

EARLY UNDERSTANDINGS OF EMOTION, MORALITY, AND SELF: DEVELOPING A WORKING MODEL

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The minds of young children amaze. After decades of describing their thinking as egocentric and lacking understanding, developmental scientists are now discovering how insightfully young children distill lessons about the physical world, people, and themselves from everyday experience. Infants and preschoolers constantly exploit their everyday transactions with

objects and people to understand how physical events occur, what goes on in peoples' minds, and who they are and what they can do. With respect to the physical world, scientists are discovering how powerfully young minds deduce understanding from simple observation of ordinary events and their own playful experimentation. With respect to the psychological world, scientists are discovering how early young children develop expectations for the behavior and thoughts of others that are based on a rudimentary understanding of human intentions and feelings. It is as if a young child's readiness to learn is juxtaposed with abundant natural learning opportunities in daily experience.

Children's relationships with people are central to these learning opportunities. This realization has arisen from a convergence of scientific progress in two broad areas of developmental psychology. On the one hand, researchers studying cognitive development have elucidated the growth of the mind in their studies of developing event representation, memory, theory of mind, language, and other topics. They have shown that these intellectual achievements arise not only from the young mind's surprising capacities for inducing understanding from everyday observation, but also from the ways that caregivers scaffold understanding through the structure of daily routines or by how they talk with the child about recent events. On the other hand, researchers studying social development have shown how young children's experiences in close relationships provide avenues for psychological understanding of self and others. They have shown that the quality of communication shared by a young child and an adult partner, and the trust of their relationship, together influence children's earliest understandings of who they are, what people are like, and the nature of human relationships. Taken together, these dual areas of developmental study are converging on the view that children's relationships with caregivers provide powerful forums for learning about mental realities, especially as language provides avenues for making explicit the hidden (and sometimes confusing) psychological world that underlies behavior, relationships, and self-understanding.

Our research has drawn on both fields of developmental study as we have sought to explore children's earliest understandings of emotion, morality, self, and other psychological realities. In this chapter, we profile our work. We begin with the intriguing view from attachment theory that is based on the security of their attachments with caregivers, young children create mental "working models" of these relationships that underlie their understandings of other people, relationships, and themselves. But what *are* "working models" and how do they develop? For better understanding of this question, we turn to the work of cognitive developmentalists and their research on the growth of early representations of events, people, and

the self—which are, in short, core elements of the working models described by attachment theorists. We identify several conclusions from this research that have formed the basis for our program of research, which we describe subsequently. In a concluding section, we identify multiple ways that young children’s experience in close relationships guides their understanding of the psychological world, and some of the implications of these conclusions for future research.

I. Internal Working Models and Relationships

One of the most important and provocative ideas emerging from contemporary attachment theory is that early experiences with caregivers lead young children to develop mental representations of the caregiver’s sensitivity and responsiveness, and their deservingness of care. These social expectations contribute to the security (or insecurity) of the parent–infant relationship and affect how young children respond to their caregivers, especially in circumstances of stress or uncertainty (Lamb, 1981). This is, in a sense, what is meant by a secure or insecure attachment relationship.

But to Bowlby (1973, 1980, 1988), as these core expectations become consolidated over time, they permit not only immediate forecasts of the caregiver’s behavior, but also guide expectations for relationships with other people, self-referential beliefs, and assumptions about people’s motives and intentions. Borrowing from Craik’s (1943) portrayal of mental models, classic object relations theory, and other theoretical sources, Bowlby described these “internal working models” as dynamic representational structures that are derived from relational experience and color the child’s responsiveness to partners. He believed that over time, working models become interpretive filters by which children reconstruct new experiences and relationships in ways that are consistent with past experiences and expectations, and which also provide implicit decision rules for relating to others. As a consequence, children with secure or insecure attachment histories respond to others based on expectations of warmth and intimacy that may cause them, for better or worse, to evoke the kinds of responses from others that confirm their initial expectations. Insecurely attached children may, for example, so anticipate a new partner’s unfriendliness or unreliability that they remain distant and unengaged and, in so doing, evoke the kind of disinterested response they expect from that person. A securely attached child may, by contrast, evoke a much different response from the same partner, guided by a prior relationship history to respond more positively and thus contribute to creating a warmer, more intimate relationship with that person.

In Bowlby's view, therefore, internal working models constitute the bridge between early experiences of sensitive or insensitive care and personality development. As internal working models are maintained over time, in other words, they color a person's experiences in new relationships and create self-confirming expectations of how other people will respond to them. These representations influence social dispositions and attributions of the motives, intentions, and emotions of others, as well as influencing self-referential beliefs, such as about one's competence as a social partner. In a broader view, these working models are also believed to shape parenting practices, leading to current research interest in adult attachment representations and their association with the sensitivity or insensitivity of parental care (see, for example, van Ijzendoorn, 1995). In this view, secure or insecure parental working models constitute the basis for the responsiveness of care that leads offspring to develop secure or insecure attachments to these parents, contributing to the "intergenerational transmission" of attachment security.

Bretherton (1990, 1991; Bretherton & Munholland, 1999) elaborated Bowlby's formulation by emphasizing how the development of working models is influenced by the quality of a young child's shared communication with the caregiver. The working models of securely attached children, she proposed, are shaped by the open, fluent, and candid sharing of feelings and viewpoints that can occur in relationships of trust and confidence. Bretherton argued that, by contrast, insecure relationships are characterized by limited emotional sharing, especially of negative or disturbing feelings that either or both partners may find threatening and which may elicit defensive exclusion. Drawing on Schank's (1982) theory of dynamic memory and Johnson-Laird's (1983) portrayal of flexible mental models, Bretherton also described internal working models as a system of hierarchically organized representational systems that involve different levels of generalizability and are relevant to various broader belief systems.

Taken together, the view that early relational experience provokes the development of wide-ranging mental representations related to sociability, understanding of people, and self-concept is an heuristically powerful theoretical formulation. It has led to a new generation of studies of the association between attachment security and various kinds of mental representations, including children's developing self-concept, conceptions of friendship, memory for emotional issues, conscience, and a variety of other features of social and emotional understanding that are believed to be related to the working models associated with secure or insecure attachments (see Thompson, 1999, for a review). Working models have also been enlisted to explain individual differences in preattentive

processing, selective attention, defensive exclusion, and a variety of other psychological processes from infancy to adulthood. In a sense, the breadth of representational influences attributed to internal working models attests to the heuristic power of this concept.

The problem, however, is that “in the very power of such a model lies a trap: it can too easily explain anything” (Hinde, 1988, p. 378). As a broad, inclusive formulation, working models potentially serve as a “catch-all, post-hoc explanation” for an almost limitless variety of research findings on the correlates of attachment security (Belsky & Cassidy, 1994; see also Rutter & O’Connor, 1999). The problem is that Bowlby’s concept of the internal working model is a conceptual metaphor, not a systematically defined theoretical construct, and thus it lacks the specificity required to guide and constrain its theoretical applications. This not only contributes to expansive theoretical applications, but makes it difficult to create conceptually consistent measures of working models for developmental research (Thompson & Raikes, in press). In addition, central questions concerning consistency and change in internal working models over time, conscious and unconscious features of the functioning of working models, and how these representations are associated with other social–cognitive constructs (such as relational schemas and attributional processes) remain unclarified. Perhaps most important, little is known about the *development* of working models apart from Bretherton’s provocative formulations concerning openness of communication. Understanding the nature of developmental changes in these mental representations, however, and how working models relate to other aspects of cognitive growth, would contribute to a clearer portrayal of the nature of working models and how they are likely to influence sociopersonality functioning in children of different ages. Such understanding would also enable attachment researchers to conceptualize more precisely the correlates of secure or insecure attachments at different stages of development. In the end, the usefulness of the internal working models concept hinges on the capacity of attachment theorists to define it with greater clarity and precision, and to link it to other developmental accomplishments of the growing mind. This is a significant challenge for the future of attachment theory (Thompson & Raikes, in press).

II. Internal Working Models and Cognitive Growth

Fortunately, at the same time that attachment theorists became interested in the mental representations associated with attachment security, cognitive developmental researchers began significantly expanding their appreciation

of mental development and its social influences. Their research has addressed different kinds of mental representations: the development of theory of mind, event representation, episodic memory, social scripts and schemas, autobiographical memory, and the concept of shared social reality (the latter drawn from neo-Vygotskian theory). But underlying different conceptual rubrics, these cognitively oriented scientists have been concerned with features of understanding that are central to attachment theorists' concept of the working model: how young children achieve insight into peoples' intentions, motives, and emotions; how children conceptualize the specific events and experiences of their lives; and the influences on an emerging sense of psychological individuality and self-concept. Given that the developing mind that concerns attachment researchers is the same developing mind of interest to cognitive researchers, scientists in each field are likely studying allied mental processes relevant to the encoding, interpretation, and representation of social experience. Moreover, in light of Bretherton's cogent argument that internal working models are hierarchically organized representational systems, understanding the development of working models in terms of growth in the mental representations studied by cognitive developmentalists should not only add clarity and specificity to the internal working models concept, but also begin to identify the broader representational systems with which working models are associated.

