CHAPTER 3

The Emergence and Development of Conscience in Toddlerhood and Early Childhood

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To function successfully in society, children must be inducted into the social system of rules, values, norms, and standards of conduct. They must develop internal regulators of behavior—psychological mechanisms that can reliably guide their actions not only when they are supervised and externally controlled, but also when they are on their own, without surveillance and not immediately accountable to any authority. Because of its critical importance for the individual and for the society, the development of conscience has been long recognized as one of the main objectives of socialization. The development of conscience interests and challenges researchers because conscience is at the very nexus of multiple developing systems, such as affect, cognition, motivation, the emerging self, self-regulation, temperament, and the organization of conduct, with each contributing to its emergence.

In this chapter, the origins of conscience in the toddler and early childhood years will be considered. Reflecting renewed research interest in the sociomoral development of young children, we discuss the many catalysts to moral internalization of this period that guide how values are adopted by the young child. We also consider the factors that account for individual differences in conscience development, including temperamental individuality and features of the relationship shared by parent and child. We argue that any thorough consideration of moral internalization must begin with the toddler and early childhood period, and offer suggestions for new research directions in early sociomoral development.

We begin by defining conscience, and outline the multiple developmental systems involved in the emerging internalization of conduct rules by young children. We then discuss the core contributors to conscience development starting with basic developmental processes such as the growth of self-understanding; social referencing; emergent skills in cognition, memory, and representation; sensitivity to standards; and temperament. Next, we focus on the role of relational processes by considering the importance of a secure attachment, a mutually responsive parent-child orientation, the influence of parent-child discourse, and parental control and discipline practices. We then explore the developmental interactions between the qualities of the child and parental socialization. The chapter ends with suggestions for several directions for future research.

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DEFINING CONSCIENCE

Conscience is a broad concept that refers to the development, maintenance, and application of generalizable, internal standards of conduct for one's behavior. Developmental scholars have long recognized the complexity and the multifaceted quality of this system of internal regulation of conduct. In our view, conscience organizes four components that are essential to moral self-regulation but also contribute to other behavioral processes: emotion (particularly the moral emotions associated with compliance and misbehavior), self-control capacities, motivational processes (that assist in the internalization of values), and cognitive facets of the awareness and understanding of behavioral standards. Each of these components not only highlights the early beginnings of conscience development, but also its links to other aspects of psychosocial growth.

The emotional processes most relevant to early conscience development include the emotions associated with the consequences of one's conduct, such as anxiety, guilt, remorse, and discomfort triggered by actual or contemplated wrongdoing, and pride from acting in accord with one's standards (Kochanska, DeVet, Goldman, Murray, & Putnam, 1994). Young children also show emotional responses to others' wrongdoing (and, more generally, to standard violations) that include upset, interest, and amusement (Dunn, 1988; Kagan, 1981; Lamb, 1993). Included within this domain of moral emotions are also young children's affective responses to others' misfortune that may have empathic as well as egoistic bases (Eisenberg, 1992; Radke-Yarrow, Zahn-Waxler, & Chapman, 1983; Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Each of these emotional underpinnings of conscience begins to emerge during the second year.

The behavioral self-control processes—the emerging capacity to suppress prohibited acts and sustain socially desirable acts without surveillance or immediate external control—constitute the "executive" component of conscience that encompasses emerging self-regulation and the capacity to carry out a caregiver's early "dos" and "don'ts." As Kopp (1982, 1987; Kopp & Wyer, 1994) has pointed out, the growth of behavioral self-control and self-regulation is itself a painstaking developmental process in the early years, entailing the development of self-awareness as an autonomous, agentic individual, a capacity for self-initiated modifications of behavior resulting from remembered parental guidelines, and the ability continuously to monitor one's behavior according to these guidelines in diverse circumstances. Not surprisingly, the capacity for competent self-control is, according to Kopp, an achievement of the third year of life, with self-regulatory capacities emerging somewhat later.

The motivational component of conscience refers to young children's relatively enduring stance toward the caregiver's values and standards, or their receptiveness to socialization (Maccoby, 1984). Some children are generally oriented positively and eagerly toward their caregivers' socialization agenda: they wish to accept, embrace, and endorse caregivers' values. Other children, however, early tend to reject or are reluctant to accept those values. This difference in a core component of conscience may be associated with the security of the attachment relationship formed between parent and child in infancy, as well as continuing influences of parenting practices as children mature; it may also involve differences in children's temperamental profiles.

Finally, cognitive processes encompass young children's awareness, understanding, and sensitivity to standards. Developmental researchers are realizing that this is far more than the internalization of parental values as it has been traditionally conceived, and requires consideration of how young children progressively assimilate and construct moral values in relation to their understanding of self, others, and of causality, as well

as their capacities to remember and represent behavioral standards in the context of other life experiences. The manner in which children acquire and adopt standards of conduct also extends far beyond the discipline encounter, and it reflects the various ways that parents use to help offspring to reconstruct, remember, and interpret the daily experiences that contribute to event representation, prototypical knowledge (including knowledge of behavioral norms), and autobiographical memory of personally meaningful experiences of misbehavior as well as of compliance. Taken together, the cognitive constituents of conscience are part of a much broader process of appropriating understanding through observation, conversation, and diverse other kinds of shared experiences with family members (cf. Rogoff, 1990), rather than merely internalizing values as they are learned from discipline encounters with parents. There is evidence that this process is also inaugurated in the second and third years of life.

Not only do all these processes begin to emerge in the first three years of life, but they also predict different developmental trajectories in conscience development and its later outcomes. Thus, early childhood is a critical developmental context for future moral development.

THE IMPORTANCE OF TODDLERHOOD AND EARLY CHILDHOOD

The past 10 to 15 years have been an exciting time in the history of research on conscience. Several noteworthy shifts in conceptual and empirical approaches to early morality have influenced contemporary views of conscience development.

First, after many years in which moral development research focused largely on the judgment and reasoning processes of older children, researchers now share the view that conscience emerges surprisingly early—in fact, toddlerhood and early childhood are now seen as the critical context for moral development. In many respects, renewed attention to the growth of conscience in early childhood revisits the concerns of many developmentalists in the post-World War II era when, inspired by psychoanalytic theory, researchers explored the child-rearing influences on young children's guilt, self-control, identification, and morality (e.g., Radke-Yarrow, Campbell, & Burton, 1968; Sears, Maccoby, & Levin, 1957; Sears, Rau, & Alpert, 1965). Other researchers of that era, applying instead learning principles, explored conscience as the outgrowth of anxiety-based conditioning processes (e.g., Aronfreed, 1968; Parke, 1974). In each case, the influence of parent-child interaction on conscience development in the preschool years was the focus. With the discovery of Piaget's theory in subsequent years and its applications to moral judgment by Kohlberg (1969) and others (see also Piaget, 1932), however, attention shifted to cognitive aspects of morality in older children because of the presumed egocentrism of preschoolers and the conclusion that they were essentially amoral, complying to avoid punishment and obtain rewards rather than because of genuinely moral or humanistic considerations.

