Moral development, conversation, and the development of internal working models

Ross A. Thompson and Abby C. Winer

How do children become moral? This question has long been debated by parents, philosophers and, more recently, psychologists. It is not difficult to understand why. Moral development involves searching questions about human nature, the role of society, the nature of parent—child relationships, and the influences that motivate people to care about others. Across the centuries, moral development has been portrayed as a process of civilizing selfish natural impulses, liberating children's naturally positive tendencies, socializing values, rewarding compliance, and more recently, stimulating mature judgment and understanding. Because it is so important, fostering moral development enlists core beliefs about who we are and how we get along with each other.

From developmental science, new ideas about the growth of morality have emerged (Thompson, 2012; Thompson, in press). Traditionally viewed as the child's internalization of parental values, moral development is now seen as an interaction between parental guidance and the child's construction of moral understanding. Early childhood was traditionally viewed as a period of irrationality and egocentrism, but is now seen as a foundational period for the growth of moral sensibility. Developmental researchers are also adapting from traditional views a new appreciation of emotion as a motivator of moral conduct, and are integrating it with contemporary understanding of the importance of early relationships. Taken together, new theories of moral development are emerging to encompass these and other new ideas about the origins of moral behavior and understanding.

Attachment theory has the potential of providing a new perspective on moral development. Attachment theory is conventionally viewed as a theory of parent-child relationships, and there is not a well-developed "attachment perspective" to moral development. Yet the views of attachment theory are congenial to these new directions in contemporary

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thinking about moral development, including its focus on the young child's construction of understanding from social experience, its emphasis on the influences of emotion on social motivation and understanding, and its focus on relationships as developmental forums for learning about interacting with others. Equally importantly, attachment theorists' emphasis on the development of mental working models of relationships, self, and other people provides a conceptual foundation for understanding how young children learn about others' needs and their responsibilities to other people, and a basis for studying how these models develop through parental care and conversation.

The purpose of this chapter is to examine the relevance of attachment theory to moral development. Our goal is to show that an attachment perspective does far more than predict that securely attached children will be more cooperative and compliant than insecurely attached children although such differences are important. Beyond this, an attachment perspective entails examining how early relational experience contributes to moral behavior and to the development of integrative, affectively colored. dynamic social representations relevant to moral conduct, and how these mental models influence developing social behavior and social cognition. In the first part of this chapter, therefore, we describe and analyze the concept of "internal working models" in attachment theory, the strengths and weaknesses of this theoretical construct, and its relevance to contemporary research on the security of attachment in children and adults. Next, we focus on ideas from within attachment theory that highlight parent-child interaction and conversation as a forum for the growth of these mental models. In the third section, we summarize research from within and outside attachment theory that elucidates why conversation should be important to young children's developing representations of the social world. We consider how this is relevant to moral development, and illustrate these applications with profiles of research from our own lab and those of others. In particular, we discuss our research on the development of prosocial motivation in young children, an important but underresearched issue related to the development of moral awareness. The chapter concludes with some thoughts about future research directions.

Attachment theory and internal working models

One of the most important features of attachment theory is its emphasis on the functioning of mental working models of relationships, as illustrated by this discussion by its founder, John Bowlby:

Starting, we may suppose, towards the end of his first year, and probably especially actively during his second and third when he acquires the powerful and extraordinary gift of language, a child is busy constructing working models of

how the physical world may be expected to behave, how his mother and other significant persons may be expected to behave, how he himself may be expected to behave, and how each interacts with all the others. Within the framework of these working models he evaluates his situation and makes his plans. And within the framework of the working models of his mother and himself he evaluates special aspects of his situation and makes his attachment plans. How these models are built up and thenceforward bias perception and evaluation, how adequate and effective for planning they become, how valid or distorted as representations they are, and what conditions help to hinder their development, all these are matters of great consequence for understanding the different ways in which attachment behaviour becomes organised as children grow older. (Bowlby, 1969, p. 354)

Mental models from relational experience

When John Bowlby (1969, 1973, 1980) sought to create an updated theoretical account of infant-mother attachment, he integrated several new theoretical views into the psychoanalytic orientation of his training. Ethological theory situated attachment within the inclusive fitness considerations of the species, and developmental theory (particularly Piaget's theory) provided an account for how children's understanding of other people develops in the early years. Engineering control systems theory and a behavioral systems account together were enlisted to explain the functioning of attachment processes in young children. Bowlby integrated these ideas into a psychoanalytic model that emphasized the organizational influences of emotion, the formative effects of early experience, and respect for unconscious processes. Furthermore, as a psychoanalyst trained in the object relations school, Bowlby included in attachment theory an emphasis on the importance of internal (conscious and unconscious) representations of close relationships that develop in early childhood and have enduring influences on subsequent relationships and self-awareness.

To conceptualize how these mental representations develop and influence social behavior, Bowlby borrowed from research in cognitive psychology that was emerging at the time that he was writing. The term "internal working model" initially concerned mental models of physical landscapes by which individuals navigate their way. Children and adults readily create these mental maps, and these conceptual maps become progressively more accurate, detailed, and nuanced as people have further experience with the physical terrain, and models can be tested against the evidence of experience, evaluated for internal consistency, and gradually improved. When these ideas were integrated with object relations theory, Bowlby created a new way of thinking about the mental representations associated with mother-child attachment relationships. As illustrated in the passage that opens this section, these mental maps of the social landscape enable young children to predict the behavior of the

parent, judge on this basis how to behave and interact with that person, and, because these expectations are steeped in emotion, perceive the parent and the self in valenced ways. Moreover, Bowlby believed that these mental working models of social experience become progressively more accurate and detailed over time as they are corrected by experience and improved with the child's cognitive growth. Concerning the latter, he argued that as the young child becomes more capable of understanding the caregiver's viewpoint and goals, this knowledge would be gradually balanced with the child's own needs and desires to create a more flexible "goal-corrected partnership" between them (Bowlby, 1969).

As is often true, when ideas from different theoretical approaches are integrated into a new perspective, there can be tensions between them. In Bowlby's theory, for example, the representations described by object relations theory are nonconscious and implicit, while the mental models studied by cognitive psychology can be either implicit or explicit, and are usually consciously accessible (Thompson, 2008a). Despite this theoretical ambiguity, however, these representations should influence social behavior and understanding in either case. Furthermore, although Bowlby sought to enlist Piaget's theory to portray the growth of mental working models, Bowlby's developmental account was not fully elaborated and also requires updating in light of post-Piagetian cognitive developmental research. This is another tension in the attachment theoretic portrayal of internal working models.

In attachment theory, these mental models of the social world are believed to influence behavior and thought in several ways. They serve, first, a *predictive* function because, as Bowlby noted in the passage earlier quoted, they enable children to forecast the behavior of parents and other significant people and to accommodate their actions accordingly. This predictive function can be observed in the emergence of rudimentary social expectations influencing the behavior of infants well before their first birthday. For example, seven-month-olds have been observed, when distressed and alone in their cribs, to become quiet in anticipation of the arrival of the mother when they hear her approaching footsteps, but to increase crying when they hear her footsteps but she does not arrive to pick them up (e.g., Lamb & Malkin, 1986). These developing social expectations are a foundation for the development of a secure or insecure attachment.

Second, these mental models serve an *interpretative* function by causing children to construe others' behavior in ways that are consistent with the expectations generated by their models of the social world. Some children confidently expect that others will respond warmly or fairly to them and, as a consequence, they respond in such a manner as to generate more positive interactions with them. Other children, by contrast, so

anticipate another's disinterest or bad intentions that they remain distant and cautious, and thus evoke the responses they expect. The significance of this interpretative function of mental models is not only that they affect children's encounters with new social partners, but they also affect how children respond to familiar people. This is one reason, for example, it can be difficult to repair and improve relationships in which both partners are responding to each other on the basis of a painful past history together. As discussed further below, attachment research suggests that by early childhood, securely attached children interact more sociably with familiar and unfamiliar partners compared to insecurely attached children and that this is based, at least in part, on more constructive attitudes and beliefs about other people (Thompson, 2008b).

Third, mental models serve a *self-regulatory* function as children alter their behavior in response to the expectations, interpretations, and emotions associated with other people. As these examples illustrate, prior relationships influence later relationships primarily through the expectations, attributions, beliefs, and feelings toward another that are the legacy of the child's experience with close relational partners in the past.

The expectations and beliefs generated by early relational experience influence how children interact and think about familiar and unfamiliar partners, but they are also thought to be influential for children's developing self-awareness and self-concept. To Bowlby, this self-understanding primarily concerns children's belief that they are worthy of being loved based on their experiences of parental care, but it is possible to extend this formulation to understand how children's beliefs in their competence, skills, and weaknesses, and positive and negative self-image would be comparably affected by the representations emerging from the parent–child relationship (Colman & Thompson, 2002; Goodvin et al., 2008; Thompson, 2008b).