In several papers, one of us has reviewed the cognitive developmental literature that might be relevant to the growth of working models (e.g., Thompson, 1998, 2000). This review has yielded three conclusions that can provide insight into the growth of working models and their developmental influences.

A. WORKING MODELS AS DEVELOPING REPRESENTATIONS

Although attachment theorists have devoted considerable attention to how working models function as fully developed mental representations, these representations clearly develop over an extended period of time. Working models grow and change not only as the result of new experience in close relationships, but also as children acquire new representational capacities that lead them to see other people, themselves, and relationships differently than before (Ainsworth, 1989; Marvin & Brittner, 1999). Indeed, this conclusion is inevitable given that infants and young children are incapable of the sophisticated self-referent beliefs and social inferences assumed to be inherent in the functioning of fully developed working models in adults. Working models are thus developing representations that change significantly in scope and sophistication throughout

childhood and adolescence. As new conceptual and thinking skills develop, there may be growth and consolidation of earlier-developed working models at a new level of representational sophistication. Furthermore, new representational capacities may provoke a reorganization and revision of earlier working models as children acquire new ways of understanding past and present experiences (Stern, 1989). Indeed, when new representational advances occur, they may also be associated with changes in attachment security because of how new forms of psychological understanding provoke new ways of regarding familiar relationships.

At least two representational advances are relevant to understanding the growth of working models. The first occurs in early childhood. Owing largely to developing language ability, young children begin to conceptualize in more sophisticated and memorially more enduring ways the experiences of care that were earlier represented using the simpler perceptual-affective schemas of infancy. Research on the growth of theory of mind indicates, for example, that between the ages of 3 and 5 years, a preschooler's appreciation of the feelings, thoughts, and beliefs of another expands considerably (Bartsch & Wellman, 1995; Flavell & Miller, 1998; Wellman, Cross, & Watson, 2001). This contributes to a developing appreciation of the motives and intentions of attachment figures, especially as they differ from the child's own, and expands the child's capacity to understand the reciprocal, complementary nature of relational interaction, such as conflict resolution through compromise or negotiation (Harris, 1996). During the same period, young children begin to retain more coherent recollections of past events that are built on their developing appreciation of the structure of routines in daily experience (Hudson, 1993; Nelson, 1989; Nelson & Gruendel, 1981). This contributes to a young child's ability to begin to forecast the caregiver's behavior based on mental models of familiar events, especially those involving close relational partners. Research on autobiographical memory suggests that after the age of 3, young children become capable of thinking about, and remembering, past events in a more consistently self-referential manner that contributes to, and draws on, the child's developing capacities for self-reflection (Hudson, 1990; Nelson, 1993a; Welch-Ross, 1995). This contributes to the growth of psychological self-awareness and to the initial construction of an ongoing narrative account of events of personal significance, including those involving attachment figures, that contributes to self-understanding (Miller, 1994). In these and other ways, the conceptual advances of early childhood suggest the significant changes in working models that are likely to be occurring during this period.

The second representational transition (extensive discussion of which is beyond the scope of this chapter) occurs in early adolescence with the

emergence of metarepresentational capacities and abstract thought (Ainsworth, 1989; Kobak & Cole, 1994; Marvin & Brittner, 1999). This enables young people to reflect more competently on their own mental processes, especially as they acquire more sophisticated forms of interpersonal understanding and self-awareness. Moreover, as youth strive for internally coherent self-referent beliefs, earlier working models may become subject to deliberate reexamination as young people reflect on their consistency with other beliefs and with current relational experience. Consequently, many features of the working models of childhood may be subject to elaboration, enrichment, and revision.

Understanding working models as developing representations contributes to the realization that representations of relational experience are very different at different ages, and thus have different associations with social behavior and emotional responding. This, in turn, has important implications for studying the association between attachment and sociopersonality functioning. A secure attachment may not be comparably predictive of different aspects of personality growth at various stages of development. More specifically, attachment security may be developmentally most influential when the working models with which it is associated have matured sufficiently to influence the specific features of psychosocial functioning that are emerging at the same time. If early childhood is when an integrated, enduring capacity for self-understanding begins to take shape, for example, then a secure attachment may be most strongly associated with developing self-concept during this period rather than before (see, for example, Verschueren & Marcoen, 1999). Similarly, the associations between attachment and emotional understanding (Laible & Thompson, 1998; Ontai & Thompson, 2002) and conscience development (Kochanska, 1993, 1995; Kochanska & Thompson, 1997) may be most apparent in young preschoolers, when theory of mind is rapidly developing and when internal working models are most likely to influence the emergence of emotional and moral understanding and self-regulation (see Meins *et al.*, 1998). More speculatively, hypothesized associations between attachment security and developing identity or sexuality may be most apparent in adolescence when these features of psychosocial development are taking shape. In short, as working models grow in sophistication and scope throughout childhood, a secure attachment is influential in different ways at different ages, based on the pivotal psychosocial accomplishments of each stage of psychological growth.

Traditionally researchers have assessed attachment in infancy (using the Strange Situation) to explore how attachment security predicts later socio-personality development. But the most interesting hypothesized psychological outcomes of secure or insecure attachment relationships—including

self-understanding, capacities for developing satisfying close relationships, and psychological understanding of other people—are developmental achievements of early childhood or later, when the internal working models associated with attachment security have also become more sophisticated. Consequently, early childhood is when the internal working models associated with a secure or insecure attachment may be developmentally more influential than in infancy. Research that examines the contemporaneous or predictive correlates of attachment security in early childhood may yield associations that are obscured when Strange Situation assessments in infancy are used. For other hypothesized correlates of secure attachment, moreover, researchers may be wise to study attachment influences at even later ages.

B. IMPORTANCE OF LANGUAGE AND CONVERSATION

Attachment theorists emphasize, of course, how secure or insecure working models derive from the sensitivity of parental care. Children's direct experiences of an adult's warmth, responsiveness, and reliability constitute core components of the development of working models. But as young children become more sophisticated in thinking about and sharing their experiences with others, conversational discourse becomes another powerful influence on their understanding of relational experiences. During the preschool years, therefore, working models are shaped not only by children's direct representations of parental care, but also by the secondary representations of experience mediated by language. Bretherton (1990, 1991) noted, for example, that the open or restricted communicative style of the parent-child dyad significantly guides how easily young children can share troubled or conflicting emotions and learn from the adult about their feelings and experiences. Bowlby (1980, 1988) also believed that psychological difficulty was exacerbated when children were forced to choose between markedly inconsistent direct and indirect representations of care, such as when a parent acted coldly but spoke affectionately, or when a parent acted harshly but avowed benign intentions. In these cases, he reasoned, the risks of defensive exclusion and of distorted perceptions of relational experience were enhanced.

Cognitive-developmental theorists agree that language significantly influences early representations of experience (see, for example, Nelson, 1996; Rogoff, 1990; Tomasello, 1999). This is especially true of aspects of relational experience that are, in a sense, invisible: the nature of people's thoughts and intentions, the values and rules governing conduct, the personality characteristics that predict people's individual propensities, and, of course, the child's own internal dispositions and attributes. Although

these features of human functioning are indirectly revealed in behavior, understanding the associations between these internal characteristics (thoughts, beliefs, feelings, dispositions) and specific behavior is a considerable conceptual challenge for young children. Conversations with adults contribute clarity to the mysteries of why people act as they do by articulating in language the influence of these internal motivators. Moreover, conversations do so by embedding interpersonal understanding within the broader values of the culture, and belief systems of the adult.

Language contributes to this representational advance in psychological understanding relevant to working models in several ways. First, it permits the reconstruction of the toddler's earlier, implicit understanding of mental states into more explicit knowledge that can be represented using words. A baby who feels anxious in unfamiliar situations without the caregiver becomes a preschooler who can label her feelings and talk about them for reassurance and understanding. Second, because the child can exchange information with others through language, direct representations of personal experience can be compared—even altered—with the secondary representations of another who has shared or witnessed that experience. At times, this contributes to clarifying the young child's understanding of personal experiences, such as why another person acted or felt as she did. On occasion, discourse with another becomes a tutorial in divergent mental states when the child and the caregiver have different representations of the experience they shared. The awareness of divergent mental states is conceptually provocative for young children because it confronts the child with the realization that different people have different understandings of shared events, and motivates efforts to understand why. Third, and most significantly, language becomes the implicit conduit for the child's appropriation of values, beliefs, and a sense of personhood that comes from being a cultural member as these are incorporated into the structure and content of language. This is what Nelson (1996) means by "the collaborative construction of the mediated mind" that occurs with language development, a view that is consistent with Vygotskian and neo-Vygotskian views (e.g., Rogoff, 1990). In all these ways, language acquisition provides the basis in early childhood for working models becoming more complex, explicit, consciously-accessible, and influenced by shared conversations with others.