The contemporary return of scholarly interest to early conscience revisits earlier theoretical concerns about the influence of parent-child relationships on early morality, therefore, but within a broader and more complex conceptual landscape. For example, attachment theory now provides potentially valuable insights into the motivational bases of early moral compliance, and advances in temperamental theory highlight the importance of a young child's behavioral individuality for the internalization of values. Recent research on early parent-child interaction reveals the multifaceted ways that

children acquire knowledge of morality and emotion both within and outside the discipline encounter. Additional contemporary insights derive from allied research fields, such as new perspectives on the growth of young children's psychological understanding of others (known currently as "theory of mind") and their representations of self and others, which show that preschoolers are decidedly nonegocentric in many features of social cognition that inform early conscience. Altogether, it now appears that many emergent capabilities of the second and third years of life—including an early appreciation of standards, a rapidly developing network of self-conscious emotions, the growth of self-understanding, and emerging restraint and self-control—fuel early moral development.

Second, accompanying a return of scholarly interest to early childhood is renewed attention to the affective, motivational, and self-regulatory facets of conscience development. By contrast with the predominant emphasis on cognitive features of moral judgment in research with older children, students of early childhood have revealed how closely conscience development is tied to affective processes in self (e.g., salient experiences of pride, shame, and guilt) or another (signaling approval or disapproval of the child's actions or intentions). Moreover, as young children strive to manage their self-care, emotion regulation, and peer sociability, self-regulation of compliance, like rules of conduct, is also a salient concern. Consequently, the toddler and preschool years are an important arena for studying conscience development because it highlights central components of moral growth prior to the emergence of sophisticated moral cognition. Furthermore, a contemporary focus on the affective and motivational features of conscience has also drawn attention to individual differences in these characteristics, particularly with regard to temperamental individuality and its potentially important role in the development of internalized regulators of conduct.

Finally, renewed attention to early childhood has also caused researchers to revisit questions about the importance of close relationships to conscience development. Although most contemporary researchers do not draw explicitly on psychoanalytic formulations, the relational processes they examine—a secure attachment, a mutually responsive parent-child relationship, the quality of parent-child discourse, as well as adult actions in the discipline encounter—are each consistent with the analytic legacy and, more importantly, point to the diverse relational experiences that contribute to conscience development. For many reasons, therefore, the toddler and early preschool years constitute a critically important period for the foundation of conscience and morality.

BASIC PROCESSES IN EARLY CONSCIENCE DEVELOPMENT

The emergence of conscience is based on multiple developing systems. Several early developmental processes associated with self-understanding, social referencing, memory, and the awareness of behavioral standards constitute the necessary antecedents of conscience, and temperamentally based individual differences contribute to variation in early internalization.

The Growth of Self-Understanding

The growth of self-awareness and self-understanding during the second year is necessary for conscience because it permits children to view the self as an object of evaluation and as a causal agent in activity that is appraised as right or wrong. Even infants

experience themselves as causal agents, especially in the context of social and nonsocial contingency. It is not until the end of the second year, however, that young children acquire a sense of themselves as autonomous agents in a temporal context (Thompson, in press-a). When this occurs, they begin to associate past experiences with present circumstances and future outcomes and can, with guidance, evaluate past actions in the present moment (Nelson, 1993). As self-understanding continues to mature during the preschool years, young children begin to connect personal experiences to broader representations of their abilities, characteristics, and past experiences in constructing a sense of personal history, or autobiographical memory (Welch-Ross, 1995). Consequently, their sense of self becomes more deeply associated with the behaviors that evoke others' approval or disapproval (Stipek, Recchia, & McClintic, 1992). Thus in many respects, the growth of self-understanding and of conscience are mutually influential in early childhood as emerging new forms of self-awareness permit more competent self-regulation, and as experiences of moral socialization (and of compliance and disobedience) become integrated with the child's self-concept and autobiographical memory.

The growth of self-understanding has other significant implications for conscience development. An empathic capacity flourishes during the second year as young children begin to differentiate and associate external events, emotional expressions, and subjective experiences of emotion in themselves and others (Thompson, in press-b; Zahn-Waxler & Radke-Yarrow, 1990). Empathy provides a catalyst for conscience that is, in many ways, independent of compliance-based moral socialization (Hoffman, 1983). Moreover, some scholars (Lewis, Sullivan, Stanger, & Weiss, 1989) argue that self-awareness is also a necessary precondition for the growth of self-referent or "moral emotions" such as guilt, shame, and pride (although other emotion theorists do not hold this view, arguing instead that parental socialization of pride, guilt, and other self-referent emotions fosters the young child's self-awareness; see Barrett, 1995). Regardless, the second year also witnesses growing indications that young children experience guilt, shame, pride, embarrassment, and related self-referent emotions in appropriate circumstances, which may be associated with their greater capacities to appraise the self's actions in a more sophisticated fashion. As these self-referent emotions become enlisted into recurrent experiences of moral socialization by parents and other authorities, the child's motivation to comply becomes associated with the desire to regard the self with an affectively positive valence, which is one of the crucial components of moral internalization.

Social Referencing

Late in the first year of life, infants acquire a capacity for social referencing: They respond to novel or uncertain situations based on the emotional expressions they detect in others. Although there is currently controversy over whether social referencing at this age reflects genuine information seeking or is a by-product of affective sharing, comfort seeking, or other facets of secure-base behavior (see Baldwin & Moses, 1996), the social referencing literature indicates that late in the first year, infants are fairly good consumers of emotional information from others and can use it in their own action tendencies (Thompson, in press-a). More generally, social referencing indicates how early young children can acquire understanding from the distal emotional communications of others. As this capacity becomes progressively accompanied by the child's growing language capabilities, it can provide an important foundation for moral socialization in the

early years of life. Because of the salience of the emotional signals of others, in other words, referencing provides an important avenue by which these emotional cues become moral incentives.

One way that social referencing contributes to conscience development is through the multimodal cues by which parents signal disapproval in circumstances in which young children may be unaware or uncertain of prohibited acts. As social referencing theory predicts, infants and young children are most likely to look to caregivers for cues when they are uncertain of how to respond (see Feinman, Roberts, Hsieh, Sawyer, & Swanson, 1992), but the caregiver's cues may also have a significant impact even when children are not particularly seeking them (especially when both salient facial and vocal cues are used). Thus social referencing helps to endow acts with affective valence for the child, and this becomes even more influential when the parents' emotional cues are accompanied by language. Moreover, there is evidence that social referencing becomes enlisted by parents for purposes of behavioral control shortly after infants have become mobile during the first year (Zumbahlen & Crawley, 1996).