This discussion has focused primarily on the *content* of children's mental models of the social world. Although this is important, Bowlby's psychoanalytic orientation also led him to focus on the influence of these models on *information processing*. As he noted in the opening passage, mental models can bias perception and evaluation in ways that alter their validity and usefulness, and there are two models of biased information processing that he proposed. In the defensive exclusion model, children (and adults) are unconsciously motivated to restrict conscious access to information that would be disturbing or threatening if explicitly recognized. In this view, an individual is nonconsciously motivated to overlook or "forget" hurtful or painful behavior toward them from an attachment figure. Alternatively, in the schema-congruent model, information that is consistent with preexisting mental models is more likely to receive

attention and be processed, while incompatible information is more likely to be ignored or overlooked. This would predict a negative processing bias for insecurely attached children, and a positivity bias for children with secure attachments. Although these alternative models do not yield entirely consistent predictions (especially for the responses of children with insecure attachments), Dykas and Cassidy (2011) have proposed that defensive exclusion is more likely to occur when individuals are confronted with information that is likely to cause psychological pain, with a negative processing bias more likely when this is not the case.

Because Bowlby's theory of internal working models is rooted in attachment theory, research testing his formulations has focused on differences between securely attached and insecurely attached children. In general, they have supported theoretical expectations concerning the content of the mental models arising from early attachments (Thompson, 2008b). Securely attached children and adolescents have been found, for example, to be more advanced in constructive features of social cognition, which would be consistent with their more constructive beliefs and expectations for other people. More specifically, children in secure attachments devise more competent solutions to social problem-solving dilemmas, have enhanced emotion understanding, and are less likely to make negative assumptions about the motives of other children, and there is evidence that these socio-cognitive achievements are directly relevant to their social competence with others (e.g., Laible & Thompson, 1998; Raikes & Thompson, 2008a; Raikes et al., 2013). Children with secure attachments also exhibit more positive self-concept in how they explicitly describe themselves and in their implicit self-confidence and persistence when working on difficult tasks (Colman & Thompson, 2002; Goodvin et al., 2008). Pertinent to the themes of this chapter, securely attached children are also more advanced in conscience development, which includes their greater cooperation and compliance with maternal requests (Kochanska et al., 2004; Laible & Thompson, 2000). This is consistent with the theoretical view that the security of the parent-child relationship promotes different ways of thinking about the mutual responsibilities of family relationships, and will be discussed further later in this chapter.

Research with children and adults has also confirmed many of the predictions of attachment theory concerning the information-processing influences of attachment-related mental models. In studies of attention and memory for different kinds of social information, social perceptions, and biases, securely attached individuals are more likely to exhibit a constructive positivity bias in their processing of social information, with insecurely attached individuals more likely to exhibit either defensive exclusion or a negativity bias (Dykas & Cassidy, 2011).

Although these findings are supportive of the predictions of attachment theory, it is important to note that other research concerning relationally based biases in the content or processing of social information are also relevant to these theoretical predictions. In the study of peer relationships, for example, children who are rejected by peers because of their aggressive conduct exhibit several social information-processing biases that help maintain their negative conduct, including a hostile attribution bias concerning the motives of other children, endorsement of social goals that involve dominance, and the belief that aggressive solutions are appropriate to social conflict (Rubin et al., 2011). In this respect, therefore, social experience with peers contributes to the development of mental models of the social world that are consistent with earlier experience, and help to maintain these beliefs in the context of subsequent interactions. Likewise, the research on social support shows that if recipients experience aid as humiliating (because it violates expectations of adult self-reliance), it can lead to negative mental representations of the benefactor's support that can paradoxically cause recipients to undermine the provision of further assistance (Fisher, Nadler, & Witcher-Alagna, 1982; Thompson, 1995). In these instances, mental models (based, in part, on social equity norms) can bias social judgments of helpers and contribute to dysfunctional responses to offers of further aid.

These examples indicate that the model of relationship-based mental representations developed by Bowlby is more broadly useful in understanding how mental representations bridge earlier social experience and subsequent social behavior and understanding (Dweck & London, 2004). These broader applications are not surprising because one can see in Bowlby's formulation the functioning of several psychological processes studied by contemporary researchers, including expectancy biases, the self-confirming prophecy, confirmation biases, causal attribution biases, social scripts, and processes of constructive memory. This portrayal of the development of mental working models is also consistent with research on the development of children's early social expectations, event representation, and autobiographical memory, and the growth of self-concept (Thompson, 2010). The internal working models concept integrates these ideas into a relationship-based formulation that incorporates the (sometimes strong) emotion associated with relational experience. These conceptual connections between Bowlby's construct and other psychological processes are important, however, in light of criticism that the internal working models concept is too inclusive and poorly defined (Belsky & Cassidy, 1994; Thompson & Raikes, 2003). According to this critique, attachment researchers too readily use the concept of internal working models as a flexibly post hoc, catch-all explanation for

almost any empirical finding of the association of attachment security with other behavior. This concern requires researchers within and outside of attachment theory to be clear and specific in their applications of internal working models to behavioral development, preferably with reference also to specific, relevant psychological processes highlighted in other research literatures.

Relevance to moral development

How are internal working models relevant to early moral development? One implication is that early moral sensibility develops in a relational context and enlists a variety of socio-cognitive processes relevant to how young children think of themselves in relation to others. To attachment theorists, the relational context facilitating moral development is characterized by parental sensitivity leading to a secure attachment, in which children experience warm responsiveness to their feelings and needs, and create mental models of relationships in which responsiveness is a central feature. Outside of attachment theory, researchers of conscience development have reached a similar conclusion. Kochanska (2002a; Kochanska & Aksan, 2004) argues that early conscience development is founded on the growth of a mutually responsive orientation between parent and child that sensitizes the child to the reciprocal obligations of close relationships. In this context, a young child is motivated by the parent's warm, sensitive care to respond constructively to parental initiatives, adopt parental values, and value a positive parent-child relationship that entails the child's cooperative response to parental requests. This mutually responsive parent-child orientation is not the same as a secure attachment, but they share a common focus on responsiveness and shared warmth. This distinguishes them from alternative portrayals of how the parent-child relationship influences moral development that emphasize parental authority, the child's fear of loss of love, or even the rational induction of a sense of responsibility.

Because internal working models involve a nested system of interrelated representations in Bowlby's theory, moreover, it implies that understanding moral development requires more than studying how children acquire and comply with parental values. Values acquisition, in this view, is connected to other social representations, such as how children perceive themselves as moral agents, how they understand relationships and social obligations, and their beliefs about what other people are like and expect of them. From this perspective, moreover, the integrity of moral development is based on the extent to which these linked representational processes are consistent and mutually supportive. A preschooler's capacity to respect the feelings of another child may be based not only on how much this value is reinforced at home but also on the child's experience of having her own feelings respected by others, her view of herself as one who cares about others' feelings (a component of what Kochanska [2002b] calls the "moral self"), and her expectation for how others would react to her efforts to respond sensitively to others' emotional displays. If a child believes that others would belittle or exploit her constructive response to their feelings, or her relational history does not include regular experience of sensitivity to her own emotions, it may be difficult for such a child to maintain fidelity to such a moral maxim, however much it has been reinforced at home or understood by the child. In more extreme circumstances, such as an aversive relational history, it may even be difficult for the child to perceive others' feelings accurately, especially where negative emotions are concerned (Pollak, 2008).

Another implication of the internal working models construct for moral development concerns the role of emotion. Emotion is a young child's first entreé into another person's internal experience because of early advances in emotion understanding and theory of mind. Before the first birthday, for example, infants are capable of accurately perceiving positive and negative emotional expressions in the face and voice, and they understand that emotions are evoked in reference to other people or situations (Moses et al., 2001). During the second year, they comprehend the association of emotion with the satisfaction (or frustration) of goals and needs (Repacholi & Gopnik, 1997), and emotion understanding develops further to connect emotional expressions to one's thoughts, expectations, intentions, desires, and other internal psychological processes. This suggests, consistent with the psychoanalytic orientation of Bowlby's theory, that emotions are privileged sources of social information as well as salient aspects of relational experience, selfunderstanding, and person perception. Emotion and emotion understanding are likely, therefore, to be important aspects of early moral development, but in a manner different from the emphasis of traditional moral development theories on feelings of guilt or shame, fear of punishment, or anxiety over loss of parental love. From an attachment perspective, emotion is important to the development of interpersonal understanding.

The emphasis on multifaceted aspects of early relational experience, the interrelated representations associated with moral values and compliance, and the significance of emotion for moral understanding are each implications of the theory of internal working models for moral development. There are other implications as well, such as the view that moral socialization does not occur only in the discipline encounter or other

situations of explicit moral compliance, but also (and perhaps primarily) in other contexts that influence children's conceptions of themselves as moral actors and relationships with others. One of these contexts is parent—child conversation.

Development of mental working models

How do these mental models develop? To attachment theorists, the sensitivity and responsiveness of parental care is the primary influence on the development of secure or insecure attachments in infancy. The research evidence is generally consistent with this view: parental sensitivity is a reliable if modest predictor of the security of attachment (De Wolff & van Ijzendoorn, 1997). As infants mature, however, parental sensitivity becomes conveyed in more complex ways in accordance with the child's growing psychological and representational capabilities. As Bowlby noted in the preceding passage, language development provides new and powerful conceptual tools for children's representations of parental sensitivity and other aspects of social experience.