Studies of the conversations of parents with young children confirm some of these theoretical views. They indicate that mothers' emotion language in shared conversation predicts preschoolers' emotion understanding and affective competence (e.g., Brown & Dunn 1996; Denham, Zoller, & Couchoud, 1994; Dunn, Brown, & Beardsall, 1991; Fivush, 1993). Mother-child conversation about behavioral standards also influences emergent

conscience and moral understanding (Dunn, Brown, & Maguire, 1995; Kochanska, 1995). Welch-Ross (1997) found that mother–child conversations about past events contributed to the theory of mind understanding in young children as mothers clarified the thoughts, feelings, and motives of people, including themselves (see also Dunn, Brown, & Beardsall, 1991). Moreover, as caregivers establish an interpretive framework for shared experiences that clarifies the significance of personal events to a young child, mother–child discourse has been linked to the organization of event representation (Nelson, 1989, 1993b) and early autobiographical reference (Hudson, 1990; Miller, Fung, & Mintz, 1996; Nelson, 1993b). In a sense, adults convey in their everyday conversations with young children varied lessons about people’s emotions and thoughts, the bases of cooperation and conflict, and the child herself that children are quick to appropriate into their own representations of shared events.

As an example, consider the following conversation between a 21-month-old and his mother about an event earlier in the morning (from Dunn & Brown, 1991, p. 97):

- Child:* Eat my Weetabix. Eat my Weetabix. Crying.
Mother: Crying, weren’t you? We had quite a battle. “One more mouthful, Michael.” And what did you do? You spat it out!
Child: (pretends to cry)

This shared recollection is, in some respects, simply a recounting of the morning’s confrontation over breakfast cereal. But incorporated into the mother’s rendition is a sequential structure of events and a causal representation for the outcome (i.e., the child’s emotional reaction). It is easy to see how her description of the morning’s events would contribute to the organization and coherence of her young child’s subsequent memory for that event. In a sense, the mother has provided both a model for remembering and guidance concerning how and what to remember from personal experiences.

On closer examination, moreover, other lessons for the child are apparent in the mother’s recounting. There are lessons about emotion and morality: crying is associated with misbehavior and lack of cooperation (rather than resulting from having to eat unpleasant breakfast cereal). There are lessons about the self: good boys cooperate and thus do not get upset, but Michael was uncooperative and that is why he cried. There are lessons about relationships: battles arise when young children are uncooperative (rather than battles occurring when parents insist on children eating Weetabix!). In addition to providing a memorable representation of the event, therefore, the parent has also interpreted it within a framework of assumptions, attributions, beliefs, and values. Although it is unclear how many of

these lessons are likely to be internalized by a 2-year-old from a single conversation, as conversations like these become part of the landscape of parent–child interaction in early childhood, the lessons about events, people, relationships, emotions, self, and other psychological realities embedded in these conversations are likely to become part of the young child’s psychological understanding. In our research, we have recorded many, many of these kinds of conversations that are representative of the kinds that are shared informally by young children with their caregivers.

Such simple verbal exchanges are especially influential for young children whose direct representations of experience may be inchoate or incomplete, and for whom the articulate verbal structure of maternal discourse provides clarity and organization. This is especially true for understanding those aspects of everyday experience that are conceptually most elusive (and most interesting) for young children, such as people’s motives, feelings, and thoughts. This means that subsequent to such conversations, the explicit and implicit interpretations embedded in the caregiver’s verbal representation of events may supplant the child’s direct representations of personal experience, or at least significantly alter them. A young child like Michael would probably remember the morning’s confrontation much differently after this conversation with his mother compared with before. A young child’s earliest understandings of events and the psychological world are thus guided by how parents help to interpret, organize, and construct understanding through simple conversations. Developing working models are, in a sense, a co-construction of the parent and the young child.

C. VARIATIONS IN PARENTAL CONVERSATIONAL STYLE

Parents vary, of course, in how they talk to their young children. Some—like Michael’s mother—provide a richly elaborative description of events that includes attributions of motives and emotion. Others provide a narrative structure that is more sparse or incomplete, or which incorporates a more impoverished variety of psychological attributions for the child. As Bowlby observed, moreover, some parents provide a narrative representation of events that strikingly conflicts with the child’s direct experience. Attachment theorists like Bretherton argued that these variations in parental conversational style are significant influences on young children’s developing working models, primarily owing to the open or restricted sharing of feelings and perspectives. But what is meant by “open” or fluent communication between parent and child, and what are its consequences for early psychological understanding and the working models that emerge in early childhood?

Cognitive-developmental scientists who study parent–child discourse about shared events have also found that parents vary in the ways they converse with offspring (see Fivush & Fromhoff, 1988; Hudson, 1990; Reese & Fivush, 1993). Some parents (labeled “pragmatic” or “repetitive”) use short, directive conversations centered on specific events or questions that invite a simple “yes” or “no” response. Others (labeled “elaborative”) provide rich background and contextual detail, and enlist questions that probe the child for further information, in a shared retelling of past events. In these studies, the offspring of elaborative mothers have a more complete and sophisticated representation of their past experiences that results from the direct impact of parent discourse style on memory for events. Children of elaborative mothers remember more also because of the child’s appropriation of the adult’s narrative approach. Young children learn to remember more, and remember differently, as a consequence of the mother’s narrative style (Fivush, 1993; McCabe & Peterson, 1991). These findings are consistent with those of Dunn, Denham, and their colleagues described earlier, who found that mothers who talk more about feelings and their causes have children who are subsequently more advanced in emotion understanding and theory of mind. In each case, the richness and elaboration of maternal discourse contributes to more complex, sophisticated representations of personal experiences by offspring. This may be part of what is meant by more open communication.

But the distinction between elaborative and pragmatic conversational style may be only the beginning. Parents vary in other ways in their conversations with young offspring. What they choose to emphasize or recall in their conversations about past events and the details they omit may be important influences on how young children represent their experiences (especially because, as Levine, Stein, & Liwag, 1999, have noted, parents often remember different features of a shared experience than do young children). The emotions parents attribute to others and to the child, their moral evaluations of behavior, their attributions of culpability and causality for the consequences of actions, and the characteristics they attribute to the child may each be appropriated by the children who listen to them. Miller and her colleagues observed, for example, that Chinese and Chinese-American mothers emphasize moralistic themes and the shame inherent in misbehavior in their shared recounting of their 2-year-olds’ experiences, but Anglo-American mothers de-emphasize misbehavior and attribute bad conduct instead to the child’s spunk or mischievousness (Miller *et al.*, 1990; Miller, Fung, & Mintz, 1996). It is easy to see how personal and cultural belief systems become internalized by young children through conversations like these. In this sense, language underlies the intergenerational transmission of parental beliefs and values.

Not only the adult's beliefs and implicit causal theories but also the pragmatics and emotional tone of the caregiver's discourse may be influential. Shared conversations about everyday events can occur in the relaxed context of smiles, hugs, and other expressions of warmth, or may instead be didactic exchanges with a more critical emotional tone, or there may be heated exchanges in the context of conflict. The impact of these conversations likely varies according to their emotional, pragmatic context. Moreover, the relational context of parent-child conversations is also likely to be important. Individual differences in parental narrative style may be related to broader variability in the caregiver's sensitivity, defensiveness, emotional style, or to the adult's personal representations of past events. These issues remain to be explored in future research. For the present, however, the realization that variations in parental narrative style, belief systems, communicative pragmatics, and other qualities may significantly influence the lessons appropriated by offspring in discourse contributes significantly to elucidating the nature of the open or restricted communication patterns distinguishing secure from insecure attachment relationships.

III. Developing a Working Model

This review of the cognitive research relevant to the concept of internal working models yields several conclusions that have guided our program of research on the growth of early psychological understanding. First, early childhood may be a particularly important period for the development of working models and for the influence of attachment security on psychosocial development (the other important period, as noted earlier, is early adolescence). Because of the representational advances afforded by language and concurrent growth in event representation, theory of mind, autobiographical memory, emotion understanding, and other conceptual achievements, a secure or insecure attachment may be especially provocative in guiding children's emergent understandings of people, relationships, and themselves at this time.

Second, psychological understanding is shaped by the conceptual advances of early childhood and the conceptual catalysts of parent-child discourse. The latter helps to clarify the invisible qualities of psychological experience that young children seek to understand. *How* parents converse with children about shared experiences is as important as *what* they say, and this requires sensitive and detailed assessments of discourse style as it is relevant to specific features of emergent psychological understanding.

Third, consistent with attachment theory, discourse is influential in a relational context. Close relationships are one of the primary motivators

for growth in psychological understanding, and relational experiences are one of the primary forums for learning about others and the self. The quality of relationships is thus important, and a parent's elaborative narrative style may have a different influence in the context of a conflicted or insecure parent-child relationship than in a warm or secure relationship, for example, because relational quality is likely to influence the content and style of what the parent says and how the child responds to it.

In our research program, therefore, we are exploring the development of psychological understanding in early childhood by enlisting formulations of attachment theory and the insights of cognitive researchers. We have not, however, sought to study working models directly. The conceptual uncertainties about how to define working models and their development, together with the empirical challenges of directly assessing working models through semiprojective stories, self-report, or other methods, each pose significant obstacles to research in this area (Oppenheim & Waters, 1995; Thompson & Raikes, in press). Consequently, we have focused on the growth of emotion and moral understanding in young children because these elements of psychological understanding are central to relationships, and are also crucial to the working models young children develop about themselves in relation to others. In a sense, therefore, our research is an effort to understand the development of conceptual processes related to the growth of working models—in other words, to develop a working model of the growth of working models.