Another way that social referencing is influential, at somewhat older ages, is to provide for nonverbal negotiation between parent and child over permitted and prohibited actions through the exchange of looks, expressions, and gestures (e.g., the toddler progressively approaches the VCR while glancing toward his or her parents; Emde & Buchsbaum, 1990). This kind of checking and rechecking the parent's emotional message may be an important avenue toward the growth of genuine self-control as the process of comparing contemplated behavior with a behavioral standard becomes internalized. The internalization of the parent's approving or disapproving expressions when young children are considering action in the parent's absence may link social referencing to the progressive emergence of conscience. In "referencing the absent parent," young children spontaneously evoke the caregiver's expected reaction to behavior that they know is permitted or prohibited (Emde, Biringen, Clyman, & Oppenheim, 1991; Emde & Buchsbaum, 1990).

Early Cognition, Memory, and Representation

As Kopp (1982, 1987; Kopp & Wyer, 1994) has noted, a young child's compliance is contingent on the intellectual capacities required for attending and responding to an adult's prohibitions, understanding and recalling standards of conduct, and applying these standards to one's behavior in diverse situations. As these constituents of self-regulation slowly develop, behavioral compliance can occur for very different reasons at different ages. A 12-month-old may avoid prohibited acts (such as touching forbidden objects) because of simple associative learning or a conditioned response to past disapproval, and a toddler may resist acting in a prohibited manner because of imitative learning. In neither instance, however, does compliance derive from an internalized behavioral standard that is generalizable, and thus it is unclear whether these actions may be truly regarded as "moral."

The beginnings of an understanding of behavioral standards may emerge late in the second year and in the third year, however, with the growth of prototypical knowledge structures by which young children strive to represent and understand common, recurrent experiences, as well as to predict their outcomes. Such prototypical structures—commonly called "scripts"—form a bedrock for event representation by enabling young children inclusively to represent familiar experiences and to integrate them with other knowledge systems (see Hudson, 1993; Nelson, 1978; Nelson & Gruendel, 1981). Because many behavioral standards (both moral and conventional) are based on routine

events and are repeatedly conveyed in these circumstances—whether they entail prohibitions from touching dangerous objects at home, self-control with respect to waiting, sharing, and eating, participation in family routines, or the use of simple manners (see Gralinski & Kopp, 1993)—it would be surprising if simple rules did not become incorporated into young children's early scripted knowledge systems. Moreover, to the extent that children use such scripts for their representations of novel events also (e.g., using a familiar bedtime script to describe the specific events of the previous night), knowledge of the behavioral standards embedded within such scripts is likely to become well integrated into children's memory and representation of many of their personal experiences. The incorporation of behavioral standards into prototypical knowledge structures is especially important because of young children's use of these scripts to predict their outcomes: It is important to know, for example, what happens when you fail to cooperate with rules about playing with forbidden objects as well as what happens when you comply.

There has been little research into the development of prototypical knowledge structures pertinent to standards of conduct, although research by Smetana (Chapter 7; 1989) indicates that, in their interactions, both parents and children make distinctions among behavioral standards, rules, and values in different domains (e.g., pertaining to social relationships, conventions, or safety). There are interesting suggestions in this literature, moreover, that parents assume a significant role in establishing the content, as well as the organization and structure, of such scripts by how they prompt the child's memory retrieval. In the context of shared discourse that begins as soon as children can participate meaningfully in simple conversation, parents help to review, reconstruct, and consolidate young children's memory of generalized routines as well as of their specific experiences (Fivush, 1994; Fivush & Hamond, 1990; Hudson, 1990). In this way, the child's understanding of recurrent (as well as novel) events is defined and organized. Moreover, parents differ in their styles for doing so, with some parents (labeled "elaborative") providing considerable embellishment on their children's efforts at recall and representation during shared conversations, while others (labeled "pragmatic" or "repetitive") act in a more directive, focused manner (Fivush, 1991; Hudson, 1990; Reese & Fivush, 1993).

Although these variations in parents' styles of guiding emergent representation have been related to children's memory for the past, how they might affect the developing conscience is poorly understood. Perhaps each fosters its development in different ways. The pragmatic, directive style may communicate basic behavioral standards clearly and somewhat forcefully, whereas the elaborative style may instill a broader moral orientation toward others, reminiscent perhaps of Hoffman's (1970a) "humanistic orientation." No research, however, has directly addressed this topic.

Similarly, researchers have not yet explored other dimensions of variability that may affect the valence of children's recall of personal experiences. It seems likely that parents who help reconstruct their children's memory for past events of disobedience using heightened emotion and emphasizing negative outcomes would differentially affect children's representations of such experiences compared with parents who help children recall these events using a more benign affective tone. These individual differences would likely have an important effect on conscience development. For example, parents who help young children reconstruct past experiences of misbehavior while emphasizing the guilt inherent in misconduct are likely to heighten young children's compliance compared with parents whose event reconstructions emphasize the benign intent of children's misbehavior. Such an hypothesis remains, however, for future exploration.

With further growth in representation, the young child's grasp of behavioral standards becomes more multifaceted. Rules that had earlier been tied to specific situations may now be generalized to similar circumstances in other settings (e.g., keeping hands off delicate or dangerous objects in settings outside the home). A growing awareness and anticipation of causal relations enables young children better to grasp the significance of many behavioral expectations and also permits their application elsewhere (e.g., avoiding strangers or resisting scaling high or precarious places). Later, with the growth of a more sophisticated understanding of others' thoughts, feelings, emotions, and desires, children begin to understand the humanistic rationale for behavioral standards that entail respect for another's well-being. Finally, as young children begin constructing a valenced sense of self in the fourth year that entails personal evaluations of one's actions, compliance with behavioral standards becomes one of the avenues for others' approval or disapproval and, as a consequence, of positive or negative self-image.

Sensitivity to Standards and Their Violations

Kagan (1981) and Lamb (1993) have described another important maturational phenomenon that emerges in the second half of the second year. At that time, children begin to notice instances when standards (of wholeness, intactness, etc.) have been violated, such as when they see missing buttons, torn pages, trash on the floor, or misplaced objects. They pay attention to these violations of the norm, and they show both negative and positive emotional responses to them. Even though those events share no common perceptual qualities, young children's behavior strongly indicates that a flaw is a salient and affectively laden occurrence. Kagan and Lamb interpreted this phenomenon as a marker of the emerging sensitivity to and appreciation of standards, but their evidence was anecdotal or based on very few cases.