Language is important for many reasons, including the conceptual flexibility it affords for representing mental and social experience lexically and relating it to other similarly encoded experiences in memory (Thompson, 2008a). This is especially true of psychological phenomena that are invisible and complex. To a young child, the acquisition of a simple emotional lexicon parses the flow of emotional behavior into categories - "happy," "sad," "mad," and so forth - that can be conceptually related to other emotional experiences in oneself and others. In the moral domain, language acquisition connects behavior to evaluative terms - "good," "bad," "nice," "mean" - that likewise categorize human and relational experience, and provides the basis for more general representations of acceptable and unacceptable conduct. It is important to note that these emotional and evaluative categories are not necessarily created by the acquisition of a relevant lexicon, since there is evidence that preverbal infants respond categorically to their perceptions of others' emotions and actions (Thompson, 2006). With the advent of language, however, knowledge structures become reorganized by linguistic categories, and in comparable fashion, the implicit affective-perceptual internal working models of infancy become developmentally reorganized into more explicit knowledge systems according to the representations of relational experience that language affords the preschooler (Thompson, 2000; Thompson, Laible, & Ontai, 2003).

Another consequence of language for the development of internal working models is that experiences can be shared with another, and thus children's understanding derives not just from their direct representations of experience but also from the secondary representations obtained from conversation. The combination of these sources of understanding can be conceptually provocative, especially when children are young, because of the richer representations adults can provide. Consider, for example, the following conversation between a 21-month-old and his mother about an event earlier in the morning (from Dunn & Brown, 1991: 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]

Although the child's memory for the morning's confrontation may have initially focused on having to eat unpleasant breakfast cereal, the mother's account of the morning's events focuses instead on her son's lack of cooperation as the cause of crying. In this short conversation, therefore, the child is faced with lessons in emotion and morality because of how the mother re-represents their shared experience. Although an older child might simply reject the mother's alternative construction of events, research on early event representation suggests that young children are more likely to incorporate the mother's representation of events into their own, and remember it accordingly (Nelson, 1993). In a similar manner, the development of internal working models is likely to incorporate both the young child's direct representation of experience and the secondary representations of others afforded by language. In this sense, the young child's mental models of the social world become "co-constructed" by child and mother through conversation (Koren-Karie et al., 2003).

A third way that language contributes to the development of internal working models was envisioned by Bowlby: parent-child conversation constitutes another avenue for the child's developing security in the parent-child relationship. Bretherton (1993) subsequently expanded on this view by describing how parents and children in secure relationships are likely to engage in more candid "open, fluid communication" that enables greater personal disclosure, particularly of disturbing experiences or negative feelings that are troubling or confusing to young children. When this occurs, the child's security is fostered by the parent's understanding and reassurance conveyed in conversation. By contrast, when parents are critical or dismissive of the child's fears or anxieties, children may come to believe that their emotions are inappropriate or unacceptable, and perhaps that they are themselves unacceptable. Viewed in this manner, therefore, the parent's conversational approach, in the context of other forms of sensitive responding, constitutes a "psychological secure base" for the young child (Oppenheim & Koren-Karie, 2009).

Taken together, the "powerful and extraordinary gift of language" is important to the development and maintenance of secure parent-child relationships and, equally importantly, to the growth of mental working models associated with these relationships. This is not simply a description of how the information provided by adults in conversation informs children's socio-cognitive understanding. Rather, it describes a process by which children construct mental working models through the interaction of their direct experience and what they learn from others, and in which the person providing this information – and how it is provided – is as important as what is said. The security of the relationship with a caregiver, furthermore, influences how that person's words are understood and believed (Corriveau et al., 2009; Laible & Thompson, 2000). Bowlby (1979) also recognized that significant inconsistency between children's direct experience and what they are told is true by their parents, especially when it relates to the parent-child relationship, can be emotionally challenging for them, and this is when the information processing involved in defensive exclusion can occur.

Relevance to moral development

With respect to moral development, this portrayal of the role of language in the development of mental working models has several implications. First, parent-child conversation is a significant forum for values acquisition, and the most important conversational influences may not occur during the heightened emotion of a discipline encounter or in didactic teaching of right and wrong, but rather in ordinary conversations about events, such as the morning's confrontation over breakfast cereal. Moral judgments, causal attributions, evaluative statements, attributions of personal responsibility, and other morally relevant elements infiltrate these everyday conversations about past, current, or future experiences. Stated differently, moral socialization through conversation may more often be implicit than explicit. Second, what is said and how it is said are both important to the influence of conversational quality on early moral development. Because conversations about morally relevant behavior can be emotionally challenging for young children, the ability of the parent to establish a "psychological secure base" in conversation is important for the child's capacity to comprehend and respond to what the adult says. Third, who says it is also important, and the quality of the child's relationship with that person moderates the impact of what is said.

It is also important to note that these conversational processes may be especially influential during the developmental period(s) when children's mental representations of the social world are most rapidly taking shape (Thompson, 2000; Thompson, Laible, & Ontai, 2003). As earlier

noted, older children may dispute the mother's interpretations of shared experiences that conflict with their own view owing to their greater confidence in their memory and interpretations of events. They may also disagree with the mother's moral and causal attributions of responsibility. Preschoolers, by contrast, are less skilled mnemonists and also depend more on the information provided by adults, and this may cause their mental representations of experience to be more open to the influences of the richer, more elaborative secondary representations of those events provided by conversational discourse.

Finally, conversational discourse relevant to morality must draw on the capacities for socio-cognitive understanding of which young children are capable. As earlier noted, for example, infants and preschoolers rapidly become proficient at emotion understanding, which may provide a more useful gateway to the development of moral understanding than conversation related to more abstract values and ideals. Their early-developing understanding of others' intentions and goals, and of causality, likewise provide a basis for the development of morally relevant conduct. Connecting developing moral understanding to other emerging socio-cognitive abilities means that values transmission occurs in developmentally changing ways with the child's growing conceptual skills.

Conversation and developing representations of experience

There is considerable research from outside attachment theory that underscores the importance of conversational discourse to early psychological and social understanding. These studies provide support to the view that parent—child conversation is likely to be an important influence on young children's mental representations of experience, and also identify some of the characteristics of conversation that make it so influential.

How toddlers and preschoolers represent events, for example, is affected by how adults talk with them during the course of the event because of its influence on children's attentional deployment and encoding (Ornstein, Haden, & Hedrick, 2004). Adult conversational references to specific people, actions, and objects make them salient, and language contributes further to their encoding. Afterwards, young children's episodic memory is also affected by the quality of adult—child conversation during memory retrieval (Nelson, 1993). In both cases, researchers have found that when mothers talk in a more *elaborative* manner — which includes asking wh-types of questions (e.g., who? what happened? where?), following up on children's comments in a way that extends the conversation, adding information to the child's account, and evaluating the child's responses to confirm or correct what was said — their children represent and

remember the experience in a richer, more detailed manner (Haden & Ornstein, 2009). This conclusion is supported by experimental research indicating that when mothers are trained to reminisce about events in the recent past in this elaborative style with their preschoolers, their children show more detailed memory recall both immediately after training and six months later (Van Bergen et al., 2009). The significance of the attentional deployment of elaborative discourse is reflected in the finding of the same study that when mothers were also trained to discuss people's emotions during reminiscing, their children also made more emotion references during follow-up assessments.

In light of these findings, it is not surprising that adult elaborative conversational discourse is also associated with children's autobiographical memory, particularly the detail and richness of their personal autobiographical narratives, as well as to children's future event representations (Hudson, 2002, 2006; Nelson & Fivush, 2004). Autobiographical memory consists of recollections in which the child is the central figure in the event, establishing connections between past events and the present self, and parents contribute to the nature and organization of children's self-referential memories through conversational discourse. Moreover, because maternal elaborative speech when reminiscing about every-day events is rich in emotional references, children whose mothers are elaborative are also more advanced in emotion understanding (Fivush, 2007; Wareham & Salmon, 2006). How young children understand and remember their personal experiences and the behavior of other people are two central aspects of developing internal working models.

These findings are part of a much broader research literature showing that the conversational guidance of caregivers contributes, from an early age, to children's conceptual growth on issues ranging from spatial thinking (Pruden, Levine, & Huttenlocher, 2011) to scientific concepts (Gentner & Lowenstein, 2002; Valle & Callanan, 2006) to theory of mind (Astington & Baird, 2005) (for a general overview, consult Harris, 2012). What is distinctive about research relating conversation to self-referential memory and emotion understanding is its emphasis on the style as well as the content of conversational discourse and the importance of the child's relationship with the adult discussant.

Research in the attachment literature supports and extends the association between maternal discourse style and social-emotional understanding, and puts it in a relational context. Mothers in secure attachments have been found in several studies to converse in a more elaborative manner with their preschool children (see Fivush, Reese, & Haden, 2006; Reese, 2002 for reviews). Ontai and Thompson (2002) unpacked this discourse style in a study of parent—child conversations related to emotion by asking

mothers and children to recall together a recent event in which the child had experienced negative emotion, and they also read together from a storybook featuring emotion themes. From transcribed conversations, they coded several aspects of the mother's discourse, including: (a) the frequency of her references to emotion, (b) her description of the causes of emotion, (c) her portrayals of the outcomes of emotion, (d) definitions of emotion (such as explaining an emotion term), (e) linking events in the child's life to the situation or story to help the child better understand the emotion, and (f) requests for information from the child related to emotion. These elements of maternal emotion-related discourse were highly intercorrelated, and each was also significantly correlated with a global rating of the mother's overall elaborative conversational style. Maternal elaborations thus provide young children with considerable information about emotion, including associations between the child's emotional experiences and those of others. Consistent with this conclusion, Laible (2004) found that emotion understanding in four-year-olds was significantly and independently predicted by both the security of attachment and by the mother's use of elaborative discourse and discussion of emotion in the context of reminiscing about events in the recent past.