A. EMOTION UNDERSTANDING AND ATTACHMENT SECURITY

In an initial study, our goal was to understand whether understanding of emotions was one of the facets of psychological understanding influenced by a secure or insecure attachment relationship (Laible & Thompson, 1998). The more open or fluent communication styles that securely attached dyads are thought to share should permit greater discussion and mutual understanding of emotions for example, and this may contribute to the greater social competence observed in securely attached children (see Thompson, 1999). However, this study was the first to explore a direct association between attachment and emotion understanding in young children as a prelude to examining the parent-child communication patterns that may contribute to emotion understanding.

A sample of 40 preschoolers (mean age of 4 years) and their mothers participated. The security of attachment was assessed through the Attachment Q-Sort (AQS) (Waters & Deane, 1985), which mothers completed at home under the guidance of a trained research assistant. Although disagreement exists concerning whether trained observers or

mothers provide the most valid information via the AQS (mothers have more extensive and representative experience of the child but may be biased; observers can be more objective but have more limited information about the child), Teti and McGourty (1996) have shown that mothers can be valid informants when certain procedures are followed. These procedures include sending mothers the AQS items in advance and asking them to think about them in relation to the child, providing a standard set of instructions when mothers complete the sort, and ensuring that a well-trained research assistant is available to answer any questions. In this study and the others described in this chapter, we strictly followed the Teti and McGourty procedures.

Two measures were used to assess preschoolers' understanding of emotion. First, children participated in an affective perspective-taking task developed by Denham (1986), in which children were presented with 20 short stories enacted by a research assistant using words and puppets. The child's task was to identify how the story character felt at the conclusion of each story by attaching a felt face to the puppet that the child had identified earlier as representing either sad, happy, angry, or fearful emotion. Children's performance on this task was assessed as their accuracy in attributing the correct emotion to the story character, and the accuracy of their prior identification of the facial expressions of emotion. Second, children's spontaneous understanding of the emotions of their peers in preschool or child-care centers was assessed, using a procedure adapted from Fabes *et al.* (1988). Research assistants watched for overt expressions of emotion from any child who could be observed by the target child. After noting the emotion and its cause, the assistant then approached the target child and asked "How does [other child] feel?" and "Why does [other child] feel that way?" and recorded the target child's responses verbatim. We gathered five to ten such interviews for each child in the study over a 4-week period. Independent judges later evaluated the agreement between the reports of the target child and the research assistant concerning emotion and its causes, resulting in accuracy scores for each child for emotion understanding and identification of the causes of the peer's emotions. The measures of emotion understanding derived from the affective perspective-taking task and the on-site interviews were highly correlated (supporting the validity of each), so they were converted to standard scores and summed.

Consistent with our expectations, there was a significant association between attachment security and emotion understanding in hierarchical regressions with age and gender controlled. Children with higher AQS scores also performed better on the assessments of emotion understanding, suggesting that a secure attachment may contribute to greater appreciation of emotional experiences in others. In separate hierarchical regressions, we also found that secure children earned higher scores for their understanding

of the causes of their peers' emotions in the preschool and child-care on-site interviews.

We took these analyses a step further, however, to explore whether the *valence* of the emotion was important. We were intrigued by a report by Belsky, Spritz, and Crnic (1996) that securely attached 3-year-olds were more likely to remember the positive events depicted in a puppet show they had previously observed, whereas insecurely attached children were more likely to remember negative events in the puppet show. The authors interpreted this as resulting from the heightened sensitivity of insecure children to negative emotion and its outcomes, perhaps because prior relational experiences involving ambivalent or negative feelings contributed to biases in affective-cognitive information-processing, consistent with the working models formulation. This suggested that memory for emotional events—and perhaps aspects of emotion understanding—varied by attachment security and the valence of the emotion.

To explore this, children's responses to the affective perspective-taking task and the on-site interviews were distinguished according to whether positive or negative emotions were concerned. Accuracy scores for each task were recalculated for each child and, because scores on the two tasks were significantly correlated for both positive valence and negative valence, scores were again converted to standard scores and then combined. In hierarchical regression analyses with age and gender controlled, there were no significant effects for attachment security for positive emotion understanding. Only for negative emotion understanding did children with higher AQS scores obtain significantly higher scores.

These findings are somewhat different from those of Belsky, Spritz, and Crnic (1996), but are consistent with the expectations of attachment theory. Although insecurely attached children may have greater memory for negative events, enhanced *understanding* of those events requires opportunities to share, discuss, and learn about emotional experiences in the everyday contexts in which they are encountered, such as discipline encounters, sibling bickering, and even marital conflict. This is especially true for negative emotions because feelings like anger, fear, and sadness are motivationally and socially complex, far more than positive emotions which can be comprehended more easily and with much less personal threat. If securely attached children have greater opportunities to talk with their caregivers about events entailing negative emotion that they experience at home and elsewhere, it could significantly enhance their comprehension of the causes and outcomes of these feelings when compared with insecurely attached young children. This view is consistent with the findings of this study, and also the findings of Belsky, Spritz, and Crnic (1996).

B. PARENT–CHILD CONVERSATION, ATTACHMENT, AND EMOTION UNDERSTANDING

The problem with this conclusion, however, is that we did not directly observe mother–child conversations related to emotion. Our second study in this series, therefore, was designed to examine how mothers of young children converse with their offspring about emotional issues, and to see whether their conversational style was related to differences in children’s emotion understanding (Ontai & Thompson, 2002). In doing so, we hoped to better understand the nature of the more open, fluid communication that is believed to characterize the conversations of securely attached dyads. We were particularly interested in discovering whether parental discourse style and attachment security interact in predicting children’s emotion understanding. In other words, would more elaborative parent–child discourse be especially beneficial to the development of emotion understanding in the context of a secure parent–child relationship? Such a conclusion would suggest that how parents communicate about emotion and the broader relational context of their conversations are each important to developing psychological understanding.

We studied 52 3-year-olds and their mothers. We studied a younger sample of children than in the previous study because of our interest in examining understanding of emotion during a period when developing representations of others’ mental states are still very basic, and when relational influences could shape children’s emerging conceptions of emotion. Mothers and children were observed in two situations that elicited shared conversations about emotion. In the first, mothers read and discussed five one-page stories with their children, each taken from a children’s storybook entitled *Feelings* (Brandenburg, 1984). Each story involved emotional themes, such as a boy who was happy about receiving a birthday party invitation, or a girl who was scared about her first day in a new class. Mothers were asked to “read them as you would normally read a story with your child.” The stories (and book) were chosen because they have minimal narration and rely primarily on pictures to convey the story, prompting considerable spontaneous mother–child discussion of the stories. Next, mothers were asked to talk to their children about an event that had occurred within the past week during which the child had displayed negative emotion. We focused on negative emotion in light of the findings of the previous study, and because negative emotions are conceptually more challenging for young children to understand, we focused on a recent personal event because this captures young children’s attention and interest. Mothers were asked to “recall the event as you normally would recall an event with your child” to elicit the child’s memory and how the child felt at

the time. Mothers were invited to take as long as necessary for each conversation, which was tape-recorded for later transcription. As in the previous study, Denham's affective perspective-taking task was used as the measure of emotion understanding, and mothers completed the AQS during a second visit to assess attachment security.

The transcribed conversations about emotion issues (storybook and past event) were coded in detail for characteristics of maternal speech specifically related to emotional states (see Ontai & Thompson, 2002). We focused on emotion state language following criteria identified by Dunn and colleagues to include feeling state terms but excluding references to other nonfeeling internal state terms, such as those referring to thinking and believing (see Dunn, Brown, & Beardsall, 1991). These emotion-related utterances were then coded for several characteristics believed to be related to children's developing emotion understanding (Cervantes & Callanan, 1998; Dunn *et al.*, 1991; Fivush & Fromhoff, 1988), including:

- The frequency of references to emotion by the mother (*total emotion references*)
- References to the *causes* of emotion
- References to the *outcomes* (or behavioral results) of emotion
- *Definitions* of emotion (e.g., "Furious is when you are really, really angry")
- *Linking events*: attempts to help the child comprehend the situation by linking the emotion to an event in the child's life in which similar feelings were experienced (e.g., "He's angry like when you were angry at sissy for hitting you this morning")
- *Requests for information* from the child related to emotion
- *Directives* about the proper behavior in response to emotional arousal (e.g., "You don't hit when you get mad")
- Mothers' *confirmations, negations, or repetition* of the child's emotion-related utterances.

We also conducted a more global rating of the mother's overall *elaborative* narrative style using the criteria earlier described.

