I THOUGHT SHE KNEW THAT WOULD HURT MY FEELINGS: DEVELOPING PSYCHOLOGICAL KNOWLEDGE AND MORAL THINKING

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I. Introduction

Scientific interest in children's psychological and moral understandings is not new. Nearly 80 years ago, Piaget considered children's understandings of thoughts and dreams (1929/1960) and moral rules (1932/1965). His proposition that young children's peculiar moral judgments were related to their limited understanding of intentionality, too, presciently foreshadowed the idea that psychological understandings are implicated in moral thinking. In the 1970s and early 1980s, following Piaget's observations, the relation between children's moral judgments and their understandings of intentionality and person perception was investigated further (Berndt & Berndt, 1975; Darley, Klosson, & Zanna, 1978; Darley & Zanna, 1982; Karniol, 1978; Keasey, 1977; Nelson-Le Gall, 1985; Shultz, Wright, & Schleifer, 1986). Since that time,

however, research on children's psychological and moral concepts has proceeded along independent lines, with two considerable bodies of empirical evidence coexisting side by side. In this chapter, we argue that the relation between the two realms of development merits close attention and present a framework for thinking about this relation.

Our interest in these issues is also not unique. In the past several years, theories-of-mind researchers have begun considering the role of children's understandings of obligation, including moral obligation, in the interconnected network of mental state concepts. For some, this concern was part of their increasingly broader interest in the connections between children's psychological understandings and their social development and behavior (Astington, 2003; Dunn, 1999; Dunn, Cutting, & Demetriou, 2000). Others recognized that a psychological sense of obligation might operate, not unlike desire, to motivate human behavior (Harris & Nunez, 1996; Kalish & Shiverick, 2004; Lagattuta, 2005; Leslie, 2000).

From our perspective as moral development researchers, the interest in the relation between moral and psychological concepts lies elsewhere. Other than those who take a strict behaviorist stance, few would disagree with the proposition that a moral attitude hinges, at its very basis, on a consideration of the agent's mental states. To pronounce a situation as implicating moral concerns, one must at the very least bear in mind the agent's beliefs and reasons for acting. This is why, we argue, the unwitting dissociation between investigations of children's developing psychological and moral concepts worked to constrain the study of children's moral thinking. To fully understand children's moral lives—to capture the ways in which children bring their moral concepts to bear on their actual social interactions and conflicts—it is important to understand how children's developing psychological concepts become implicated in their moral judgments.

The set of propositions we put forth in this chapter stem in part from a well-established tradition in moral development research that has held that starting at a young age, children develop moral concepts that bear on the welfare and fair treatment of others (Turiel, 1983a, 1998). Over the last three decades, researchers working from what has become known as the "domain-specific" tradition have radically altered the way we understand children's morality by demonstrating that by the age of 3 or 4 children already possess moral concepts—ways of thinking about welfare and justice—that are not contingent on non-moral considerations, but prescriptive and generalizable. Even at this young age, children judge it to be wrong and unacceptable to hurt or mistreat others, not merely because of the potential for ensuing punishment, but because of their concerns with fairness and the well-being of persons. The results of more than 100 studies have indicated that children hold their moral concerns with welfare and justice to be applicable regardless of rules or

custom (for comprehensive reviews of this research, see Helwig & Turiel, 2003; Smetana, 2006; Turiel, 1998).

One way to understand the mounting evidence emerging from this research tradition is to say that, insofar as children understand an event as implicating an agent who intentionally mistreats or inflicts harm upon an unwilling victim, they bring to bear their moral concepts both on straightforward instances of physical and psychological harm and unfairness and on multifaceted situations that entail overlapping concerns with morality, social conventions, and personal choice. But how do children come to understand that an event involves intentional harm?

This is not only a complex question, but also a potentially dangerous one, as it can introduce within the study of moral development a fair amount of subjectivity and, with it, the dreaded specter of relativism. In attempting to consider this question, we have relied on two additional long-standing research traditions in developmental psychology (Piaget, 1952; Piaget & Inhelder, 1969) and social psychology (Asch, 1952)—both of which emphasize the active and interpretive stance of people *vis-á-vis* reality. In the process, we have concluded that children's developing psychological understandings become implicated in their moral thinking in ways that have far-reaching implications. This is our conclusion, however. We shall start at the beginning.