In a study of a large group of 2- and 3-year-old toddlers, one of us (G.K.) examined that conclusion empirically (Kochanska, Casey, & Fukumoto, 1995b). First, we explored in a systematic fashion children's responses to flawed objects. During a home visit, each child was presented with four pairs of play objects (toy bears, beds, blankets, and Sesame Street cups). In each pair, one object was whole and one was visibly flawed (i.e., broken or stained). The children's responses were videotaped and coded, including their answers to the examiner's standard questions, physical acts on the objects, and the manner of play with all eight objects. The findings indicated that young toddlers clearly responded to the flawed/whole quality. They showed significantly more interest in and concern about the flawed objects, although they declared strong preference for the whole ones. They were clearly aware of the violations of standards that the flawed objects embodied, and they repudiated the flaws; at the same time, however, they were fascinated with them. Dunn (1988) described similar, affectively complex reactions of young children to norm violations, such as their responses to the transgressions of siblings.

In the same study, we also examined Kagan's proposal that sensitivity to flaws is a marker of a more general system of internal standards. During a laboratory visit several weeks later, the same children were led to believe, on two occasions, that they had committed an act of wrongdoing that resulted in serious damage to an object that was valued by the examiner (i.e., broke a large doll, stained a new T-shirt). The situations were contrived so that the damage occurred while the child was handling the object. The children exhibited multiple verbal, affective, and behavioral signs of distress following the mishaps, including attempts at reparation. Moreover, those reactions were correlated significantly with the child's sensitivity to flawed objects

assessed previously. Children who appeared more sensitive to the flawed/whole quality of those objects were also more distressed and concerned following the mishaps, supporting Kagan's proposal that both sets of responses reflect an early sense of right and wrong and an emerging system of internal standards.

Temperamental Underpinnings

Temperament has received very little attention in research on conscience and internalization. This gap is quite surprising, in view of the fact that biological contributions to internalization have been long acknowledged. For example, the fundamental role of emotions of fear or anxiety in the development of conscience has been implicated in the classic psychoanalytic model, as well as in the early learning approaches to internalization and in research on psychopathy (Fowles, 1993, 1994; Lykken, 1957; Quay, 1993). Until recently, however, there has been no systematic research addressing the implications of individual differences in fearfulness and other temperamental qualities for the early development of internalization. We have begun to examine the temperamental foundations that make internalization possible, as well as qualities of temperament that account for individual differences in early conscience.

Successful internalization often requires restraint—the suppression or inhibition of desired but prohibited acts, and the production or sustinance of socially desirable acts. Therefore, two temperamental inhibitory systems appear particularly relevant to emerging internalized regulators of conduct: a passive inhibition system (anxiety, fearfulness) and an active inhibition system (inhibitory or effortful control).

The first system (passive inhibition, or fearfulness) has been long believed to be an important mediator of internalization and conscience. The classic learning models had proposed that when children are punished for transgressions, they experience anxiety and other aversive states, and they come to associate anxiety with actual or potential deviation (Mowrer, 1960). Fear or anxiety contributes to internalization, in this view, because it underpins children's apprehension, anxiety, or discomfort associated with an actual or even contemplated transgression (Parke, 1974). Similar views have been long endorsed by researchers studying psychopathy. Since the classic work by Lykken (1957), substantial experimental evidence in research on psychopathy has documented that antisocial individuals with grossly impaired conscience differ significantly from those without such impairments in the weaker regulatory role of fear and anxiety or, more generally, a weaker Behavioral Inhibition System (Fowles, 1988, 1993). Therefore, whereas most people refrain from destructive or antisocial acts due to apprehension, anticipatory anxiety, and other negative emotions associated with the potential consequences of wrongdoing, in many psychopaths this process is undermined by their physiologically based hyporesponsiveness to signals of punishment—the deficit of fear.

To the extent that temperamental fearfulness is involved in emerging internalization, variations in fearfulness should be associated with the differential outcomes in early conscience. Fearful children may feel salient remorse and upset after wrongdoing, may be quite concerned about its potential negative consequences, and may experience discomfort even while considering future wrongdoing. They may, therefore, become well internalized. In contrast, relatively fearless children are likely to be less concerned about rule violations and less prone to transgression-related discomfort, and consequently, become less well internalized.

Data from several laboratories support this model. Rothbart, Ahadi, and Hershey (1994) reported that 6- to 7-year-old children who were described by their parents as

high on moral traits, such as empathy and guilt, had been highly fearful when they had been observed in standardized assessments in the laboratory as infants. Kochanska (1995) found that fearful toddlers, who responded with distress and withdrawal in laboratory situations that presented them with novel and mildly "risky" events and stimuli, were also more internalized on several independent observational measures that involved the inhibition of prohibited behavior and execution of behavior consistent with parental values, compared with fearless toddlers who readily approached novel and risky stimuli. In another study (Kochanska, DeVet, Goldman, Murray, & Putnam, 1994), using maternal reports to assess children's temperament and conscience, fearfulness was associated with girls' tendency to experience guilt and other negative affects after transgressions. Asendorpf and Nunner-Winkler (1992) reported that fearful, shy, and inhibited children cheated less while playing a game without surveillance.

The second system (inhibitory or effortful control) is also associated with a temperamental quality that has only recently become the subject of systematic research (Derryberry & Reed, 1994; Rothbart, 1989; Rothbart & Ahadi, 1994). In contrast to fearfulness—which represents the reactive aspect of temperament—inhibitory control represents its self-regulatory aspect. Rothbart (1989) considers this capacity to be fundamental to the emerging ability voluntarily to suppress or initiate responses. In earlier research (e.g., Block & Block, 1980), similar qualities were considered part of ego-control, an important individual difference variable, but only recently has effortful/inhibitory control been explicitly defined in the context of a more general model of temperament that includes its developmental course and its psychophysiological and neuroanatomical underpinnings (Rothbart, Derryberry, & Posner, 1994).

Although we are only beginning systematically to examine inhibitory or effortful control, new data already strongly support its fundamental role in the development of internalization. Using newly developed behavioral batteries, Kochanska and her colleagues recently assessed inhibitory control in a large group of toddlers and preschool children. The tasks involved several (highly coherent) functions that are theoretically the components of inhibitory or effortful control, such as delaying, slowing down motor activity, suppressing/initiating activity to alternating signals, lowering voice, and reflective information processing. The same children were also observed in multiple paradigms assessing internalization of rules of conduct, and were rated by their mothers on several dimensions of early conscience. The findings indicated that, both contemporaneously and longitudinally, children who had high scores on the inhibitory control dimension of temperament were also highly internalized on observational and mother-reported measures, whereas those who performed poorly on the temperament battery were less internalized (Kochanska, Murray, Jacques, Koenig, & Vandegeest, 1996). In another study, Rothbart, Ahadi, et al. (1994) found that an early antecedent of inhibitory control, latency to grasp in infancy, predicted moral traits in middle childhood. In yet another study (Kochanska et al., 1994), inhibitory control assessed by mothers' reports was strongly linked to children's internalization.