Our first question was whether these discrete codings would reveal more general, coherent conversational styles in the mothers we studied. They did, as revealed in two analyses. First, a simple display of the correlational associations among these discourse codes revealed a strong network among the features of maternal speech that would be expected to be most provocative of children's emotion understanding (see Figure 1). The frequency of references to the causes of emotion was significantly associated with references to the outcomes of emotions, mothers' efforts to define

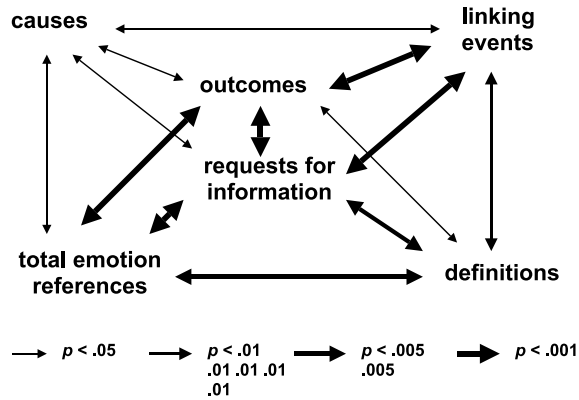


Fig. 1. Direct correlational associations between maternal discourse measures (from Ontai & Thompson, 2002). Variables are defined in the text.

or explain emotion, to link events in the child's life to emotion concepts, and her requests for further information about emotion from the child. These behaviors were also significantly associated with the total frequency of emotion references in the mother's discourse, suggesting that mothers were using their emotion language to enrich the child's understanding rather than merely to confirm or repeat the child's utterances, or to provide directives. Moreover, each of the features of maternal discourse identified in Figure 1 was significantly associated with global ratings of the mother's elaborative conversational style. This was the first investigation to associate elaborative conversational style with more specific features of maternal discourse about emotion, and these findings suggest that elaborative discourse benefits socioemotional understanding as well as memory and event representation in young children. Mothers who talk more elaboratively during their shared conversations with young offspring embellish the child's understanding of emotional themes, and in doing so they contribute to the development of emotion understanding.

These conclusions were supported by a second analysis in which a subset of the discourse codes were submitted to a principal components analysis. Two factors emerged from this analysis. The primary factor had strong, positive loadings for maternal references to causes, linking events, requests for information, and the outcomes of emotion and, consistent with the foregoing findings, we labeled this factor *elaborative style*. The second factor had strong, primary loadings for maternal confirmations, directives, negation, and repetition, and we labeled this factor *pragmatic style*.

In light of these findings, however, we were surprised to discover that neither of the maternal conversational style factors nor attachment security had the predicted relations to children's emotion understanding at age 3. Indeed, the only significant association was opposite to what we expected: in hierarchical regressions with age and gender controlled, the maternal pragmatic style factor was significantly and *positively* associated with emotion understanding. In attempting to make sense of these unexpected results—and looking at other patterns in the data—we began to conclude that by studying these relational influences at age 3, our investigation had started too early. In our effort to understand relational influences on emerging understanding of emotion, we began with children who were too young for the secondary representations of parent-child conversations, or the security of the parent-child relationship, to yet have a significant influence on emerging representations of people's feelings. Indeed, theory of mind understanding is still very rudimentary at this age, and although the belief-desire psychology of 3-year-olds is likely to sensitize them to others' feelings, it may not permit generous understanding of emotions in others, especially negative emotions. If it is true that we started our inquiry too early, this suggests that the timing of studies in this field is crucial to accurately portray social influences on developing psychological understanding in early childhood.

To explore this possibility further, therefore, we recontacted as many of the children in this study as possible for another assessment of attachment and emotion understanding, using the same procedures as had been used earlier. By this time, the children were 5 years old. Consistent with our expectations (but contrary to the age 3 results), hierarchical regression analyses revealed that attachment security at age 5 significantly predicted emotion understanding at the same age, with age and gender (and attachment security at age 3) controlled. Children with more secure relationships at age 5 obtained higher scores on the emotion understanding measure at the same age. Moreover, follow-up analyses showed that securely attached 5-year-olds were especially strong in understanding negative emotions, compared with insecurely attached children. These findings replicated those of our earlier study.

The maternal conversational style factors at age 3 did not directly predict children's emotion understanding at age 5. But we also explored the interaction between attachment and conversational style at age 3 in predicting later emotion understanding. In other words, would the quality of maternal discourse in interaction with the security of attachment at age 3 significantly predict children's competence in emotion knowledge at age 5? Although the interaction was not significant with respect to overall emotion understanding or for negative emotions, a significant interaction was

obtained for the measure of positive emotion understanding. More specifically, securely attached children whose mothers had used a more elaborative narrative style at age 3 were more advanced in their understanding of positive emotions at age 5 (Ontai & Thompson, 2002).

These findings are consistent with those of our other studies. Laible (2002a) also coded maternal elaborative discourse during shared recall of the child's past behavior, and obtained measures of attachment security (via maternal-report AQS) and children's emotion understanding (via the Denham task). In this study, emotion understanding of these 4-year-olds was significantly predicted by secure attachment, and also by maternal elaborative speech and discussion of positive emotions during conversations about the child's past behavior. Mothers who were more elaborative and talked more about positive emotions, in the context of secure relationships with their offspring, had children who showed greater emotion understanding, consistent with the foregoing results. In a separate investigation, Laible (2002b) also found that maternal elaborative style in parent-child conversations when children were 30 months old significantly predicted children's emotion understanding 6 months later (attachment security was not measured in this study). Remarkably, Laible's (2002b) findings were for 3-year-olds.

Taken together, findings from these three studies suggest that the quality of parent-child conversational discourse and the overall quality of the parent-child relationship are each influential in the growth of emotion understanding. Elaborative discourse in the context of a secure relationship provides an especially rich forum for developing emotion understanding, particularly as children become capable of participating more extensively in the rich give-and-take of conversational exchanges with their caregivers, and as their representational capacities for understanding mental experience in others begins to mature more fully. Although the security of attachment alone is a significant predictor of children's understanding of negative emotions—consistent with the benefits of more open communication with a trusted caregiver about feelings that may be disturbing or confusing—it is the security of attachment as it interacts with parental conversational style that predicts understanding of positive emotions. This may arise from the greater opportunities affording secure dyads to enjoy relaxed, positive times together that provide a forum for talking about feelings, their causes and consequences.

C. CONSCIENCE AND EMOTION

As young children acquire greater understanding of people's emotions, their motivation for cooperation and compliance expands. Concern about

the effects of their actions on others' feelings begins to emerge as a motivator of moral conduct to supplement their concern over punishment and reward. Early childhood witnesses not only the growth of emotion understanding but also the origins of conscience, as young children begin to understand behavioral expectations, become capable of monitoring their actions according to such standards, and are motivated to cooperate and comply (Kochanska & Thompson, 1997). Early advances in conscience and moral understanding are fostered by the conversations that children share with their caregivers who, like Michael's mother and the Weetabix breakfast confrontation, convey their expectations and the consequences of violating them in their everyday interactions with offspring.

The importance of parent-child conversations to moral development is not a new idea. Developmental scientists like Hoffman (1983) have long emphasized that the quality of parental communication in the discipline encounter is a crucial catalyst for moral internalization, and that whether parents engage in a reasoned discussion of human needs or emotionally laden threats influences whether offspring will adopt parental values as their own. There are two ways that our interest in parent-child conversations and the development of conscience differs from earlier approaches, however. First, we became interested in studying the influence of parent-child discourse outside of the discipline encounter. The heightened emotional arousal that is characteristic of discipline encounters may make it difficult for children to fully comprehend and reflect on the parent's message when parents and children confront each other, especially during the early years (Thompson, 1998). By contrast, as suggested by our prior findings, when parents and children converse later about past misbehavior—as they often do—the less confrontational atmosphere of shared recall may foster a fuller processing of the parent's message about expectations and values, and contribute better to the child's understanding. This might be especially true if the parent discusses standards and compliance using a richer, more elaborative conversational style that contributes to children's deeper conceptualizations of cooperation and compliance. We became interested in exploring whether this was true, and whether other features of parental discourse would have also influenced the growth of conscience.

Second, whereas the traditional research literature on parental discipline focuses on school-age children, research in our laboratory and by Kochanska (1995; Kochanska & Aksan, 1995; Kochanska & Thompson, 1997) caused us to emphasize early childhood as an important developmental period for conscience development. Kochanska's research has focused, like ours, on how the general quality of parent-child relationships (conceptualized by her as variations in "shared positive affect" as well

as attachment security) and specific parental practices contribute to the internalization of values by preschoolers. In light of the findings of our previous studies suggesting that attachment security and shared discourse together influence emotion understanding, we sought to extend this work by exploring how relationship quality and the style of parental discourse together influence developing conscience in young children (Laible & Thompson, 2000).

A sample of 42 4-year-olds and their mothers participated in a 45-minute laboratory session involving several activities. First, after 15 minutes of free play, mothers were asked to enlist their children in cleaning up the toys to permit observations of child compliance (following Kochanska & Aksan, 1995). Second, mothers conversed with their children as they shared recall of two events from the recent past—one in which the child misbehaved, and another in which the child behaved well—following procedures of our previous research, in order to observe variability in maternal conversational style. Next, the child was given a dull sorting task while mothers went into a nearby room to complete a questionnaire, after cautioning the child not to touch a nearby shelf of highly attractive toys. This resistance to temptation task, drawn from Kochanska and Aksan (1995), lasted 8 minutes, during which the child's behavior was observed for cooperation with the mother's request.