Against the backdrop of these three broad theoretical and empirical bodies of knowledge, we begin this chapter by outlining a framework for understanding why and how children's psychological understandings are implicated in their moral thinking. To do so, we discuss, first, the role of interpretation in moral thinking, putting forth the proposition that children make moral judgments about the world as they understand it, or construe it, to be. Next we argue for the view that children's understandings of persons—persons' beliefs, desires, intentions, and emotions—are a central component of how children construe the world, and present evidence of the multiple ways in which children's developing psychological concepts inform, and differently constrain, their moral thinking. We conclude by speculating broadly about the nature of the relation between psychological knowledge and moral reasoning, and discuss the implications that this relation may have for future research in moral development.

II. Moral Judgments About the World as Understood

To understand the role of interpretation in moral thinking, it is necessary to situate this argument within the larger framework of moral development research. Long before the notions of subjective construal and interpretation entered the scholarly discourse by way of social constructionist and postmodernist writings (e.g., Gergen, 1991; Shweder, 1999), social and developmental

psychologists had provided compelling evidence that people construe their own understandings of reality. At least 50 years before Gergen or Shweder first spoke about subjectivism, Gestalt psychologists had amassed evidence suggesting that "objects of judgment" (whatever individuals make judgments about) are not fixed and do not merely reside in or coincide with the events themselves. Objects of judgment, they showed us, are cognitively created and transformed as individuals interpret unfolding events (Asch, 1952; Duncker, 1939). Piaget, too, beat postmodern thinkers to the realization that people's construals of reality are distorted, or informed, by their own understandings and positions, thereby giving rise to a long-standing research tradition that views children, and people in general, as actively construing, rather than passively registering, reality (Piaget, 1952; Piaget & Inhelder, 1969).

The proposition that people construe their own understanding of reality and the related realization that people behave and respond primarily in accord with their own interpretations of their experiences, rather to the experiences themselves, spurred interest among psychologists working in fields as diverse as aggression (Dodge, 1986, 2003), depression (Beck, 1967; Dalgleish *et al.*, 2003; Hammen & Zupan, 1984); peer relations (Asher & Wheeler, 1985; Crick & Ladd, 1990; Prinstein, Cheah, & Guyer, 2005), everyday problem solving (Berg, Meegan, & Deviney, 1998), and emotional development (Lewis, 2001; Weiner & Graham, 1984). This was not the case in the field of moral development.

Although Asch (1952; see also Duncker, 1939) understood, and pointed out, that beliefs and interpretations of reality play a fundamental role in moral decisions, the idea of interpretation has encountered serious resistance within the field of moral development. It is impossible to determine with any certainty why interpretation has been largely ignored in research on moral thinking. We speculate that this may have been due, at least in part, to the ever present concern, among moral developmentalists, that attending to the subjective ways in which individuals interpret moral conflicts would inevitably lead to moral relativism.

It was Kohlberg (1971) who first introduced, into the study of moral development, the injunction against confounding matters of value ("ought") with matters of fact ("is"). In so doing, Kohlberg successfully steered the field of moral psychology away from the relativistic definitions of morality put forth by the then prevalent behaviorist psychology; hence, the importance of this distinction cannot be overstated. It is equally important to note, however, that allowing for the possibility that children subjectively construe moral situations does not necessarily lead to moral relativism. This was not clear in Kohlberg's stage theory of moral development. Kohlberg (1969, 1971) viewed moral development as an increasing process of differentiation, by which moral understandings come to be distinguished from prudential and conventional understandings. In his view, moral thinking at the early stages is contingent on

aspects of reality (e.g., interpersonal expectations, existing laws) because "is" and "ought" are not yet distinguished, and it is only with development that matters of value become extricated from matters of fact, such that moral judgments become "entirely independent of factual assumptions" (Kohlberg, 1971, p. 292) and universal. Kohlberg's emphasis on the increasing differentiation between matters of value and fact worked to obscure the possibility that the ways in which people think about and understand a situation—the ways in which they construe the relevant facts—may play a role in moral thinking after moral concepts have become prescriptive (Wainryb, 2004). A view of development that does not assume that moral concepts stem from nonmoral concepts renders this possibility less problematic.