Young children converse about emotion with siblings and friends as well as with mothers, and these conversations are also influential in the growth of emotion understanding (Brown, Donelan-McCall, & Dunn, 1996; Hughes & Dunn, 1998). Attachment theorists expect, however, that there are unique features to children's conversations with their parents owing to the adult's greater conceptual sophistication and the psychological secure base that can be established in conversation. This psychological secure base can make it easier for children to disclose and discuss uncomfortable topics, such as those associated with negative emotion. Several studies have focused on measures of these conversational elements. Raikes and Thompson (2008b) observed mothers and children from a socio-demographically at-risk sample as they together talked about events in the recent past that caused the child to feel happy, angry, and sad. In addition to the frequency of maternal emotion references, these researchers also made summary ratings of the mother's elaborative discourse, maternal validation (i.e., acceptance and affirmation of the child's perspective in conversation), and maternal imposition (i.e., when mothers imposed their own viewpoint on the child during conversation). The latter three measures were combined (with imposition reverse-scored) into a factor-analytically derived score for the quality of maternal emotion-related conversation, with the frequency of emotion references constituting a measure of the content of maternal emotionrelated conversation. Conversational quality and content measures were both significantly and positively associated with the security of attachment, and they were predictive of differences in children's emotion language, which were, in turn, significantly associated with the child's emotion understanding.

Further evidence that the quality as well as the content of maternal discourse distinguishes securely attached from insecure relationships comes from another study from our lab on the development of emotion regulation (Waters et al., 2010). As in the other studies, mothers were observed conversing with their preschoolers about recent events in which the child had felt sad and angry. Young children often feel uncomfortable when talking about negative feelings, as earlier noted, and sometimes actively resist or avoid talking further with their mothers about these topics. When we coded individual differences in child avoidance of the conversation topic, we found that maternal validation during the conversation was associated with less avoidance: children were less likely to try to avoid talking about negative feelings when mothers were more accepting and supportive of the child's point of view. A secure motherchild attachment was also negatively associated with child avoidance. Interestingly, there was also a significant interaction between attachment and maternal validation: the mother's validation was especially predictive of lower child avoidance in the context of less secure mother-child relationships. It appears, in other words, that although maternal validation and security are significantly correlated, young children benefit most from validational comments by the mother when they lack the support of a secure attachment.

The same study found that another aspect of a secure attachment is also important for children. During a different part of the study procedure, mothers and children were observed together in a frustration task requiring their joint management of the child's negative emotions. Subsequently, mothers and children were each independently interviewed about their shared experience in this task, during which a videotape of the task was played, and the tape was stopped at the moment the child's peak emotional intensity was reached (based on the prior judgment of a trained research assistant). Mothers and children were each asked how the child felt at this moment. We were surprised to find how often maternal judgments of the child's feelings were different from children's selfreports (although this finding is not unprecedented; see Levine, Stein, & Liwag, 1999). Mothers in securely attached relationships with their children, however, significantly more often provided judgments that were concordant with their children's self-reports (Waters et al., 2010). In a sense, the greater sensitivity to the child's emotions of mothers in secure attachments may be a psychological counterpart to the behavioral sensitivity that mothers exhibit in infancy, and may be part of the psychological secure base that is established in conversation when children become capable of talking about their feelings and other important experiences of their lives.

Taken together, these studies identify several features of mother-child conversation that influence children's developing representation and understanding of the psychological world. At the time that events occur, conversational discourse has an attention-focusing function, causing certain aspects of the experience to become salient to the child and affecting event representation in this way. During a social encounter, for example, how a young child represents this experience may depend on whether mothers talk about another's emotions, action sequences, or aspects of the setting. At the time of memory retrieval, conversational discourse especially if it is elaborative - provides a memory assist by helping young children retrieve aspects of this representation that may otherwise be lost. Maternal elaborative discourse in these contexts is important for the reconstruction of episodic memory from children's initial encoding while also providing children with a model of competent memory retrieval processes. It is important to note, however, that mothers' elaborative discourse is also likely to be affected by their own evaluative judgments, causal attributions, emotion schemas, and other psychological processes that may cause them - and thus their children - to focus on certain aspects of a shared experience to the exclusion of others.

Beyond the importance of elaborative discourse, parent-child conversation also establishes a psychological context of security in which young children can discuss potentially uncomfortable topics. Research to date has identified the mother's validation of the child's point of view (and resisting the impulse to impose her own perspective) and her sensitivity to the child's feelings as elements of that conversational secure base, but more research is needed to elucidate other aspects of this psychological context (see, for example, Leyva et al., 2008). Koren-Karie, Oppenheim, and Getzler-Yosef (2008) studied similar features of maternal conversation and also evaluated the mother's involvement and reciprocity with the child in conversational dialogue, how she structured their exchange, and evidence of hostility and negative feelings. Laible and Song (2006) examined the shared positive affectivity of the interaction between mother and child during storybook reading and shared reminiscing. Much more remains to be understood about the psychological secure base established in parentchild conversation.

Moral development, conversation, and parent-child relationships

As this discussion turns again to moral development, it is necessary to remember that conversational discourse is important to moral growth not just as a means of the child's internalization of values, but as a conceptual catalyst that interacts with the child's own intuitive moral sensibility. Children construct their own understanding of behavioral standards from many sources, including how these standards are conveyed by parents, observing the behavior of others, listening to how people's needs and responsibilities are discussed in conversations with the child and overheard from others, and the child's developing awareness of the consequences of actions for others (Thompson, 2013). There is growing evidence that from very early, young children make evaluative judgments based on the consequences of behavior for other people. These judgments arise from early understanding of others' goals and intentions, developing emotion understanding, and other aspects of theory of mind (Thompson, 2012, in press). On this basis, toddlers are competent at connecting another's negative feelings to circumstances involving the frustration or denial of goals and desires, and positive emotions with their fulfillment. A rudimentary empathic capacity also makes the sight and sound of another's distress a salient event for which young children seek causal understanding.

In addition, toddlers exhibit a tendency to interpret peoples' actions as helpful or harmful to other people, and they respond accordingly. Vaish, Carpenter, and Tomasello (2009) reported that 18- to 25-month-olds were significantly more likely to offer assistance to an adult whom they had previously witnessed being harmed by another person, compared to an adult who had not been harmed. Hamlin, Wynn, Bloom, and Mahajan (2011) found that 19- to 23-month-olds were more likely to provide rewards to a puppet previously observed as helpful, and to take rewards from a puppet who had previously acted harmfully to another puppet. By the age of three, fairness judgments are even more apparent. Young children of this age have been found to distribute shared rewards according to the extent of each recipient's contribution (Baumard, Mascaro, & Chevallier, 2012), and to use reciprocity and indirect reciprocity (i.e., rewarding those who previously gave to others) when allocating resources (Olson and Spelke, 2008). Even so, children of this age prefer to distribute resources equally rather than equitably when provided the opportunity to do so (see also Kenward & Dahl, 2011). By age three, intentionality also figures into children's judgments of others' actions. In another study by Vaish, Carpenter, and Tomasello (2010), children

had to choose to offer assistance either to an adult who had been previously observed acting harmfully toward another, or to a neutral adult. Three-year-olds were significantly less likely to offer assistance to the harmful adult, even when the adult only intended, but failed, to harm the other person. In another study, three- and four-year-olds enlisted a story character's intentions when judging her naughtiness when violating her mother's prohibition (Nunez & Harris, 1998).

Toddlers and preschoolers make these judgments based, it appears, on several things (Thompson, 2013). One is their emotional sensitivity, which sharpens their awareness of the consequences of another's harmful or helpful actions for other people. However, in circumstances in which someone's feelings cannot be directly perceived (as is true in most of the research described here), another influence is the young child's rapidly developing awareness of the goals and intentions underlying behavior. A rudimentary appreciation of the goal-orientation of people's behavior emerges during the first year owing, in part, to infants' awareness of their own goal-directed activity (Meltzoff, 2007; Woodward, 2009). Once infants become more capably agentic in their own activity during the first year, in other words, they also become capable of appraising others' behavior in terms of the implicit intentions and goals it reveals, such as watching mother go to the refrigerator in order to take something out of it. Once others' behavior is interpreted as goal-oriented, this enables infants to seek to alter others' goals (such as in establishing joint attention using gestures) and in the second year enter into the intentional actions of others in cooperative and compliant acts. In addition, understanding behavior as goal-oriented enables toddlers to perceive the actions of people as helping or hindering others to accomplish their goals, such as when one puppet takes and withholds a ball that another was playing with. As recent research shows, young children tend to reward those who act helpfully and to deny benefits to those who hinder another, in a manner that seems to reflect implicit fairness judgments.

