). The beginnings of moral understanding: Development in the second year. In J. Kagan & S. Lamb (Eds.), *The emergence of morality in young children* (pp. 91–112). Chicago: University of Chicago Press.
- Dunn, J., Bretherton, I., & Munn, P. (1987). Conversations about feeling states between mothers and their young children. *Developmental Psychology*, 23, 132–139.
- Dunn, J., Brown, J., & Beardsall, L. (1991). Family talk about feeling states and children's later understanding of others' emotions. *Developmental Psychology*, 27, 448–455.
- Dunn, J., & Munn, P. (1987). Development of justification in disputes with mother and sibling. *Developmental Psychology*, 23, 791–798.
- Eisenberg, N., & Miller, P. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, 94, 100–131.
- Farrar, M., Fasig, L., & Welch-Ross, M. (1997). Attachment and emotion in autobiographical memory development. *Journal of Experimental Child Psychology*, 67, 389–408.
- Fivush, R. (1993). Emotional content of parent-child conversations about the past. In C. A. Nelson (Ed.), *Minnesota Symposium on Child Psychology: Vol. 26. Memory and affect in development*. Hillsdale, NJ: Erlbaum.
- Fivush, R. (1994). Constructing narrative, emotion, and self in parent-child conversations about the past. In U. Neisser & R. Fivush (Eds.), *The remembering self: Construction and accuracy in the self-narrative* (pp. 136–157). Cambridge, U.K.: Cambridge University Press.
- Fivush, R., & Fromhoff, F. (1988). Style and structure in mother-child conversations about the past. *Discourse Processes*, 11, 337–355.
- Hoffman, M. (1975). Moral internalization, parental power, and the nature of parent-child interaction. *Developmental Psychology*, 11, 228–239.
- Hudson, J. (1990). The emergence of autobiographical memory in mother-child conversation. In R. Fivush & J. Hudson (Eds.), *Knowing and remembering in young children* (pp. 166–196). New York: Cambridge University Press.
- Kochanska, G. (1995). Children's temperament, mother's discipline, and security of attachment: Multiple pathways to emerging socialization. *Child Development*, 66, 597–613.
- Kochanska, G., & Aksan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. *Child Development*, 66, 236–254.
- Kochanska, G., Aksan, N., & Koenig, A. (1995). A longitudinal study of the roots of preschoolers' conscience: Committed compliance and emerging internalization. *Child Development*, 66, 1752–1769.
- Kochanska, G., De Vet, K., Goldman, M., Murray, K., & Putnam, S. (1994). Maternal reports of conscience development and temperament in young children. *Child Development*, 63, 852–868.
- Kochanska, G., & Thompson, R. (1997). The emergence and development of conscience in toddlerhood and early childhood. In J. El. Grusec & L. Kuczynski (Eds.), *Parenting strategies and children's internalization of values: A handbook of theoretical and research perspectives*. New York: Wiley.
- Kuebli, J., & Fivush, R. (1992). Gender differences in parent-child conversations about past emotions. *Sex Roles*, 27, 683–698.
- Laible, D., & Thompson, R. (1998). Attachment and emotional understanding in preschool children. *Developmental Psychology*, 34, 1038–1045.
- Maccoby, E. (1984). Socialization and developmental change. *Child Development*, 55, 317–328.
- Maccoby, E. (1992). The role of parents in the socialization of children: A historical overview. *Developmental Psychology*, 28, 1006–1017.
- Maccoby, E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. In E. Hetherington (Ed.), P. H. Mussen (Series Ed.), *Handbook of child psychology: Vol. 4, Socialization, personality, and social development* (pp. 1–102). New York: Wiley.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, 50, 66–104 (1–2, Serial No. 209).
- McCabe, A., & Peterson, C. (1991). Getting the story: A longitudinal study of parental styles in eliciting narratives and developing narrative skill. In A. McCabe & C. Peterson (Eds.), *Developing Narrative Structure* (pp. 217–254). Hillsdale, NJ: Erlbaum.
- Miller, P. (1994). Narrative practices: Their role in socialization and self-construction. In U. Neisser & R. Fivush (Eds.), *The remembering self: Construction and accuracy in the self-narrative* (pp. 158–179). Cambridge, U.K.: Cambridge University Press.
- Miller, P., Fung, H., & Mintz, J. (1996). Self-construction through narrative practices: A Chinese and American comparison of early socialization. *Ethos*, 24, 237–280.
- Mullen, M., & Yi, S. (1995). The cultural context of talk about the past: Implications for the development of autobiographical memory. *Cognitive Development*, 10, 407–419.
- Nelson, K. (1990). Remembering, forgetting, and childhood amnesia. In R. Fivush & J. Hudson (Eds.), *Knowing and remembering in young children* (pp. 301–316). Cambridge, U.K.: Cambridge University Press.
- Nelson, K. (1993). The psychological and social origins of autobiographical memory. *Psychological Science*, 4, 7–14.
- Oppenheim, D., & Waters, H. A. (1995). Narrative processes and attachment representation: Issues of development



- and assessment. *Monographs of the Society for Research in Child Development*, 60, 1076–1081.
- Reese, E., & Fivush, R. (1993). Parental styles of talking about the past. *Developmental Psychology*, 29, 596–606.
- Reese, E., Haden, C., & Fivush, R. (1993). Mother–child conversations about the past: Relationships of style and memory over time. *Cognitive Development*, 8, 403–430.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford.
- Snow, C. (1990). Building memories: The ontogeny of autobiography. In D. Cicchetti & M. Beeghly (Eds.), *The self in transition: Infancy to childhood*. Chicago: University of Chicago Press.
- Tabachnick, B., & Fidell, L. (1996). *Using multivariate statistics*. (3rd ed.) New York: Harper Collins.
- Teti, D., & McGourty, S. (1996). Using mothers vs. trained observers in assessing children's secure base behavior: Theoretical and methodological considerations. *Child Development*, 67, 597–605.
- Thompson, R. (1998). Early sociopersonality development. In N. Eisenberg (Ed.), W. Damon (Series Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (pp. 25–104). New York: Wiley.
- Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Waters, E., & Deane, K. (1985) Defining and assessing individual difference in attachment relations: Q-methodology and the organization of behavior in infancy and early childhood. *Monographs of the Society for Research in Child Development*, 50, (1–2, Serial No. 209).