In the constructivist and interactional view of moral development put forth by Turiel (1983a, 1998), for example, children construct prescriptive moral concepts, not out of nonmoral concepts, but out of their social interactions. That is, children's understandings and interpretations of the features of those interactions (e.g., their construal of the consequences of an attack on someone or an insult) constitute the basis out of which children develop prescriptive moral concepts. This is not the same as saying that children decide what is right or wrong merely on the basis of how things are. Rather, our argument has been that children's beliefs and interpretations about the way things are serve as the background against which they make their moral judgments (Wainryb, 1991, 1993, 2000, 2004; Wainryb & Turiel, 1993). In other words, when children (and adults) bring their moral concepts to bear on specific social events and interactions, they do so with regards not to the "real" events and interactions as they "truly happened," but to their interpretations or construals of those events and interactions. People, we have argued, make judgments about the world as they understand it to be (Wainryb, 2004). This proposition makes room for subjectivity in moral judgments, but associates such subjectivity not with relativism at the level of moral concepts, but with relativism at the level of understandings of reality—a distinction aptly described by Asch (1952) as the difference between moral relativism and "relational determination of meanings" (see also Turiel, Killen, & Helwig, 1987).

That persons make judgments in relation to their own (sometimes mistaken, sometimes biased; see Wainryb, 2000) interpretations or understandings of the relevant facts is plainly evident in the nature of the controversies surrounding complex social issues, such as abortion, pornography, or capital punishment. The variability in opinions about these matters, as expressed in public discourses as well as in legal opinions, clearly revolves around ambiguities in basic assumptions about the features of those acts. For example, the definition of life and the determination of its beginning are ambiguous concepts that are difficult to specify. The consequences of pornography are also in dispute, with some believing that it leads to violent and criminal behavior and others disputing such

a causal connection. The deterring potential of capital punishment has been an equally disputed subject. The ambivalence concerning these assumptions exists not only in the thinking of experts in the relevant disciplines but also in the thinking of the layperson, and research with adolescents and adults has shown that their positive or negative evaluations of those issues were systematically associated with their differing beliefs about or construals of the relevant "facts" (Turiel, Hildebrandt, & Wainryb, 1991).

This phenomenon—that people make moral judgments in relation to their specific construals of the relevant facts—is not restricted to larger societal issues or to the reasoning of adolescents and adults. Like adolescents and adults, children continuously appraise the features of the social contexts in which they participate, and make judgments that vary systematically in accord with their own construals and interpretations of those contexts. Children, even young children, may differently construe ordinary events in their social lives, such as conflicts over turn-taking, teasing, name-calling, or exclusion. Children may differently construe the relevant facts (e.g., whether Frank had his turn at the swing already; whether tossing Lisa's hat around the room was part of the game), they might differentially attend to various aspects of the situation, and they may also differently construe what others knew (e.g., I thought she knew that would hurt my feelings), believed (e.g., did she really believe that calling her son "lazy" would motivate him to work harder?), or intended to do (e.g., did Dylan want to hurt Carl's feelings by ignoring him, or was he merely preoccupied with other issues?).

Although the possibility that children make moral judgments in relation to their specific interpretation of situations was considered many years ago in the context of empirical findings (e.g., Berndt & Berndt, 1975; Sedlak, 1979), this proposition did not receive systematic consideration until much later. Starting in the early 1990s, we began systematically documenting aspects of the interpretive process that goes into making moral judgments. While recognizing that a child's construal of a moral situation is complex and involves multiple considerations (e.g., What was the agent's intention? What did the agent think would happen? What did the victim feel?), we began the exploration of these issues with a simple heuristic. In an effort to demonstrate that children make moral judgments in reference to whatever they understand or believe to be true about a given event, we experimentally manipulated what they believed to be factually true about some relevant aspect of the event, and assessed whether their moral judgments varied accordingly. For example, in one study (Wainryb, 1991) participants (ages 11 through 21) were asked to discuss corporal punishment. Their understandings of the actual consequences of corporal punishment were not uniform; some believed that corporal punishment functions in ways that actually help young children to learn and remember, whereas others believed that corporal punishment does not have such positive (and has some negative) consequences.