RELATIONAL INFLUENCES ON EARLY CONSCIENCE DEVELOPMENT

As researchers have increasingly come to appreciate the importance of early childhood in the emergence of conscience, they have also begun to reevaluate the critical role of

early parent-child relationships. Most developmentalists now agree that the first values and standards are conveyed and enforced in the context of the child's early relationships in the family.

Hoffman's work (1963, 1970a, 1970b, 1983) is best known for his emphasis on the importance of the parent-child relationship in moral internalization, focusing not only on their interaction in the discipline encounter but also the warmth and reciprocity characterizing their relationship, and the extent to which offspring identified with parents and their values. But Hoffman's research focused mostly (although not exclusively) on parent-child relations in the late school-age years and adolescence, when many of the foundations of conscience have already become established. By contrast, contemporary researchers approach the study of conscience with a renewed appreciation of the importance of very early parent-offspring relations and the orientation they instill in young children to cooperate and comply, or to resist and reject, parental values. In this respect, contemporary researchers build on much earlier studies concerned with the impact of parental warmth on young children's conscience (e.g., Sears et al., 1957; Sears et al., 1965).

However, relational influences on moral internalization begin, but do not end, with parent-child interaction. As Piaget (1932) himself noted, and as subsequent researchers have confirmed, peer relationships and interactions with other authorities (such as preschool teachers, the parents of peers, etc.) provide important catalysts for moral development.

Security of Attachment

Contemporary interest in early parent-child relationships has been enlivened by attachment theory, which emphasizes the growth of the child's security and trust in the parent during the first year of life as an important cornerstone for sociopersonality development (see Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969/1982; Bretherton, 1985; Lamb, Thompson, Gardner, & Charnov, 1985). Consistent with theoretical predictions, attachment research has shown that the sensitivity and warmth of maternal care during the first year contribute to the development of secure attachment, which is also affected by the extent of stress and social support within the broader family environment (Thompson, in press-a).

A secure attachment at 12 months is thus an important indicator of harmony in the parent-infant relationship, with the infant capable of relying on the parent for support when it is needed, based on a history of reasonably sensitive care. By contrast, infants who are insecurely attached at this age respond to the parent more angrily or avoidantly, partly owing to a history of less consistent sensitivity by the caregiver. It is not surprising, therefore, that secure attachment in infancy leads to more harmonious parent-child interaction in subsequent years. Children who as infants were securely attached respond more cooperatively and compliantly, and with greater enthusiasm and positive emotion, during encounters with their mothers in short-term follow-up assessments. Their mothers, in turn, were also more supportive, sensitive, and helpful in later observations than were the mothers of insecurely attached infants (see Thompson, in press-a, for a comprehensive review). Because a secure attachment in infancy paves the way for a more harmonious parent-child relationship in early childhood, researchers have begun to explore Bowlby's (1973) provocative view that, over an extended period, these relationships contribute to the development of internal representations (or working models) of self and relationships that have broader consequences for sociopersonality development.

The security of attachment thus has several important implications for conscience development. First, to the extent that securely attached infants and young children participate in more harmonious encounters with parents, the opportunities for observational learning, reinforcement of behavioral standards, and the broader transmission of norms and expectations within a positive relational context are expanded. In other words, not only are there greater opportunities for the transmission of values, but the child's receptiveness to these values may be enhanced by a secure attachment and the sensitive, responsive care associated with it (a view anticipated by Stayton, Hogan, & Ainsworth, 1971).

Second, to the extent that a secure attachment in infancy paves the way for subsequent relational influences that contribute to the child's development of self-representations of worth, approval, and competence—and to representations of the attachment figure as reliable, loving, and supportive—it provides another foundation for young children's receptivity to parental values and the arousal of uncomfortable affect when violating those standards (each of which is a crucial contributor to moral internalization). Finally, to the extent that a secure attachment appears also to enable young children to enter more successfully into other close relationships, such as with peers, in the preschool years (see Thompson, in press-a), it provides additional positive relational contexts for the growth of conscience in interpersonal interaction.

Taken together, these considerations suggest that a secure attachment provides a foundation for more positive, harmonious relationships in early childhood and the incentives they provide for the development of conscience. These outcomes are contingent on the maintenance of harmonious parent-offspring relations from infancy to early childhood when the growth of self-understanding, sensitivity to standards, and representational capacities provide additional catalysts to moral internalization. Studies have shown that when parent-child relationships change over this period, a secure attachment does not provide later benefits (see Egeland, Kalkoske, Gottesman, & Erickson, 1990; Erickson, Sroufe, & Egeland, 1985). But the view that attachment security is significant to early conscience development because it provides a foundation for a mutually positive parent-child orientation is consistent with other views of moral internalization to be reviewed in this chapter.

The Mutual Interpersonal Orientation between Parent and Child

Maccoby (1983, 1984) has proposed that, within each individual parent-child dyad, a mutual interpersonal orientation of distinct valence emerges as a result of their repeated transactions during the early years of life. She conceptualized parent-child socialization as the process of inducting the child into a system of reciprocity—the formation of a mutually binding, reciprocal, and mutually responsive relationship. Such relationships are often described as "communal" in social psychology (Clark, 1984). Briefly, two partners in a communal or mutually reciprocal relationship feel invested in and responsible for each other's welfare; one feels concern for and acts responsively to the other's needs, and at the same time, one comes to expect the other to be responsive to one's needs and to be concerned about one's welfare. Not all parent-child relationships develop, however, along the trajectory of increasing communality or mutual responsiveness, as is well known from common knowledge and clinical literature. Sometimes,

they progress along an adversarial developmental path (Maccoby, 1984; Patterson, DeBaryshe, & Ramsey, 1989).

As suggested by the attachment literature, the degree of mutual reciprocity, cooperation, or responsiveness appears to be an important quality of the parent-child relationship that differentiates individual dyads, and it serves as a foundation for a host of outcomes central in successful socialization. At this point, it is not yet clear how such orientation emerges. Two influences appear central, both also consistent with attachment theory. One factor is the parent's responsiveness to the child's signals of distress, bids for attention, influence attempts, or need for assistance. The other factor is the history of their mutually enjoyable interactions, infused with shared positive affect. Other qualities of parent-child relationship also may prove important in the consolidation of a mutually cooperative dyadic set. According to Maccoby, the history of such experiences contributes to the child's commitment to the relationship with the parent, and an internally felt obligation to reciprocate the parent's cooperative behavior.