Sensitivity to others' goals and intentions has other implications for moral understanding. During the second year, for example, a developing capacity for "shared intentionality" (Tomasello & Carpenter, 2007) becomes apparent in toddlers' joint problem solving with others, and shared intentionality may provide the foundation for the early development of instrumental helping and assistance. When they know how to do so, in other words, toddlers can be observed to help strangers achieve their goals. Goal appraisals may also underlie early evidence for young children's distributive justice with their awareness that everybody wants a portion of shared resources (thus the tendency to divide resources equally), but that some people may be more deserving owing to their

greater contribution, greater helpfulness, or other characteristics. Much more remains to be understood about how young children perceive equity in interpersonal relations and resource distribution, but it is clear from current research that children are sensitive to inequity from an early age and, given the opportunity, seek to redress unfair allocations or inequitable behavior.

There are thus several conceptual resources that caregivers can enlist in conversing with young children in morally relevant ways. By enlisting children's awareness of others' feelings, the nature of people's goals and intentions, the frustration or satisfaction of needs and desires, and the consequences of people's actions, adults can contribute through conversation to these early-developing moral appraisals. An implicit awareness of fairness that young children show behaviorally in these studies can be explicitly enlisted for enabling young children to conceptually knit together the nature of desirable and undesirable conduct and the reasons that different behaviors are so evaluated.

As the examples of these studies illustrate, moral understanding is multidimensional. By the age of three, children are comprehending behavioral standards related to prohibited conduct but are also understanding the circumstances warranting helpful, prosocial actions that are not morally required, but are desirable, in social relations. Moreover, different circumstances involving morally relevant conduct make different conceptual demands on young children. Circumstances involving empathic or emotional understanding in response to another's distress, for example, require a different constellation of socio-cognitive skills compared to other situations requiring sensitivity to others' goals (that can motivate helpful and prosocial conduct) or circumstances involving self-regulatory skills (enlisted for sharing or other forms of altruistic behavior). Different morally relevant situations make different psychological demands on young children, and this is why young children's behavior across different kinds of moral assessments can be so irregular (Thompson & Newton, 2013). Likewise, the kind of conversational catalysts that contribute to early moral development will vary for different domains of morally relevant conduct. Emotion-focused and needsbased discourse may be most relevant to fostering young children's compliance in situations involving others' needs or rights. Discourse focused on others' goals may be most relevant to encouraging helpful behavior in very young children. Of course, other conversational elements may be influential for many different moral contexts, such as the adult's elaborative and validational speech, and references to the child's positive self as it relates to moral conduct (i.e., acting as a "good boy" or "good girl").

In this section, we explore these issues further by discussing research in our lab and elsewhere concerned with two aspects of early moral behavior: conscience development and prosocial behavior.

Conscience development

The study of early conscience focuses on young children's cooperation and compliance with maternal requests (especially outside of the mother's presence), moral reasoning about prohibitive violations, and children's moral self-awareness (Thompson, 2013). As earlier noted, researchers have found that conscience development in the early years is enhanced by a mutually responsive orientation between parent and child that sensitizes the child to the reciprocal obligations of close relationships and motivates cooperative conduct (Kochanska, 2002a; Kochanska & Aksan, 2004). Consistent with this view, a secure attachment is also associated with more advanced conscience development in young children (Kochanska et al., 2004; Laible & Thompson, 2000).

Several researchers have also examined characteristics of parent-child conversation in this relational context that are associated with the development of conscience. Laible and Thompson (2000) recorded conversations between four-year-olds and their mothers about events in the recent past when the child either misbehaved or behaved appropriately. Their choice of a reminiscing context for conversation about moral conduct was intended to reflect everyday conversations between parents and children about the day's events, and they noted that this is a very different context for moral understanding compared to the traditional focus on parent-child discourse in the discipline encounter. Laible and Thompson (2000; see also Thompson, Laible, & Ontai, 2003) argued that young children might have difficulty devoting attention to and understanding a parent's moral message in the heated emotion of the discipline encounter. By contrast, when emotions have cooled and both partners can look retrospectively, conversations about the child's disapproved (and desirable) conduct can occur in a manner that enables better understanding of moral conduct and deeper processing of the parent's communication.

Several aspects of these reminiscing conversations were coded, including the mother's moral evaluative statements (e.g., "that was a nice thing to do"), references to rules, comments about the consequences of the child's actions, and references to the feelings or needs of the child, mother, or another person. There were also several assessments of conscience development during this procedure. The researchers found that mothers who more frequently discussed people's feelings and used moral evaluatives in these conversations about past events had children who were more advanced

in conscience development. By contrast, maternal references to rules and the consequences of behavior were nonpredictive of children's conscience (Laible & Thompson, 2000). These findings were subsequently replicated in a prospective longitudinal study in which maternal conversational references during conflict episodes with the child at 30 months in the lab were used to predict the child's conscience development six months later (Laible & Thompson, 2002). Consistently with young children's sensitivity to others' feelings, emotion-focused discourse was the most consistent predictor of conscience development in conversations about disapproved and desirable conduct. Maternal references to rules and the consequences of violating them were unassociated with subsequent conscience. By focusing on people's feelings even in conflict episodes, mothers enlist the young child's capacities for understanding why behavior is desirable or not, by putting a human face on issues of right and wrong.

An excerpt from one of these conversational transcripts between a 3.5-year-old child and her mother about a recent instance of misbehavior illustrates these influences. They are recalling a visit to the grandmother, Lisbet, in which the child had a tantrum when it was time to depart.

MOTHER: How do you think Lisbet felt then?

CHILD: She felt a little sad.

MOTHER: You think so? I bet you're right. What did she do?

CHILD: I don't know.

MOTHER: When you were kicking, did she stay in the room?

CHILD: No.

MOTHER: Do you remember what she did?

CHILD: What?

MOTHER: She took the girls and went upstairs so we could be by ourselves, so we could work out our problem, huh?

CHILD: Yeah.

In this vignette, the mother draws attention to how the grandmother felt while witnessing the child's emotional outburst, and then explained the reason for her departure with reference to that. The mother justifies her behavioral expectation in terms of the effects of the child's negative behavior on another person's feelings. The conversation also illustrates the mother's elaborative discourse style, and a bit of child avoidance in the form of memory lapses.

Other research on parent-child discourse and early moral understanding has yielded similar conclusions. Two- to three-year-old children whose mothers used reasoning and humanistic concerns in resolving conflict with them, for example, were more advanced in measures of moral understanding in assessments in kindergarten and first grade (Dunn, Brown, & Maguire, 1995). Kochanska, Aksan, and Nichols (2003) found, by contrast, that mothers who were conversationally more "power

assertive" when discussing the child's recent misbehavior – by conveying a critical or negative attitude, feelings of disappointment or anger, or providing reproach or punishment – had preschoolers with lower scores on measures of moral cognition. Thus mothers who discuss past instances of misbehavior or good behavior and emphasize the human consequences of moral conduct are more likely to foster conscience development than those who focus on judgments of rule-oriented compliance.

These findings are important for understanding how a parent's conversational prompting and the growth of a young child's intuitive moral sensibility can converge in the development of children's mental models of desirable human conduct. They also underscore how different is this portrayal of early moral development from those of traditional moral development theories that emphasize a young child's egocentric, utilitarian, punishment-oriented approach to moral compliance.

Prosocial behavior

Another research literature that informs our understanding of young children's moral sensibility concerns prosocial behavior. Consistent with the early development of "shared intentionality," researchers are discovering that even toddlers can provide assistance to an unfamiliar experimenter when the adult's need for assistance is clear and the toddlers know how to help (Warneken & Tomasello, 2006, 2007). Research findings also indicate that even at this early age, parent-child discourse is influential in the development of prosocial motivation. In an early study, Zahn-Waxler, Radke-Yarrow, and King (1979) reported that when toddlers caused or witnessed distress in another, they were most likely to respond with empathic and reparative responses when their mothers focused their attention on the victim using emotionally evocative messages about the other person's distress. More recently, Brownell, Svetlova, Anderson, Nichols, and Drummond (2013) observed parents with their 18- to 30-month-old children during storybook reading episodes, and children were subsequently observed during several helping and sharing tasks. Toddlers who helped and shared more quickly and more frequently had parents who more often asked them to label and explain the emotions depicted in the storybooks. Noteworthy in this study is that it was not parents' production and labeling of emotion in the stories, but their elicitation of the child's labeling and explaining the story characters' emotions that was linked to child's prosociality.

In our lab (in research with Emily Newton), we observed 18- to 20-month-olds in a series of instrumental helping tasks in which, in some experimental conditions, the adult conveyed her need for assistance through expressions of sadness. In addition, we obtained a measure

of the toddler's emotion vocabulary, based on a maternal-report inventory, that is often used as an index of early emotion understanding. We found that the experimenter's sad expressions did not elicit greater helping from toddlers compared to when the experimenter appeared neutral, but that toddlers with greater emotion word vocabularies did help the sad experimenter more. In addition, we found that girls also helped the sad experimenter more, consistent with other research documenting similar early sex differences (Newton, Goodman, & Thompson, in press).