Their moral judgments (assessed separately) were, unsurprisingly, systematically associated with what they held to be true, such that participants who construed corporal punishment as having positive consequences judged it more positively than those who viewed it as lacking such consequences. Participants were then asked to entertain, hypothetically, the possibility of new information that proved their original factual belief to be mistaken and the opposite factual belief to be true. The main finding of this study was that, under an experimental manipulation in which participants agreed as a matter of fact to a different construal of the actual consequences of corporal punishment, the majority of participants changed their moral judgments in the direction expected.

Similar results were obtained for children's reasoning about the morality of practices such as dismissing older job applicants or segregating certain groups of children (Wainryb, 1991), and for adolescents' and young adults' reasoning about abortion, pornography (Smetana, 1981; Turiel, Hildebrandt, & Wainryb, 1991), and capital punishment (Wainryb & Laupa, 1994)—all practices whose consequences, like those of corporal punishment, were also differently construed by different individuals. In each case, the evidence indicated that individuals make moral judgments in reference to their specific factual beliefs, and that differences in moral judgments are systematically associated with those beliefs. In each case, also, individuals who made different moral judgments nevertheless endorsed the same moral concepts (e.g., regardless of how participants judged corporal punishment, all stated that it is morally wrong to intentionally inflict harm on others).

As a whole, this body of findings bears directly on the role of construal and interpretation in moral thinking, demonstrating that throughout development moral concepts are applied against a background of factual understandings and beliefs about relevant aspects of reality. The proposition that individuals rely on whatever they believe to be true to inform and guide their moral decisions neither suggests nor requires that such beliefs be accurate. In the view of some (e.g., Bandura, 1991), in fact, people merely commit themselves to factual beliefs and construals of reality that cast a positive light on what they know to be immoral choices. In our view, such an extreme proposition is not warranted (Wainryb, 2000). Whereas it is possible that people (including children) engage at times in self-serving, deliberate, and even hypocritical rationalizations, it cannot be merely presumed that divergent construals of reality arise and function solely in that role. Attentional, perceptual, cognitive, and emotional factors might all result in divergent, or even mistaken, construals of reality that cannot be said to arise for the purpose of allowing disengagement from inner conflict (Malle, 2004; Ross, 1990; Ross & Nisbett, 1991).

One source of divergence in construals of reality—one that is of most interest to us, as it has systematic effects on children's moral judgments—is developmental in nature. From an early age, children develop their own understandings

of reality. Children, it has been suggested, are intuitive scientists, constructing concepts in the biological (e.g., Slaughter, Jaakkola, & Carey, 1999), societal (e.g., Kalish, 1998; Turiel, 1983a), and psychological (e.g., Wellman, 1990) realms, and children's understandings of these various aspects of reality exhibit systematic age-related changes. Because children bring their moral concepts to bear on specific situations as they understand, or construe, them to be, it is often the case that their understandings of biological aspects of reality (e.g., the source of illness) and societal matters (e.g., the agreed-upon convention) may become implicated in their construals of moral situations. It is hard to think of moral situations in which children's psychological understandings are not directly implicated. Children's psychological knowledge—their understandings of what people think, feel, and want, and why people do what they do-are inevitably central to how children make sense of other people's actions in moral situations. In turn, the unique features of the still-developing psychological understandings of young children limit in significant ways how these young children construe, and ultimately evaluate, moral situations. Thus we turn in the next section to discuss the development of children's psychological understandings, along with the specific ways in which these developing understandings become implicated in their moral thinking.

III. Children's Developing Understandings of Persons: A Thumbnail Sketch

Children's developing psychological understandings, we have argued, may be implicated in their construals and evaluations of moral conflict situations. What do children know about persons and their mental lives? As consumers of theories-of-mind findings, we approach the construct of theories of mind in a "neutral and inclusive" way (Davies & Stone, 2003, p. 305), taking it to refer to the ability to predict and explain behavior in terms of internal mental states. We do not take a stance in regards to how this ability comes about, or whether it should be thought of in terms of possessing a substantive theory about the psychological world or in terms of a capacity to identify with others and simulate their mental lives (for summaries of these competing propositions, see Astington & Gopnik, 1991a; Goldman, 2002; Harris, 1991; Hobson, 1991; Wellman, 1990). In spite of disagreements on the mechanisms by which psychological understandings develop, theories-of-mind researchers agree that the mentalistic stance (Dennet, 1978) implied in this ability is a core feature of everyday thinking, and also agree upon the general sequence by which children's understandings of mental states change.