The first study to test Maccoby's formulations was by Parpal and Maccoby (1985). In that study, 3- to 4-year-old children's cooperation with their mothers in three groups was compared. In each group, the mothers had played with their children in somewhat different ways prior to the assessment of the child's cooperation. In one group, mothers had been trained to be responsive to their children's bids (and had practiced doing so at home during the week preceding this assessment), and consequently they engaged in responsive play in which they followed the child's suggestions and expressed enjoyment. The other conditions involved free play that had not been preceded by any training to heighten maternal responsiveness. After the brief play session, mothers requested that the children clean up the toys using standard commands. As expected, even after that brief experience of mutual reciprocity, children in the responsive play group were significantly more willing to cooperate with their mothers in the cleanup task than the children in the free-play condition (see also Lay, Waters, & Park, 1989).

A mutually responsive orientation between parent and child, with its shared commitment to each other, constitutes a critical context for early moral socialization. Because in mutually responsive, cooperative dyads the child acquires a receptive, eager, or enthusiastic stance toward the parent, he or she is much more likely to embrace the parent's values and standards, and to accept them as his or her own. Children's compliance in such mutually cooperative dyads is more likely to have a self-regulated, internalized quality—"committed compliance"—that may be contrasted with "situational compliance" that entails cooperation without any feeling of internal obligation by the child. In the recent work of one of us (G.K.), we examined young children's committed compliance more closely. We found that, indeed, it was significantly related to the shared positive affect in the mother-child dyads (Kochanska & Aksan, 1995). This finding parallels Lytton's (1977) report that higher frequency of mother-child play (presumably mutually enjoyable) was associated with toddlers' higher "rudimentary conscience," or spontaneous self-correction or reversal of a misbehavior.

Encouraged by those findings, one of us (G.K.) examined a more general prediction that a mutually responsive, positive parent-child orientation also promotes the child's broad internalization of parental values. This prediction was tested in a longitudinal study on conscience development, in which data were collected from a large group of mothers and their young children in toddlerhood and again at preschool age (Kochanska, 1997b). Based on multiple observations of mother-child interaction in routines, chores, discipline, and

play contexts at each age, we created a composite measure of mutually responsive orientation that encompassed various assessments (both molecular and global) of the mother's and the child's mutual responsiveness to each other and of their history of shared positive affect. We also collected multiple observational and mother-reported measures of the child's internalization of the mother's rules and values. The findings strongly supported Maccoby's views on the influence of a mutually responsive parent-child orientation on the child's internalization of the parent's norms and values. Children from the dyads characterized by such an orientation showed significantly higher internalization scores, both on the contemporaneous and longitudinal measures. Thus, they seemed to have developed strong feelings of internal obligation regarding maternal goals, values, and standards for conduct. This obligation derived, it seems, from the genuinely harmonious and responsive relationship between mother and child, established early in their interactions.

Those results, although preliminary, encourage further exploration of the parent-child relationship as an ongoing context for the successful development of conscience. In particular, the roles of secure attachment, parental warmth (MacDonald, 1992), shared positive affect or "positive distal interaction" (Kochanska & Aksan, 1995; Maccoby & Jacklin, 1983), and maternal compliance to child (Parpal & Maccoby, 1985) deserve attention as possible contributors to the kind of relational harmony that fosters moral internalization.

Parent-Child Discourse

Relationships provide a context for many kinds of shared activity, and with the growth of language the parent-child relationship also becomes an arena for shared conversations about the child's experiences. Developmental researchers have devoted considerable attention to early parent-child discourse and its influence on event representation, scripted knowledge structures, and autobiographical memory, as well as its role in the socialization of self-understanding and the child's knowledge of emotion and morality (e.g., Hudson, 1990; Miller, 1994; Miller, Potts, Fung, Hoogstra, & Mintz, 1990; Nelson, 1993). They have discovered, in short, that many lessons are included in how parents help children to review, reconstruct, and interpret their everyday experiences.

To illustrate, consider a brief conversation between a 21-month-old and his mother about an event that occurred earlier in the day (Dunn & Brown, 1991, p. 97):

CHILD: Eat my Weetabix. Eat my Weetabix. Crying.

MOTHER: Crying, weren't you? We had quite a battle. "One more mouthful, Michael." And what did you do? You spat it out!

CHILD: (pretends to cry).

Like many simple conversations shared by young children and their parents, this one includes many things: In response to the child's prompt, the mother provides an explicit, verbal representation of the shared experience that includes the causal sequence of events leading to the child's emotional reaction and lessons about the self in the context of a moral evaluation. Such shared recounting not only contributes to the content and structure of the child's event representation, but also embeds lessons about the self in the context of information about relationships, emotion, and morality—and thus, according to some researchers, shapes early autobiographical memory. It is likely that

recurrent experiences of shared conversations like these about the child's everyday experiences are central to the development of representations (or "working models") of self, relationships, and other people, as well as the child's understanding of others' thoughts, feelings, beliefs, and motives—as they are construed and interpreted by parents in shared dialogue with the child (Thompson, in press-a).

It is also likely that shared discourse provides valuable lessons about morality, since the content of many early conversations centers on a child's (or a sibling's) compliance or misbehavior, and its consequences. Thus how a parent interprets and construes the events of the child's life provides opportunities for transmitting implicit values concerning acceptable and unacceptable behavior. There are important cultural differences, for example, in how parents structure conversational exchanges with young children in relation to the values of the culture. Miller and her colleagues (Miller, Fung, & Mintz, 1996; Miller et al., 1990) have noted that Chinese and Chinese American mothers stress moralistic themes when they discuss with 2-year-olds the experiences of the day, and also emphasize the shame inherent in misbehavior. By contrast, American mothers tended to deemphasize the child's misbehavior, or attribute it to the child's spunk or mischievousness. It is likely that these differences in discourse patterns are associated with differences in young children's compliance with parental prohibitions and, in particular, with the arousal of certain emotions (e.g., shame) associated with misbehavior. There are also differences in how parents help to recount and interpret the experiences of their young sons and daughters, with a greater emphasis on emotion and its relational contexts with daughters (Fivush, 1993, 1994). Thus lessons about morality are embedded not only directly in the discipline encounter, but also indirectly in the shared recounting of everyday experiences in early parent-child conversation.

In this light, it is not surprising to find that during the second and third years of life, young children who converse more frequently with their mothers about feelings and their causes are more competent on later measures of emotional understanding (Brown & Dunn, 1996; Dunn, Brown, & Beardsall, 1991; Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991). Similarly, 2- to 3-year-old children whose mothers use reasoning and humanistic concerns in resolving conflict with them are more advanced in measures of moral understanding in assessments in kindergarten and first grade (Dunn, Brown, & Maguire, 1995). In each case, shared discourse—often centered on experiences that are personally meaningful to the child—provides important lessons that shape the growth of conscience. Much more research is needed, however, to elucidate how parent-child discourse has this influence, and the individual differences in parental conversational styles that may have important implications for variations in early conscience development.