Prosocial motivation develops in reliability, sophistication, and scope as toddlers become preschoolers, although preschoolers remain somewhat unreliable in their prosocial responses (Cote et al., 2002; Hastings, Rubin, & DeRose, 2005; Iannotti, 1985). This variability in helping, typical for young children, arises for many reasons: the identity and behavior of the recipient, competing interests and demands, knowledge of how to provide assistance, as well as the child's temperament and personality contribute to whether children provide assistance or not. Young children also become more selective and discriminating in their prosocial behavior with increasing age, and individual differences in prosocial dispositions also become evident (Hay & Cook, 2007). It is best to conclude, therefore, that prosocial responding does not increase homogeneously throughout the early childhood years, but rather selectively, as young children become more attuned to social norms for expected behavior, comprehend others' behavior in more complex moral, gendered, and social frameworks, calculate the costs of prosocial conduct, begin to understand themselves as moral beings, and gradually comprehend others' goals and motives in more sophisticated ways (Hay & Cook, 2007; Thompson, 2012). The simple pleasure of a toddler who picks up a marker for another that has dropped on the floor becomes enlisted into a more complex network of socially motivated behavior as the child matures.

One implication of this conclusion is that early childhood is a significant period for the socialization of prosocial motivation and the development of moral character (Thompson & Newton, 2010). As young children are developing a sense of themselves and others as moral actors, the parental contributions to their developing understanding can be important to the growth of enduring dispositions to act helpfully toward others.

Recent work in our lab with preschoolers has applied discourse-based research approaches to the study of young children's developing prosocial dispositions. We observed four-year-olds in a series of prosocial tasks varying in the type of prosocial behavior that was targeted including instrumental helping, sharing, and empathy tasks (Winer & Thompson, 2011). We also observed mother-child conversations in which we asked

mothers to talk with their children about (a) a recent experience when the child had helped another person or was nice to them, and (b) a recent experience when the child could have helped or done something nice, but did not (e.g., failed to act prosocially). By contrast with previous studies that have observed the quality and content of reminiscing conversations about emotions, this study examined the quality and content of reminiscing conversations about prosocial behavior (or its absence) with young children. Given this, we wanted to capture dimensions of the conversations relevant to emotions and internal states as well as moral reasoning. These reminiscing conversations were recorded, transcribed, and subsequently coded for a variety of content themes, for both mother and child, including references to: (a) emotions and moral emotions, (b) internal states (i.e., needs, wants, desires), (c) moral evaluative statements, (d) consequences of actions, and (e) rule-based justifications (adapted from Dunn, Bretherton, & Munn, 1987). We also coded for stylistic qualities of the conversations that might promote conceptual understanding and growth as well as a sense of trust, reciprocity, and autonomy (related to the "psychological secure base" of the parent-child relationship). These included the elaborative style of the conversation as well as the amount of validation provided by the mother of the child's contributions (Fivush & Fromhoff, 1988; Laible, 2004).

Here is an example of a conversation concerning the child's helping:

MOTHER: You know what? This morning when I dropped you off at school today, I want to tell you something I saw ... Everyone was getting ready to go outside and I looked over and what were you doing with Cody today? Do you remember what you were doing this morning?

CHILD: I was helping him.

MOTHER: And how did you help him?

CHILD: We looked at the map.

MOTHER: You looked at the map? Was there anything else you did for Cody?

CHILD: I helped him do the puzzle.

MOTHER: What about his jacket this morning? What did you do to help him with his jacket?

CHILD: I put it on him but he wanted Ms. Caitlin.

MOTHER: Well you know that's funny that you say that because what I saw was you helping him zip up his jacket. I saw you zip up his jacket, is that correct? I think that was a big help for Ms. Caitlin. Because you know, Ms. Caitlin can't do everything herself. And because you are one of the big kids in the classroom you can help out that way. So I liked the fact, the fact that you helped her. So I just wanted to thank you for being such a good helper.

This excerpt includes many of the conversational elements we have found to be characteristic of mother-child discourse associated with helping, including references to the needs and feelings of others, descriptions of the consequences of the child's actions for others, and moral evaluative statements.

With regard to the content of the conversation, we found that different elements were emphasized by mothers depending on the topic (helping or not helping). In the helping conversations mothers most frequently referenced positive moral evaluations ("That was a nice thing to do"), the needs and desires that motivate helping ("She really couldn't finish it all by herself"), positive moral emotions ("I was so proud of you!") and positive emotions ("It made Sissy happy when you picked up the mess with her"), and the positive consequences of helping ("We had time to go to the park because of what you did"). Thus, in the helping conversations, mothers focused on the emotions associated with helping – both moral and nonmoral emotions – to connect the child's behavior with its personal consequences for the child, mother, and others. Mothers are tapping into emotional incentives that would be familiar to a child of this age.

How did the conversations about *not* helping compare? When discussing a recent time in which the child did not help when they could or should have, mothers most frequently referenced negative moral evaluations of the child ("You were not very nice then"), negative emotions ("Laura was sad that she had to carry everything all by herself"), the needs and desires that motivate helping ("I really needed help because my hands were full"), the needs and desires that *inhibit* helping ("I could tell that you really didn't want to stop watching your TV show to come help her"), and positive moral evaluations ("It would have been great if you had shared"). In conversations about not helping, a focus on the internal processes was also apparent in mothers' discussion of the needs that could have motivated assistance, the feelings that derived from not helping, and even the desires and needs that were disincentives to help. Conversations about helping tended to be longer than conversations about not helping, but the latter were more densely packed with moral and emotional references.

Mothers were rated as more elaborative in their discourse styles and to have more clarity in the not helping conversations than the helping conversations, perhaps because the issues they discussed were more conceptually challenging. However, mothers were more validating of the child's perspective when discussing when the child helped than when the child failed to help.

Given these qualities, how were these conversations associated with children's developing prosocial motivation? Interestingly, some of the less frequent content categories had the strongest predictions to prosocial behavior. For instance, although mothers discussed negative moral evaluations (such as the child being "not nice" or "bad") more frequently than they discussed positive moral evaluations (such as being a good or

helpful child) in the not-helping conversations, their discussion of positive moral evaluations significantly predicted children's prosocial behavior across the three different tasks. Results of hierarchical regressions also indicated that the two discourse contexts had differential relations to prosocial behavior. Models based on the discourse elements from the helping conversations were not robust predictors of children's prosocial behavior while the models based on the conversational elements of the not-helping conversations were consistently predictive of prosocial behavior. Overall, we found that it was the evaluative, emotion-laden content elements of the conversations that were most important in fostering of preschoolers' prosocial responses to others, while references to rules either had no impact or were a deterrent for children and were negatively associated with prosocial motivation.

Stylistically, qualities of both the helping and not-helping conversations had associations with children's prosocial behavior. Although the elaborative style of the discourse was not a particularly strong predictor of children's prosocial behavior, mothers who were more validating and accepting of their child's view when discussing times the child helped and times when the child did not help were more likely to have children who showed greater prosociality.

When we followed up with these children 18 months after their first visit, we found that it was again the emotional elements of the conversations that were most influential in predicting children's prosocial behavior over time. Mother-child dyads who discussed positive emotions and made more positive moral evaluations when the children were four years old were more likely to show greater prosocial behavior 18 months later when the children were 5.5 years of age. By contrast, discussion of rules or rule-based justifications did not predict children's prosocial behavior 18 months later.

Stylistically, unlike the results we found for concurrent mother-child discourse style and children's prosocial behavior at age four, the longitudinal results suggest that, over time, the elaborative style of the discourse matters for children's prosocial development. Mothers who were more elaborative and exhibited greater clarity in conversing with the child about not helping were more likely to have children who responded more prosocially across a range of tasks 18 months later. While the effect of validation in the helping conversations was not robust over time, the effect of validation in the not-helping conversations appeared to have a time-lagged effect. Children of mothers who were more validating of their child's viewpoint in the not-helping conversations were *less* likely to respond prosocially 18 months later. This illustrates some of the challenges parents face when discussing children's misbehavior or failures to

act in a morally desirable way. Although validating is generally a sensitive parenting practice, too much validation of (or sympathy with) the children's excuses for not helping in these contexts may provide reinforcement for their interpretative biases about why it is acceptable not to help. By contrast, discussing instead how the child should have behaved differently in that situation and incentivizing future helping behavior may create a more uncomfortable (and less affirming) conversation, but one more likely to foster future prosocial conduct.

Taken together, these findings suggest that both the content and style of conversational discourse about prosocial behavior are relevant to children's emerging prosocial dispositions. Emphasizing the relational and emotional incentives and reasons for prosocial acts promotes the development of prosocial motivation in children, while rule-based justifications have little effect or may even undermine children's inherent motivations for helping others. The elaborative and validating quality of these conversations is also important for children's understanding and the elements of these conversations that are internalized over time. It is important to note, however, that different conversational elements may be important in different conversational contexts, with moral evaluations, moral emotions, justifications, and consequentialist discourse having different functions in conversations about misbehavior, prosocial behavior, and other morally relevant activity.

Conclusion

An attachment theory approach to moral development is still a work in progress, but we have sought to outline its most important elements. From this perspective, moral socialization occurs through the quality of young children's experience in close relationships, their observation of the examples of parental conduct, and the content and quality of parent—child conversation. All of these socialization elements, and others, occur within and outside of disciplinary contexts in which moral values are conveyed most explicitly and forcefully. In addition, however, children's moral sensitivity is developed in everyday conversations in which children learn about people's feelings, needs, and goals, in which responsibility to others is implied and explicitly discussed, in which a child's sense of self (including a sense of self as a moral being) takes shape, and in which moral judgments, causal attributions, moral evaluatives, and other conversational elements that contribute to moral conduct are influential.