Several measures were derived from these procedures. The central assessment of conscience development, called *behavioral internalization*, was a factor score derived from a principal components analysis of detailed ratings of the child's behavior during the resistance to temptation task, and had high loadings for ratings of deviance (i.e., touching the forbidden toys) and on-task behavior (i.e., sorting activity). A second conscience measure, called *committed compliance*, was based on ratings of the child's behavior during the clean-up task. Maternal discourse during the shared recall activity with the child was evaluated in several ways. In addition to a summary rating of maternal *elaborative* style, detailed codings of maternal references to feelings, rules (social, moral, and family), the consequences of behavior, and evaluative statements were made consistently with the previous studies. These yielded two general factors: *maternal references to feelings and evaluatives* and *maternal references to rules and consequences*. Similar factor scores were derived from coding children's verbal behavior during these conversations.

Finally, two relational measures were enlisted into this study. As in earlier research, mothers completed the AQS during an independent home visit to index *attachment security*. In addition, detailed time-sampled coding of maternal and child affect throughout the laboratory procedure yielded a summary measure of their *shared positive affect*.

Consistent with the expectations of attachment theory, the security of attachment was associated with several features of maternal discourse, including a marginally significant association with elaborative style and a significant relation to maternal references to feelings and evaluatives. Several other researchers have also found an association between attachment security and maternal elaborative style, suggesting that this association is robust (see Reese, 2002, for a review). In our study, securely attached children also referred more often to feelings than did insecurely attached children (and they were higher on most conscience measures than insecurely attached children). These findings broaden our understanding of the more “open” communication of secure parent–child dyads, and suggest that one of the characteristics of the relationships they share is more elaborative conversations about recent events that incorporate more expanded discussion of emotion. These features of parent-child discourse would be expected to contribute to working models of relationships, people, and self that are illuminated by the child’s enhanced psychological understanding.

Consistent with the conclusions of the previous investigation, mothers with a more elaborative conversational style also made more frequent references to feelings and evaluatives, affirming the ways that an elaborative style enhances the lessons that children can learn about psychological processes in other people. Equally important, mothers who were high in elaborative style had offspring who were marginally significantly higher in the measure of behavioral internalization. This finding was replicated by Laible (2002b) in a longitudinal study using similar measures. Maternal elaborative style and references to emotion during shared conversation with offspring at 30 months were significant predictors of children’s behavioral internalization during the resistance to temptation task 6 months later. Both studies show that elaborative speech, and frequent references to people’s feelings, together contribute to conscience development in early childhood owing, most likely, to their richer portrayal of the needs and feelings of other people.

Our broader goal was to understand how the overall quality of the parent–child relationship and parent discourse together predicted children’s conscience development. To examine this, regression models were constructed to predict behavioral internalization, with predictors including the security of attachment, shared positive affect, maternal references to feelings and evaluatives, and maternal references to rules and consequences, along with the child’s age and gender (because of the collinearity of elaborative style with other predictors, elaborative style was not included in these regressions). A significant overall predictive model resulted, with marginally significant contributions from shared positive

affect and maternal references to feelings and evaluatives. The marginal significance of these predictors may have resulted from the collinearity between attachment security and the maternal references to feelings factor, and when attachment security was eliminated in a second, reduced regression model, the resulting model accounted for as much variance as the full model and each predictor was significant (see Laible & Thompson, 2000). Moreover, in a subsequent longitudinal study (Laible & Thompson, 2002), maternal references to emotions in conflict episodes with offspring at 30 months was a significant predictor of children's behavioral internalization in the resistance to temptation task at 36 months. Each of these studies suggests that children in relationships with high amounts of shared positivity, and whose mothers make more frequent references to people's feelings, are higher in conscience. Both relationship quality and the style of discourse seem to be important, as we had expected and as previous findings suggested.

It is striking that emotion-laden discourse was most predictive of early conscience in these studies. By contrast, the frequency of maternal references to rules and the consequences of violating them never predicted conscience in either study. Taken together, this suggests that one of the most important features of maternal discourse about misbehavior and good behavior is how it puts a human face on cooperation and compliance. A caregiver's frequent references to people's feelings, and moral statements framed in the form of evaluatives (e.g., "that was a nice thing to do"), especially in the context of a generally elaborative discourse style, probably enables young children to connect the challenges of behavioral compliance with the needs and emotions of others. This suggests that a humanistic orientation toward morality may have surprisingly early roots in moral development, with origins in how caregivers discuss everyday issues of compliance with their young offspring. Such an orientation capitalizes on young children's capacities for empathy and shared emotion in their interactions with others (Dunn, 1987).

Consistent with this view is the second general conclusion of this research: a warm, secure relationship is an important context for the development of early conscience. Both attachment security and shared positive affect were important to conscience development. Shared positive affect was also the primary contributor to a significant regression model predicting children's committed compliance in this study. The conclusion that relational quality is important to conscience is consistent with the views of developmental theorists, like Maccoby (1984) and Kochanska (1993), who have argued that a mutually responsive, harmonious parent-child relationship contributes to a child's willingness to embrace parental messages and values. This is especially likely to be true early in life owing to young children's emotional

dependency on their caregivers. Taken together, the findings from these studies suggest that when caregivers create relationships of security and shared positivity with their offspring and, in those relationships, communicate with rich elaboration the values and human needs that underlie behavioral standards, young children are most likely to adopt parental values as their own.

D. FAMILY CONFLICT: LESSONS IN EMOTION, MORALITY, AND RELATIONSHIPS

Our studies have thus far focused on the features of parent–child discourse that are shared during relaxed conversation or reading a story together. Of course, relaxed conversation is not the only forum for developing conscience, emotion knowledge, and self-understanding. In addition, young children and their caregivers engage in heated exchanges during conflict over misbehavior, preferences, or intentions. Conflict not only is a ubiquitous feature of early parent–child interaction but may also be especially provocative of psychological understanding in young children. Nothing focuses a preschooler’s attention like the awareness that disagreement exists with another. This realization affords important opportunities for young children to explore the origins of conflicting mental states and the differing feelings, expectations, and intentions that cause them. This is especially so when parental discourse during conflict episodes offers children insight into the thoughts and emotions that relate to disagreement, another’s understanding of the child’s intentions and motives (which may or may not be accurate), and efforts that might occur to resolve conflict in psychologically sophisticated ways, such as through negotiation, justifications, compromise or bargaining (Thompson, 2000). Parent–child conflict has been rarely studied in the early years, however, and least of all by attachment researchers who instead focus on the warmth and sensitivity of the parent–child relationship. Thus our next study in this series was a prospective longitudinal investigation of mother–child conflict and its relations to the child’s later understanding of emotion, morality, and relationships (Laible, 2002b; Laible & Thompson, 2002).

This study involved assessments at 30 and 36 months. At 30 months, parent–child conversations about previous episodes of the child’s misbehavior and good behavior were recorded and coded in a manner similar to the previous studies. In addition, however, the mother and child participated in a series of frustrating laboratory tasks that were designed to elicit conflict between them. Furthermore, one-and-a-half hours of unstructured parent–child interaction were audiorecorded at home during the period prior to and during dinner, which is a time of frequent mother–child

conflict. From the laboratory and home observations, each episode of mother–child conflict was identified, transcribed, and carefully coded according to several features of parent and child discourse. In addition to references to feelings, evaluatives, rules and their consequences (as in previous studies), we also coded conflict themes (e.g., over possessions, rules, aggression), conflict resolution strategy of either partner (e.g., *mitigating* conflict through compromise or bargaining; *justification* of one's views through reasoning; *aggravation* and other uses of teasing or threats), and who took the initiative in resolving the conflict (adapted from Dunn & Munn, 1987; Herrera & Dunn, 1997). At 36 months, outcome measures of emotion understanding (using the Denham task), conscience (using the behavioral internalization factor from the resistance to temptation activity), and other measures were obtained.

We have described earlier some of the findings of this investigation—for example, that conscience development at 36 months was significantly predicted by maternal references to feelings during conflict episodes 6 months earlier, consistent with the results of earlier studies. What this study added to the previous research, however, is how mothers' strategies for resolving conflicts also contributed to children's developing understanding of emotions and morality (Laible, 2002b; Laible & Thompson, 2002). In hierarchical regressions predicting emotion understanding, for example, the mother's initiative in resolving conflict, her use of justifications to clarify and explain her expectations, and her low amounts of aggravation during conflict episodes at home were each significant predictors. Similarly, low maternal aggravation and high justification during lab conflict at 30 months significantly predicted conscience at 36 months. These characteristics of maternal conflict-relevant discourse are important, and maternal justification and low aggravation are together likely to provide young children with a richer understanding of the causes and consequences of interpersonal conflict without unduly arousing the child's feelings of defensiveness or threat. Maternal justifications usually offer many lessons in psychological understanding as mothers constructively explain their expectations, convey their feelings, and clarify their perceptions of the situation. In short, adults who take the initiative in resolving conflict with their offspring and provide rational explanations for doing so appear to foster greater emotion understanding and conscience development in young children. These conclusions are consistent with the well-documented effects of inductive discipline practices on moral internalization with older children, and suggest that how parents convey their behavioral expectations in the context of family conflict—often *before* offspring have misbehaved—is comparably influential on conscience development at younger ages.