Control and Discipline

The actual process of conveying and enforcing standards in the family has been long viewed as the critical context in which children's internalization develops (Hoffman, 1970b, 1983). In general, parental use of power-assertive or forceful techniques to effect children's compliance has been considered detrimental to the development of internalization (Kochanska, Padavich, & Koenig, 1996). Discipline based on psychological methods and deemphasizing power, such as reasoning-based induction, has been found most effective in promoting internalization, although complexities involved in those bodies of research findings have also been pointed out (Grusec & Goodnow, 1994; Perry & Perry, 1983).

Hoffman's (1983) model of early discipline and internalization is particularly important to understanding early conscience development. The model proposes that anxiety or discomfort is essential in determining the effectiveness of parental discipline for the internalization of values. When children misbehave, parents intervene using a variety of techniques that vary in their forcefulness or reliance on the parent's power over the child. The degree of forcefulness results in varying degrees of discomort, anxiety, or arousal in the child. To be effective, the child's arousal must be optimal. Discipline practices that are completely devoid of force are ineffective because they elicit insufficient anxiety to signal the importance of the parental intervention, to orient the child to the message, and to provide the motivation to change.

Too much force, however, can also be detrimental to moral internalization. Power-oriented, forceful discipline elicits very high anxiety or arousal in the child and it interferes with the effective processing of the parental message about behavioral standards, and thus undermines internalization. According to Hoffman, under conditions of high arousal, the child is likely to store the encounter in episodic memory (along with salient situational features, extraneous to the actual socialization message) rather than in semantic memory where it can provide a lasting behavioral guide. Furthermore, even if the child complies, he or she likely attributes compliance to the external cause (the parent's exertion of power), rather than to internal factors, such as rules and values. Finally, the child often experiences resentment and anger toward the parent when forced to comply, and thus might tend to reject any parental message or value.

Hoffman concludes that discipline that uses only the minimal amount of power and employs rational induction and nonassertive methods of influence elicits a more optimal arousal level in the child. Under these conditions, the child attends to the parental intervention and is likely to store the socialization message in semantic memory "stripped" of extraneous situational details; thus the message becomes part of an internalized system of rules, later experienced as one's own. Attributions for compliance are likely to be internal, and thus the discipline encounter is more likely to promote future rule-compatible behavior without surveillance.

This formulation, where parental power assertion is linked to the storage of the socialization message in episodic or semantic memory system, is consistent with the research on early memory and internalization reviewed earlier. Additionally (from a depth-of-processing perspective), parental use of power may interfere with internalization also because it may be associated with the child's more shallow processing of the message. A child's retention of the content of the parent's prohibition may be impaired when power assertion is employed because the heightened affect generated by the parent's power-oriented discipline limits the child's capacity, at that moment, to reflect on the moral rule as the event is retained in memory. More broadly, it is possible to generalize Hoffman's formulations beyond the discipline encounter itself to other situations when parents and offspring converse about earlier instances of disobedience or misbehavior (such as the Weetabix encounter previously described). Insofar as forceful discipline inhibits a deeper processing of the parent's moral message at the moment that misbehavior occurs, so also the parent's reliance on denigrating, threatening, or demeaning interpretations of that event during subsequent conversations may have the same effect, as we suggested earlier while considering parent-child discourse. Conversely, a parent who uses rational explanations when discussing the child's earlier misbehavior may better facilitate the depth of processing required for effective storage and retrieval of the adult's moral message in appropriate circumstances.

THE INTERACTION OF CHILD TEMPERAMENT AND PARENTAL SOCIALIZATION

Earlier, we described the direct associations between child temperament and the developing conscience. We have also described several processes of early socialization that capitalize on different motivational incentives in the child to promote moral internalization. One process, associated with the mutually cooperative, responsive parent-child orientation, capitalizes on the positive feelings between parent and child. The other process, associated with rationally oriented discipline and the arousal it creates (as described in Hoffman's model), capitalizes on negative motivation, fear, or anxiety.

One of the most interesting questions in recent research on early internalization concerns the relative effectiveness of these two socialization processes in the development of conscience in children with different individualities. One of us (G.K.) has recently proposed that considering children's temperament as a factor that moderates the impact of parental socialization may contribute to an effective integration of these two socialization processes that promote early conscience (Kochanska, 1993, 1995, 1997a). In particular, individual differences in children's temperamental fearfulness appear critical for understanding how different mechanisms of moral socialization may promote conscience in children with varying temperaments.

A closer analysis of Hoffman's model, which portrays the pathway to internalization as capitalizing on the child's anxiety, suggests that it may be particularly well suited for children who are temperamentally relatively fearful and anxiety prone. Such children are likely to respond with optimal, moderate arousal even to subtle parenting techniques. They may, in fact, experience anxiety associated with wrongdoing even before parents intervene. Their parents, if they resort to non-power-oriented, rationally oriented discipline techniques, often capitalize on that discomfort, using gentle strategies of influence that, in turn, foster internal attributions and a deeper processing of the socialization message.

In contrast, children who are relatively fearless and are not anxiety prone may not experience such spontaneous discomfort and may not react with sufficient arousal to parents' rational interventions. Thus, for them, gentle discipline may not be equally effective in fostering internalization. Simply increasing parental power—which parents of fearless children may be often tempted to do, as pointed out first by Bell (1968)—may not be effective either. Highly power-assertive discipline is uniformly detrimental to internalization due to the child's resentment toward parents, external attributions, and the shallow processing of parental message (Hoffman, 1983; Maccoby, 1983). We are thus faced with a provocative question: How then, do fearless children become morally internalized?

We propose that for temperamentally fearless children, the alternative pathway to internalization capitalizes on the positive motivation that derives from a mutually responsive, cooperative parent-child orientation, rather than from discomfort or anxiety (Maccoby, 1983). For example, for those children, secure attachment may be particularly important in fostering internalization because it inaugurates such a harmonious mutual orientation.

The first empirical study that suggested—but did not test—this possibility was the previously described study by Parpal and Maccoby (1985) on situationally induced maternal responsiveness and its consequences for the child's cooperation. Whereas the findings, in general, supported the importance of the mutually responsive mother-child orientation for children's cooperation, there was also a hint in the results that such an orientation was most beneficial for children who were rated by mothers and teachers as

difficult. In our terms, these children were most likely relatively fearless in their temperamental profile.