In this view, conversation is particularly influential for several reasons: it provides explicit lexical referents to invisible and sometimes obscure psychological processes related to human behavior, it enables children

to connect the experiences of others with their own experience, and it provides conceptual tools by which young children develop a sense of themselves in relation to others. Moreover, current research suggests that these conversational elements are particularly influential in early childhood, when young children are developing richer understanding of the psychological world and in which the secondary representations provided by language offer a conceptual bootstrap to this understanding. Most importantly, from an attachment perspective, conversation is important not only because it enlists rapidly developing representational, conceptual, and memorial skills, but also because it provides another avenue for the maintenance and deepening of the psychological secure base that is foundational to a secure parent-child attachment. Within this secure base, young children can disclose, explore, and clarify in conversation with caregivers the emotional and morally relevant experiences that may be initially disturbing, confusing, or upsetting to them, and receive support and guidance from a caregiver. From an attachment perspective, therefore, it is not just what is said, but also who says it (relational quality) and how it is said (involving validation, mutual responsiveness, shared positive affect) that underlies the influence of conversational discourse on developing moral sensibility and conduct.

Several of the studies summarized here suggest that these conversational elements have greater significance in predicting conscience development and prosocial motivation than does parental discussion of rules and the consequences of violating them. These findings are consistent with the emerging conclusion that, contrary to the long-standing views of traditional moral development theories, young children are not egocentric, opportunistic, externalized moral beings. Instead, they approach morally relevant problems with an intuitive sensibility based on their emerging psychological understanding of other people, their own appraisals of others' conduct based on its impact on people's feelings and goals, their experiences in close relationships with others, and the conceptual catalysts afforded by parent—child conversation. This new view of the early foundations of moral understanding has important implications for our understanding of life-span moral development (Thompson, 2012), and provides an exciting research agenda for the future.

REFERENCES

Astington, J. W., & Baird, J. A. (Eds.) (2005). Why language matters for theory of mind. New York: Oxford University Press.

Baumard, N., Mascaro, O., & Chevallier, C. (2012). Preschoolers are able to take merit into account when distributing goods. *Developmental Psychology*, 48, 492–498.

- Belsky, J., & Cassidy, J. (1994). Attachment: Theory and evidence. In M. Rutter & D. Hay (Eds.), *Development through life* (pp. 373-402). Oxford: Blackwell.
- Bowlby, J. (1969). Attachment and loss. Vol. I: Attachment. New York: Basic (2nd Edition published 1982).
- Bowlby, J. (1973). Attachment and loss. Vol. II: Separation: Anxiety and anger. New York: Basic.
- Bowlby, J. (1979). On knowing what you are not supposed to know and feeling what you are not supposed to feel. *Canadian Journal of Psychiatry*, 24, 403–408.
- Bowlby, J. (1980). Attachment and loss. Vol. III: Loss: Sadness and depression. New York: Basic.
- Bretherton, I. (1993). From dialogue to internal working models: The co-construction of self in relationships. In C. A. Nelson (Ed.), Memory and affect in development. Minnesota Symposia on Child Psychology, Vol. XXVI (pp. 237–263). Hillsdale, NJ: Erlbaum.
- Brown, J., Donelan-McCall, N., & Dunn, J. (1996). Why talk about mental states? The significance of children's conversations with friends, siblings, and mothers. *Child Development*, 67, 836–849.
- Brownell, C. A., Svetlova, M., Anderson, R., Nichols, S. R., & Drummond, J. (2013). Socialization of early prosocial behavior: Parents' talk about emotions is associated with sharing and helping in toddlers. *Infancy*, 18, 91–119.
- Colman, R., & Thompson, R. A. (2002). Attachment status, adaptive functioning, and problem-solving interaction styles in mother-child dyads. *Merrill-Palmer Quarterly*, 48, 337–359.
- Corriveau, K., Harris, P. L., Meins, E., Fernyhough, C., Arnott, B., Elliott, L., Liddle, B., Hearn, A., Vittorini, L., & de Rosnay, M. (2009). Young children's trust in their mother's claims: Longitudinal links with attachment security in infancy. *Child Development*, 80, 750-761.
- Cote, S., Tremblay, R., Nagin, D., Zoccolillo, M., & Vitaro, F. (2002). The development of impulsivity, fearfulness, and helpfulness during childhood: Patterns of consistency and change in the trajectories of boys and girls. Journal of Child Psychology and Psychiatry, 43, 609-618.
- De Wolff, M., & van Ijzendoorn, M. (1997). Sensitivity and attachment: A metaanalysis on parental antecedents of infant attachment. *Child Development*, 68, 571-591.
- Dunn, J., Bretherton, I., & Munn, P. (1987). Conversations about feeling states between mothers and their young children. *Developmental Psychology*, 23, 132–139.
- Dunn, J., & Brown, J. (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 University Press.
- Dunn, J., Brown, J. R., & Maguire, M. (1995). The development of children's moral sensibility: Individual differences and emotion understanding. *Developmental Psychology*, 31, 649-659.
- Dweck, C. S., & London, B. (2004). The role of mental representation in social development. *Merrill-Palmer Quarterly*, 50, 428-444.
- Dykas, M. J., & Cassidy, J. (2011). Attachment and the processing of social information across the life span: Theory and evidence. *Psychological Bulletin*, 137, 19–46.

- Fisher, J. D., Nadler, A., & Witcher-Alagna, S. (1982). Recipient reactions to aid. *Psychological Bulletin*, 91, 27-54.
- Fivush, R. (2007). Maternal reminiscing style and children's developing understanding of self and emotion. *Clinical Social Work*, 35, 37–46.
- Fivush, R., & Fromhoff, F. A. (1988). Style and structure in mother-child conversations about the past. *Discourse Processes*, 11, 337-355.
- Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, 77, 1568–1588.
- Gentner, D., & Lowenstein, J. (2002). Relational language and relational thought. In E. Amsel & J. P. Byrnes (Eds.), *Language*, *literacy*, and cognitive development (pp. 87–120). Mahwah, NJ: Erlbaum.
- Goodvin, R., Meyer, S., Thompson, R. A., & Hayes, R. (2008). Self-understanding in early childhood: Associations with attachment security and maternal emotional risk. Attachment & Human Development, 10, 433–450.
- Haden, C. A., & Ornstein, P. A. (2009). Research on talking about the past: The past, present, and future. Journal of Cognition and Development, 10, 135-142.
- Hamlin, J. K., Wynn, K., Bloom, P., & Mahajan, N. (2011). How infants and toddlers react to antisocial others. *Proceedings of the National Academy of Sciences*, 108, 11931-11936.
- Harris, P. L. (2012). Trusting what you're told: How children learn from others. Cambridge, MA: Belknap Press.
- Hastings, P. D., Rubin, K. H., & DeRose, L. (2005). Links among gender, inhibition, and parental socialization in the development of prosocial behavior. Merrill-Palmer Quarterly, 51, 467–493.
- Hay, D. F., & Cook, K. V. (2007). The transformation of prosocial behavior from infancy to childhood. In C. A. Brownell & C. B. Kopp (Eds.), Socioemotional development in the toddler years (pp. 100-131). New York: Guilford.
- Hudson, J. A. (2002). "Do you know what we're going to do this summer?" Mothers' talk to young children about future events. Journal of Cognition and Development, 3, 49-71.
- Hudson, J. A. (2006). The development of future time concepts through mother-child conversation. *Merrill-Palmer Quarterly*, 52, 70–95.
- Hughes, C., & Dunn, J. (1998). Understanding mind and emotion: Longitudinal associations with mental-state talk between young friends. *Developmental Psychology*, 34, 1026–1037.
- Iannotti, R. J. (1985). Naturalistic and structured assessments of prosocial behavior in preschool children: The influence of empathy and perspective taking. *Developmental Psychology*, 21, 46–55.
- Kenward, B., & Dahl, M. (2011). Preschoolers distribute scarce resources according to the moral valence of recipients' previous actions. *Developmental Psychology*, 47, 1054–1064.
- Kochanska, G. (2002a). Mutually responsive orientation between mothers and their young children: A context for the early development of conscience. *Current Directions in Psychological Science*, 11, 191–195.
- Kochanska, G. (2002b). Committed compliance, moral self, and internalization: A mediational model. *Developmental Psychology*, 38, 339–351.