IV. Conclusion: The Impact of Relationships on Emotion, Morality—and the Self

How do the working models that arise from attachment relationships develop? Although we have not sought to directly measure working models in these studies, these findings are nevertheless relevant to attachment theory because understanding how people feel, how to get along with others, and how to find approval in the eyes of people who matter are each relevant to the representations of self, others, and relationships that the working models construct embodies. If Bretherton (1991; Bretherton & Munholland, 1999) is correct that working models comprise a system of hierarchically organized representations that are tied to other belief systems, then a young mind that is striving to understand the psychological realities underlying relationships and social interaction enlists that knowledge into working models of the characteristics of attachment figures, the rules of intimacy, and the value of the self.

What do the findings of these studies tell us, then, about the development of working models? First, they are shaped by the emotional tenor of parent–child relationships that are defined not only by security but also by shared positivity, conflict resolution style, and by other characteristics. Attachment theorists are correct that the security of attachment is a significant influence on developing psychological understanding in early childhood, especially as it provides a confident haven in which to share and understand distressing feelings or confusing experiences. But it is not the only definition of relational quality. The shared positive affect enjoyed by parents and children is another important influence on developing conscience, for example, although variations in this relational measure are not strongly correlated with attachment security (Kochanska & Thompson, 1997; Laible & Thompson, 2000). How parents and offspring mutually resolve conflict is yet another definer of their relationship quality that also affects psychological understanding, especially as young children learn about differing mental states and how they can be constructively harmonized. Close relationships are, in short, multidimensional. Early psychological understanding has origins in these broader emotional qualities of the parent–child relationship that teach young children what to expect from others.

Second, working models arise not only from a young child's direct experience in such relationships but also from the secondary representations that arise from parent–child conversation. Because of how language articulates the hidden psychological world underlying human behavior, there are many lessons embedded in conversations between parents and offspring about the day's events, while reading a storybook, or when

arguing during dinnertime. A mother's discussions of people's feelings is, for example, a catalyst to conscience development. The most important feature of parental conversational style, however, appears to be the extent to which the adult richly elaborates the child's understanding of everyday events through background details, provocative questions, and retelling. Our studies indicate that in addition to its benefits for event representation and memory, elaborative discourse also fosters enhanced understanding of emotion and morality through the richer portrayal it provides of the psychological characteristics of other people. These features of parental discourse help to clarify the nature of the more open, fluid communicative style shared by parents and children in secure attachment relationships, and suggests that parental sensitivity influences working models partly through a parent's style of discussing everyday events with offspring.

Third, and most speculatively, parent-child conversation teaches psychological understanding and also humanistic concern, and both are incorporated into developing working models. In two studies, maternal references to feelings predicted children's conscience development, suggesting that frequent comments about people's emotions may sensitize young children to the human needs underlying behavioral standards and the human costs of misbehavior. This is one of the reasons that inductive discipline is believed to be influential in moral internalization for older children, and the evidence of our research and other studies increasingly suggests that similar processes are relevant to conscience development in early childhood. If so, this suggests not only that traditional theories of moral development require updating, but also that the working models that arise from the experiences of early childhood may incorporate developing concern for the needs and interests of others that arise, in part, from processes of parent-child communication.

These conclusions provide a basis for future studies in this area, because a number of questions remain to be explored. One concerns the origins of variations in parental conversational style, particularly elaborative discourse. Is this merely another manifestation of parental sensitivity? How is conversational style associated with variations in education, parenting involvement, beliefs about children, and other characteristics that may also contribute to parental practices that foster emotion understanding, conscience, and other aspects of psychological understanding in offspring? Better conceptualizing the network of parental influences that contribute to the development of working models, especially through conversational style, is one of the important tasks of attachment researchers and others who are interested in sociopersonality growth during the preschool years.

Another question for further study concerns other elements of parent-child conversation that may also guide emerging psychological

understanding. As noted earlier, maternal representations of shared events incorporate motivational and emotional inferences, attributions of causality, moral evaluations of behavior, and references to character and personality (especially of the child) that are likely to influence how young children think about people and themselves. Moreover, typical conversations are accompanied by a rich nonverbal language that embeds words in facial expressions, vocal tone, affective gestures, and postural cues that add to (or change) the significance of what is said to young children. Our coding systems have only begun to capture the richness and variety of these multifaceted dimensions of parent–child conversation, but understanding this variability is essential to comprehending the effects of discourse on young children’s representations of experience. How is elaborative discourse related, for example, to nonverbal cues of emotion used by a parent during conversational exchanges? These and other questions also remain for future research.

Moreover, conversations about past events, storybook reading, and conflict episodes encompass only a small portion of the circumstances in which conversation can influence how young children understand the psychological world. More difficult to study—but perhaps equally significant for developing representations—is what caregivers say during the course of shared activity, or in anticipation of events that will occur later in the day. These and other kinds of shared discourse may be especially important in shaping young children’s understanding of experience by providing concurrent or predictive conceptual structures within which to organize event representation. We are particularly interested in how these conceptual structures may attune young children’s expectations for the psychological responses of other people.

Finally, the self. Developing conscience and emotion understanding contribute to a child’s conceptions of human relationships, psychological motivation, and the self in relation to others. The skills that young children exhibit in Denham’s puppet task are relevant to how children conceptualize their own feelings, and children’s capacities to resist the forbidden toys in the lab contribute to feelings of self-worth as compliance is exhibited at home also. Consistent with attachment theory, the relational experiences that we have studied—shared conversation about everyday events, conflict resolution at home, storybook reading, shared positive affect in casual interaction—provide catalysts for how young children begin to regard themselves as well as others. Even so, another new direction for our research program is to examine how these features of parent–child interaction contribute to young children’s earliest forms of psychological self-understanding. We are particularly interested in how mothers’ representations of the personalities of their offspring are reflected in their conversations

with children about shared experiences, and whether these attributions are also reflected in how children describe themselves to a research assistant. In doing so, we are beginning to probe the working models of the self and the intergenerational influences that shape developing self-awareness and psychological understanding.