Consequently, one of us (G.K.) pursued that possibility at a greater depth in further research. In a preliminary study, 58 children and their mothers were studied first at toddler age (Kochanska, 1991). Children's fearfulness was observed during their encounter with an unfamiliar adult in an unfamiliar laboratory setting, and their responses were coded using categories typically indicative of fear or anxiety proneness, such as proximity to mother, reluctance to explore, and distress and withdrawal from the stranger. Children were then divided into relatively fearful and relatively fearless groups using a median split procedure. Mothers' discipline style was assessed also, using self-reports and observations of interactions with their toddler children during lengthy videotaped sessions. Finally, children's conscience was assessed at the age of 8 to 10 by eliciting their narrative endings to several semiprojective stories that depicted moral transgressions. These responses were subsequently scored for the general affective/moral orientation (yielding an overall internalization score), and themes of reparation and distress tied to wrongdoing.

As expected, children's temperamental fearfulness moderated the influence of maternal socialization style. For the relatively fearful children, toddler-age maternal discipline that deemphasized power (from both observational and self-report measures) significantly predicted more internalized conscience in middle childhood, consistent with Hoffman's model. For the relatively fearless children, however, there were no such relations.

In a subsequent study, an ongoing longitudinal project on conscience development, we pursued those issues much more extensively with a large group of children and mothers studied at toddler, preschool, and kindergarten age. Children's fearfulness was asssessed in an observational battery that included several standardized encounters with unfamiliar and mildly scary objects and events (e.g., getting into an unusual-looking car, putting the hand inside a big black box, interacting with a clown), as well as using mothers' reports. Again, children were classified into relatively fearless and fearful. Mothers' discipline style was assessed using a number of self-reports and was observed in lengthy home and laboratory contexts focused on control issues, such as toy cleanups and not touching attractive objects near the child. In addition, the study included assessment of socialization processes expected to promote conscience in the relatively fearless children, including the security of attachment (using the Attachment Q-Set; Waters, 1987) and maternal responsiveness, both of which reflect a mutually cooperative parent-child relationship. Multiple maternal reports and observational measures were used to assess children's conscience, as described before: rule-abiding conduct while alone with prohibited toys, committed compliance, maternal descriptions of the child's internalization of rules in their daily lives.

The same children were seen again when they were approximately 4 years old. At that time, measures of conscience included game playing without surveillance where winning was impossible without cheating, in which their rule-abiding or rule-violating behaviors were coded, and children's narratives produced to hypothetical moral story stems, in which morally-relevant themes were coded. They also returned to the lab one more time at age 5 to 5½ years, and were observed again while playing a game that occasioned cheating, as well as while responding to hypothetical moral dilemmas that yielded cognitive measures of morality, mostly involving choices of actions—prosocial and moral versus antisocial and selfish (Eisenberg-Berg, 1979; Nunner-Winkler & Sodian, 1988).

The findings provided powerful support, in both contemporaneous and longitudinal relations and across multiple conscience measures, for our model of the complex interplay of child temperament and parental socialization in the emergence of internalization. For the children who had been relatively fearful as toddlers, mothers' gentle discipline deemphasizing power was associated with strong conscience, both at toddler age and at preschool age (Kochanska, 1995, 1997a). We speculate that for fearful children, low-key maternal interventions are sufficient to elicit the optimal level of discomfort and arousal, promoting deeper semantic processing and encoding, as described by Hoffman. Because those interventions are subtle, children are likely to form internal attributions for that discomfort, which is another factor promoting internalization. As expected, for the children who were relatively fearless, such low-key maternal discipline was less effective in promoting conscience, presumably because the level of discomfort it elicited fell short of optimal. For such children, different influences that capitalized on positive motivation rather than on anxiety, fostered internalization. In particular, a mother-child mutually cooperative, positive, responsive orientation was associated with strong conscience development at toddler and preschool age.

An interesting question posed by those findings concerns the relatively lower effectiveness (in terms of fostering conscience) of the mother-child mutually responsive orientation in fearful children. Although this question deserves more attention, at least two interpretations are possible. First, perhaps the mechanism based on internal discomfort and anxiety indeed is the primary one involved in internalizing prohibitions, as implied in the psychopathy literature. Only when it fails, due to the child's constitutionally low anxiety, alternative mechanisms may come into play. Second, perhaps secure attachment (which we view as one form of the mutually responsive orientation) serves two developmental functions for the child: providing "felt security" (Sroufe & Waters, 1977) and creating a "preparedness for socialization" (Kochanska, 1995). The relative importance of these functions may depend on the child's temperament: perhaps for fearful children, particularly concerned with issues of security, the first function dominates over the second one, whereas for fearless children the reverse is true—the second function dominates over the first. Future research will help clarify such possibility.

CONCLUSION

This is an exciting time in the study of early conscience. There is converging evidence that the early years may hold the key to our understanding of the foundations of morality and its future developmental trajectories. Moreover, contemporary research on conscience begins to cross traditional domains of inquiry, as multiple windows appear to provide insights into its early development—the study of early temperament, moral emotion, cognition, emerging self, and early parent-child relationships.

Several future directions of research appear particularly promising. First, new research points to compelling interfaces between biologically founded temperamental individuality and the qualities of socialization. Mapping the complex interactions between the child's temperament and his or her experiences in relationship with parents may enable researchers to make considerable progress in understanding the traditional nature-nurture question as it pertains to moral development. They may become better able to understand both moral emotions (e.g., guilt or shame) and behavioral control processes (e.g., restraint) involved in internalization. They will also gain new

insights in the early combinations of both sets of influences that may create potentially adaptive pathways to conscience or, in contrast, contribute to early vulnerability in moral development.

Second, several strands of research point to the rich complexities involved in the early parent-child relationship that await integration. Attachment scholars' compelling notion of internal working models of self and relationships may be reconsidered in the context of multiple processes embedded within that relationship, such as parent-child discourse, parental discipline and control, and the emergence of the mutually responsive and cooperative—or adversarial—parent-child orientation. Taken together with the work on temperamental influences, one implication of this chapter is that temperament may affect not only the behavioral styles to which parents must respond in their discipline practices, but also the cognitive styles by which children construct working models from relational experience. Such a view may elucidate how the earliest understandings of self and morality are co-constructed by the child and the parent, and what multiple pathways this process may follow (Thompson, in press-a).

Third, a related direction is exploring the early development of the child's internal representation of moral values. An intriguing task will be to elucidate how early memory and information processing are influenced by diverse features of the child's experiences during which the values are conveyed (discipline encounters, parent-child discourse) and later remembered and applied. It is likely that the context of both the actual discipline encounters and of the later shared reviews of those encounters by the parent-child dyad affect how the information about moral values and rules is processed and stored.

Progress in many areas of developmental psychology has invigorated research on early conscience. The time is thus particularly conducive for future integrative investigations that will highlight the origins of internalized regulators of conduct.

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