- Kochanska, G., & Aksan, N. (2004). Conscience in childhood: Past, present, and future. *Merrill-Palmer Quarterly*, 50, 299-310.
- Kochanska, G., Aksan, N., Knaack, A., & Rhines, H. (2004). Maternal parenting and children's conscience: Early security as a moderator. *Child Development*, 75, 1229–1242.
- Kochanska, G., Aksan, N., & Nichols, K. E. (2003). Maternal power assertion in discipline and moral discourse contexts: Commonalities, differences, and implications for children's moral conduct and cognition. *Developmental Psychology*, 39, 949–963.
- Koren-Karie, N., Oppenheim, D., & Getzler-Yosef, R. (2008). Shaping children's internal working models through mother-child dialogues: The importance of resolving past maternal trauma. *Attachment & Human Development*, 10, 465-483.
- Koren-Karie, N., Oppenheim, D., Haimovich, Z., & Etzion-Carasso, A. (2003). Dialogues of seven-year-olds with their mothers about emotional events: Development of a typology. In R. N. Emde, D. P. Wolf, & D. Oppenheim (Eds.), Revealing the inner worlds of young children (pp. 338-354). New York: Oxford University Press.
- Laible, D. (2004). Mother-child discourse in two contexts: Links with child temperament, attachment security, and socioemotional competence. *Developmental Psychology*, 40, 979–992.
- Laible, D., & Song, J. (2006). Constructing emotional and relational understanding: The role of affect and mother-child discourse. *Merrill-Palmer Quarterly*, 52, 44-69.
- Laible, D. J., & Thompson, R. A. (1998). Attachment and emotional understanding in preschool children. *Developmental Psychology*, 34, 1038–1045.
- Laible, D., & Thompson, R. A. (2000). Mother-child discourse, attachment security, shared positive affect, and early conscience development. *Child Development*, 71(5), 1424–1440.
- Laible, D., & 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., & Malkin, C. M. (1986). The development of social expectations in distress relief sequences: A longitudinal study. *International Journal of Behavioral Development*, 9, 235-249.
- Levine, L., Stein, N., & Liwag, M. (1999). Remembering children's emotions: Sources of concordant and discordant accounts between parents and children. *Developmental Psychology*, 35, 790–801.
- Leyva, D., Reese, E., Grolnick, W., & Price, C. (2008). Elaboration and autonomy support in low-income mothers' reminiscing: Links to children's autobiographical narratives. *Journal of Cognition and Development*, 9, 363–389.
- Meltzoff, A. N. (2007). The "like me" framework for recognizing and becoming an intentional agent. *Acta Psychologica*, 124, 26–43.
- Moses, L. J., Baldwin, D. A., Rosicky, J. G., & Tidball, G. (2001). Evidence for referential understanding in the emotions domain at twelve and eighteen months. *Child Development*, 72, 718-735.

- Nelson, K. (1993). Events, narratives, memory: What develops. In C. A. Nelson (Ed.), Memory and affect in development. Minnesota Symposia in Child Psychology, Vol. XXVI (pp. 1-24). Hillsdale, NJ: Erlbaum.
- Nelson, K., & Fivush, R. (2004). The emergence of autobiographical memory: A social-cultural developmental theory. *Psychological Review*, 111, 486-511.
- Newton, E. K., Goodman, M., & Thompson, R. A. (in press). Why do some toddlers help a stranger? Origins of individual differences in prosocial behavior. *Infancy*, in press.
- Nunez, M., & Harris, P. L. (1998). Psychological and deontic concepts: Separate domains or intimate connection? *Mind & Language*, 13, 153–170.
- Olson, K. R., & Spelke, E. S. (2008). Foundations of cooperation in young children. *Cognition*, 108, 222–231.
- 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, 11, 433–450.
- Oppenheim, D., & Koren-Karie, N. (2009). Mother-child emotion dialogues: A window into the psychological secure base. In J. Quas & R. Fivush (Eds.), Emotion in memory and development: Biological, cognitive, and social considerations. Oxford series in effective science (pp. 142-165). Oxford University Press.
- Ornstein, P. A., Haden, C. A., & Hedrick, A. M. (2004). Learning to remember: Social-communicative exchanges and the development of children's memory skills. *Developmental Review*, 24, 374–395.
- Pollak, S. D. (2008). Mechanisms linking early experience and the emergence of emotions: Illustrations from the study of maltreated children. *Current Directions in Psychological Science*, 17, 370–375.
- Pruden, S. M., Levine, S. C., & Huttenlocher, J. (2011). Children's spatial thinking: Does talk about the spatial world matter? *Developmental Science*, 14, 1417–1430.
- Raikes, H. A., & Thompson, R. A. (2008a). Attachment security and parenting quality predict children's problem-solving, attributions, and loneliness with peers. Attachment & Human Development, 10, 1–26.
- Raikes, H. A., & Thompson, R. A. (2008b). Conversations about emotion in high-risk dyads. Attachment & Human Development, 10(4), 359-377.
- Raikes, H. A., Virmani, E. A., Thompson, R. A., & Hatton, H. (2013). Declines in peer conflict from preschool through first grade: Influences from early attachment and social information processing. *Attachment & Human Development*, 15, 65–82.
- Reese, E. (2002). Social factors in the development of autobiographical memory: The state of the art. *Social Development*, 11, 124–142.
- Repacholi, B., & Gopnik, A. (1997). Early reasoning about desires: Evidence from 14- and 18-month-olds. *Developmental Psychology*, 33, 12-21.
- Rubin, K. H., Coplan, R., Chen, X., Bowker, J., & McDonald, K. L. (2011). Peer relationships in childhood. In M. H. Bornstein & M. E. Lamb (Eds.), Developmental science: An advanced textbook, 6th Edition (pp. 519–570). New York: Psychology Press.
- Thompson, R. A. (1995). Preventing child maltreatment through social support: A critical analysis. Thousand Oaks, CA: Sage.

- Thompson, R. A. (2000). The legacy of early attachments. *Child Development*, 71, 145-152.
- Thompson, R. A. (2006). Conversation and developing understanding: Introduction to the special issue. *Merrill-Palmer Quarterly*, 52, 1–16.
- Thompson, R. A. (2008a). Attachment-related mental representations: Introduction to the special issue. Attachment & Human Development, 10, 347-358.
- Thompson, R. A. (2008b). Early attachment and later development: Familiar questions, new answers. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment*, 2nd Edition (pp. 348–365). New York: Guilford.
- Thompson, R. A. (2010). Feeling and understanding through the prism of relationships. In S. D. Calkins & M. A. Bell (Eds.), *Child development at the intersection of emotion and cognition* (pp. 79–95). Washington, DC: American Psychological Association.
- Thompson, R. A. (2012). Wither the preconventional child? Toward a life-span moral development theory. *Child Development Perspectives*, 6, 423–429.
- Thompson, R. A. (2013). Conscience development in early childhood. In M. Killen & J. Smetana (Eds.), *Handbook of moral development*, 2nd Edition. New York: Taylor & Francis.
- Thompson, R. A. (in press). The development of virtue: A perspective from developmental psychology. In N. E. Snow (Ed.), *Cultivating virtue: Multiple perspectives*. New York: Oxford University Press.
- Thompson, R. A., Laible, D. J., & Ontai, L. L. (2003). Early understanding of emotion, morality, and the self: Developing a working model. In R. V. Kail (Ed.), *Advances in child development and behavior*, Vol. XXXI (pp. 137-171). San Diego: Academic.
- Thompson, R. A., & Newton, E. K. (2010). Emotion in early conscience. In W. F. Arsenio & E. A. Lemerise (Eds.), Emotions, aggression, and morality in children: Bridging development and Psychopathology (pp. 13-31). Washington, DC: American Psychological Association.
- Thompson, R. A. & Newton, E. K. (2013). Baby altruists? Examining the complexity of prosocial motivation in young children. *Infancy*, 18, 120–133.
- Thompson, R. A., & Raikes, H. A. (2003). Toward the next quarter-century: Conceptual and methodological challenges for attachment theory. *Development and Psychopathology*, 15, 691–718.
- Tomasello, M., & Carpenter, M. (2007). Shared intentionality. *Developmental Science*, 10, 121–125.
- Vaish, A., Carpenter, M., & Tomasello, M. (2009). Sympathy through affective perspective taking and its relation to prosocial behavior in toddlers. *Developmental Psychology*, 45, 534–543.
- Vaish, A., Carpenter, M., & Tomasello, M. (2010). Young children selectively avoid helping people with harmful intentions. *Child Development*, 81, 1661–1669.
- Valle, A., & Callanan, M. A. (2006). Similarity comparisons and relational analogies in parent-child conversations about science topics. *Merrill-Palmer Quarterly*, 52, 96–124.
- Van Bergen, P., Salmon, K., Dadds, M. R., & Allen, J. (2009). The effects of mother training in emotion-rich, elaborative reminiscing on children's

shared recall and emotion knowledge. Journal of Cognition and Development, 10, 162-187.

Wareham, P., & Salmon, K. (2006). Mother-child reminiscing about everyday experiences: Implications for psychological interventions in the preschool years. Clinical Psychology Review, 26, 535-554.

Warneken, F., & Tomasello, M. (2006). Altruistic helping in human infants and young chimpanzees. *Science*, 311, 1301–1303.

Warneken, F., & Tomasello, M. (2007). Helping and cooperation at 14 months of age. *Infancy*, 11, 271-294.

Waters, S., Virmani, E., Thompson, R. A., Meyer, S., Raikes, A., & Jochem, R. (2010). Emotion regulation and attachment: Unpacking two constructs and their association. *Journal of Psychopathology and Behavioral Assessment*, 32, 37-47.

Winer, A. C., & Thompson, R. A. (2011, March). Origins of individual differences in prosocial dispositions: Preschoolers. Poster session presentation to the Society for Research in Child Development, Montreal, Quebec, Canada.

Woodward, A. L. (2009). Infants' grasp of others' intentions. Current Directions in Psychological Science, 18, 53-57.

Zahn-Waxler, C., Radke-Yarrow, M., & King, R. A. (1979). Child rearing and children's prosocial initiations toward victims of distress. *Child Development*, 50, 319–330.