REFERENCES

- Ainsworth, M. D. S. (1989). Attachments beyond infancy. *American Psychologist*, *44*, 709–716.
- Bartsch, K., & Wellman, H. M. (1995). *Children talk about the mind*. New York: Oxford University Press.
- Belsky, J., & Cassidy, J. (1994). Attachment: Theory and evidence. In M. Rutter & D. Hay (Eds.), *Development through life* (pp. 373–402). Oxford: Blackwell.
- Belsky, J., Spritz, B., & Crnic, K. (1996). Infant attachment security and affective-cognitive information processing at age 3. *Psychological Science*, *7*, 111–114.
- Bowlby, J. (1973). *Attachment and loss*. Vol. 2. *Separation: Anxiety and anger*. New York: Basic.
- Bowlby, J. (1980). *Attachment and loss*. Vol. 3. *Loss: Sadness and depression*. New York: Basic.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. 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.), *Socioemotional development. Nebraska Symposium on Motivation*, Vol. 36 (pp. 57–113). Lincoln: University of Nebraska Press.
- Bretherton, I. (1991). Pouring new wine into old bottles: The social self as internal working model. In M. R. Gunnar & L. A. Sroufe (Eds.), *Self processes and development. Minnesota Symposia on Child Psychology*, Vol. 23 (pp. 1–41). Hillsdale, NJ: Erlbaum.
- Bretherton, I., & Munholland, K. A. (1999). Internal working models in attachment relationships: A construct revisited. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment* (pp. 89–111). New York: Guilford.
- Brown, J. R., & Dunn, J. (1996). Continuities in emotional understanding from 3 to 6. *Child Development*, *67*, 789–802.
- Cervantes, C. A., & Callanan, M. A. (1998). Labels and explanations in mother-child emotion talk: Age and gender differences. *Developmental Psychology*, *34*, 88–98.
- Craik, K. (1943). *The nature of explanation*. Cambridge, England: Cambridge University Press.
- Denham, S. (1986). Social cognition, prosocial behavior, and emotion in preschoolers: Contextual validation. *Child Development*, *57*, 194–201.
- Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialization of preschoolers' emotion understanding. *Developmental Psychology*, *30*, 928–936.
- 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., & Brown, J. (1991). Relationships, talk about feelings, and the development of affect regulation in early childhood. In J. Garber & K. A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 89–108). Cambridge: Cambridge University Press.
- 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., Brown, J., & Maguire, M. (1995). The development of children's moral sensibility: Individual differences and emotional understanding. *Developmental Psychology, 31*, 649–659.
- Dunn, J., Brown, J., Slomkowski, C., Tesla, C., & Youngblade, L. (1991). Young children's understanding of other people's feelings and beliefs: Individual differences and their antecedents. *Child Development, 62*, 1352–1366.
- Dunn, J., & Munn, P. (1987). Development of justification in disputes with mother and sibling. *Developmental Psychology, 23*, 791–798.
- Fabes, R. A., Eisenberg, N., McCormick, S. E., & Wilson, M. S. (1988). Young children's appraisals of others' spontaneous emotional reactions. *Developmental Psychology, 27*, 858–866.
- Fivush, R. (1993). Emotional content of parent-child conversations about the past. In C. A. Nelson (Ed.), *Memory and affect in development. Minnesota Symposia on Child Psychology*, Vol. 23 (pp. 39–77). Hillsdale, NJ: Erlbaum.
- Fivush, R., & Fromhoff, F. A. (1988). Style and structure in mother-child conversations about the past. *Discourse Processes, 8*, 177–204.
- Flavell, J. H., & Miller, P. H. (1998). Social cognition. In W. Damon (Ed.), *Handbook of child psychology* (5th Ed.), Vol. 2. *Cognition, perception, and language* (D. Kuhn & R. S. Sigler, Vol. Eds.) (pp. 851–898). New York: Wiley.
- Herrera, C., & Dunn, J. (1997). Early experiences with family conflict: Implications for arguments with a close friend. *Developmental Psychology, 33*, 869–881.
- Harris, P. L. (1996). Between Strange Situation and false beliefs: Working models and theories of mind. In W. Koops, J. Hoeksma, & D. van den Boom (Eds.), *Early mother-child interaction and attachment: Old and new approaches* (pp. 187–199). Amsterdam: Elsevier.
- Hinde, R. A. (1988). Continuities and discontinuities: Conceptual issues and methodological considerations. In M. Rutter (Ed.), *Studies of psychosocial risk: The power of longitudinal data* (pp. 367–383). Cambridge: Cambridge University Press.
- Hoffman, M. L. (1983). Affective and cognitive processes in moral internalization. In E. T. Higgins, D. Ruble, & W. Hartup (Eds.), *Social cognition and social development* (pp. 236–274). New York: Cambridge University Press.
- Hudson, J. A. (1990). The emergence of autobiographical memory in mother-child conversation. In R. Fivush & J. A. Hudson (Eds.), *Knowing and remembering in young children* (pp. 166–196). Cambridge: Cambridge University Press.
- Hudson, J. A. (1993). Understanding events: The development of script knowledge. In M. Bennett (Ed.), *The child as psychologist: An introduction to the development of social cognition* (pp. 142–167). New York: Harvester Wheatsheaf.
- Johnson-Laird, P. N. (1983). *Mental models*. Cambridge: Harvard University Press.
- Kobak, R. R., & Cole, H. I. (1994). Attachment and meta-monitoring: Implications for adolescent autonomy and psychopathology. In D. Cicchetti & S. L. Toth (Eds.), *Disorders and dysfunctions of the self: Rochester Symposium on Developmental Psychopathology*, Vol. 5 (pp. 267–297). Rochester, NY: University of Rochester Press.
- Kochanska, G. (1993). Toward a synthesis of parental socialization and child temperament in early development of conscience. *Child Development, 62*, 325–347.
- Kochanska, G. (1995). Children's temperament, mothers' discipline, and security of attachment: Multiple pathways to emerging internalization. *Child Development, 66*, 597–615.
- 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., & Thompson, R. A. (1997). The emergence and development of conscience in toddlerhood and early childhood. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values* (pp. 53–77). New York: Wiley.
- Laible, D. J. (2002a). *Mother-child discourse in two contexts: Factors that predict differences in the quality and emotional content of the discourse and the consequences of those differences for socioemotional development*. Unpublished manuscript, Southern Methodist University.
- Laible, D. J. (2002b). *Mother-child discourse surrounding a child's past behavior at 30 months: Links to emotional understanding and early conscience development at 36 months*. Unpublished manuscript, Southern Methodist University.
- Laible, D. J., & Thompson, R. A. (1998). Attachment and emotional understanding in preschool children. *Developmental Psychology*, **34**, 1038–1045.
- Laible, D. J., & Thompson, R. A. (2000). Mother-child discourse, attachment security, shared positive affect, and early conscience development. *Child Development*, **71**, 1424–1440.
- Laible, D. J., & Thompson, R. A. (2002). Mother-child conflict in the toddler years: Lessons in emotion, morality, and relationships. *Child Development*, **73**, 1187–1203.
- Lamb, M. E. (1981). Developing trust and perceived effectance in infancy. In L. Lipsitt (Ed.), *Advances in infancy research*, Vol. 1 (pp. 101–127). New York: Ablex.
- Levine, L. J., Stein, N. L., & Liwag, M. D. (1999). Remembering children's emotions: Sources of concordant and discordant accounts between parents and children. *Developmental Psychology*, **35**, 790–801.
- Maccoby, E. E. (1984). Socialization and developmental change. *Child Development*, **55**, 317–328.
- Marvin, R. S., & Britner, P. A. (1999). Normative development: The ontogeny of attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment* (pp. 44–67). New York: Guilford.
- 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. 217–253). Hillsdale, NJ: Erlbaum.
- Meins, E., Fernyhough, C., Russell, J., & Clark-Carter, D. (1998). Security of attachment as a predictor of symbolic and mentalising abilities: A longitudinal study. *Social Development*, **7**, 1–24.
- Miller, P. J. (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: Cambridge University Press.
- Miller, P. J., Fung, H., & Mintz, J. (1996). Self-construction through narrative practices: A Chinese and American comparison of early socialization. *Ethos*, **24**, 237–280.
- Miller, P. J., Potts, R., Fung, H., Hoogstra, L., & Mintz, J. (1990). Narrative practices and the social construction of self in childhood. *American Ethnologist*, **17**, 292–311.
- Nelson, K. (Ed.) (1989). *Narratives from the crib*. Cambridge: Harvard University Press.
- Nelson, K. (1993a). The psychological and social origins of autobiographical memory. *Psychological Science*, **4**, 7–14.
- Nelson, K. (1993b). Events, narratives, memory: What develops? In C. A. Nelson (Ed.), *Memory and affect in development. Minnesota Symposia in Child Psychology*, Vol. 26 (pp. 1–24). Hillsdale, NJ: Erlbaum.
- Nelson, K. (1996). *Language in cognitive development: The emergence of the mediated mind*. New York: Cambridge University Press.
- Nelson, K., & Gruendel, J. (1981). Generalized event representations: Basic building blocks of cognitive development. In M. Lamb & A. Brown (Eds.), *Advances in developmental psychology* (pp. 131–158). Hillsdale, NJ: Erlbaum.
- Oppenheim, D., & Waters, H. A. (1995). Narrative processes and attachment representations: Issues of development and assessment. In E. Waters, B. E. Vaughn, G. Posada, & K. Kondo-Ikemura (Eds.), *Caregiving, cultural, and cognitive perspectives on secure-base*

- behavior and working models: New growing points in attachment theory and research. *Monographs of the Society for Research in Child Development*, 60 (Serial no. 244), 197–215.
- Ontai, L. L., & Thompson, R. A. (2002). Patterns of attachment and maternal discourse effects on children's emotion understanding from 3 to 5 years of age. *Social Development*, 12, 657–675.
- Reese, E. (2002). Social factors in the development of autobiographical memory: The state of the art. *Social Development*, 11, 124–142.
- Reese, E., & Fivush, R. (1993). Parental styles of talking about the past. *Developmental Psychology*, 29, 596–606.
- Rogoff, B. (1990). *Apprenticeship in thinking*. New York: Oxford University Press.
- Rutter, M., & O'Connor, T. G. (1999). Implications of attachment theory for child care policies. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment* (pp. 823–844). New York: Guilford.
- Schank, R. C. (1982). *Dynamic memory: A theory of reminding and learning in computers and people*. Cambridge: Cambridge University Press.
- Stern, D. N. (1989). The representation of relational patterns: Developmental considerations. In A. J. Sameroff & R. N. Emde (Eds.), *Relationship disturbances in early childhood* (pp. 52–69). New York: Basic.
- 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. A. (1998). Early sociopersonality development. In W. Damon (Ed.), *Handbook of child psychology* (5th Ed.), Vol. 3. *Social, emotional, and personality development* (N. Eisenberg, Vol. Ed.) (pp. 25–104). New York: Wiley.
- Thompson, R. A. (1999). Early attachment and later development. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment* (pp. 265–286). New York: Guilford.
- Thompson, R. A. (2000). The legacy of early attachments. *Child Development*, 71, 145–152.
- Thompson, R. A., & Raikes, H. A. (in press). Toward the next quarter-century: Conceptual and methodological challenges for attachment theory. *Development and Psychopathology*, in press.
- Tomaseello, M. (1999). *The cultural origins of human cognition*. Cambridge: Harvard University Press.
- van Ijzendoorn, M. H. (1995). The association between adult attachment representations and infant attachment, parental responsiveness, and clinical status: A meta-analysis of the predictive validity of the Adult Attachment Interview. *Psychological Bulletin*, 113, 404–410.
- Waters, E., & Deane, K. E. (1985). Defining and assessing individual differences in attachment relationships: Q-methodology and the organization of behavior in infancy and early childhood. In I. Bretherton & E. Waters (Eds.), *Growing points of attachment theory and research. Monographs of the Society for Research in Child Development*, 50 (1/2, Serial no. 209), 41–65.
- Welch-Ross, M. K. (1995). An integrative model of the development of autobiographical memory. *Developmental Review*, 15, 338–365.
- Welch-Ross, M. K. (1997). Mother-child participation in conversation about the past: Relationships to preschoolers' theory of mind. *Developmental Psychology*, 33, 618–629.
- Wellman, H. M., Cross, D., & Watson, J. (2001). Meta-analysis of theory-of-mind development: The truth about false belief. *Child Development*, 72, 655–684.