Broadly speaking, children's understandings of mental functioning are said to undergo a general shift from an understanding of the mind as "passive" to

"active" (Pillow, 1988), or from a "copy" to a "constructive" theory of mind (Chandler & Lalonde, 1996). Children progress from viewing the mind as passive in relation to the external world, to understanding that persons actively interpret their experience based on existing beliefs and expectations, and that mental states are organized such that they inform one another. Young children are unaware that information and experience are actively construed and subjectively organized, and instead think of the mind as a storehouse of information and experiences. Older children come to recognize that subjective experience and mental activities transform information in ways such that persons may arrive at different interpretations of or emotional reactions to the same situation. This general shift in children's understandings of mental functioning is evident in each element of the conceptual network of mental states.

A. WHAT DO CHILDREN KNOW ABOUT PERSONS' BELIEFS, DESIRES, AND INTENTIONS?

The most widely researched aspect of children's network of mental state concepts has been their understandings of belief. As documented by an impressive body of evidence (e.g., Chandler & Lalonde, 1996; Fabricius & Imbens-Bailey, 2000; Mitchell, 2003; Wellman, Cross, & Watson, 2001), prior to the age of 4 or 5, children do not understand that beliefs are representations of reality or that different people may, therefore, come up with different representations of, or beliefs about, the same reality. Rather, these young children appear to rely on the assumption that perception is the sole basis for belief and that there is a one-to-one mapping between what one sees or hears and what one knows (Pillow & Mash, 1999). Research has shown that 3-year-olds do not understand that someone can have a belief that differs from the actual state of affairs (Wimmer & Perner, 1983), or a perception of something that differs from that of another person's (Flavell et al., 1981). Three-year-olds also find it difficult to appreciate that someone might not know something (Leslie, 2000), and find it difficult to report even their own previous mistaken beliefs (Harris & Leevers, 2000).

Beginning at around the age of 4-5 years, children first develop the understanding that even persons who have access to different information might end up with different (although, in children's view, still mistaken or false) beliefs and only later, beginning somewhere around 7-8 years of age, do they begin to understand that the mind acts upon information, by selecting, transforming, and organizing perceptual experiences. At this time, children first realize that persons might form different beliefs even if they have equal access to all relevant information. At this age, also, children begin to recognize that mental events

are linked to one another, such that prior thoughts and emotions can inform current beliefs and interpretations of experience (Fabricius & Schwanenflugel, 1994; Lagattuta & Wellman, 2001; Pillow & Henrichon, 1996).

A similar shift from a copy to a representational view of the mind characterizes children's developing understandings of desire. Research has shown that already at age 2, children can conceive of people as agents whose actions are directed to achieving goals and can predict a person's action on the basis of her or his desire (e.g., Wellman & Woolley, 1990), and by age 3, they can also understand the emotional consequences of simple fulfilled and unfulfilled desires (e.g., that people are happy when their desires are fulfilled and unhappy when their desires remain unfulfilled; see Hadwin & Perner, 1991; Yuill, 1984). Nevertheless, these early achievements do not yet constitute a full understanding of the concept of desire because such young children do not understand yet that desires are subjective relations to reality.

Research has indeed shown that 3-year-olds tend to think of desirability as an objective property of situations rather than a relation between a person and a situation (Perner, 1991). Evidence to this "objective desirability" is young children's responses to situations in which "wicked desires" (e.g., the desire to hit someone), rather than neutral desires (e.g., the desire to win a prize), are fulfilled. For example, when asked to say how an actor behaving on his or her desire to harm another child might feel, 3-year-olds, unlike their older peers, judged that such an actor would feel sad (Yuill et al., 1996). Similarly, when given information about rules (what is allowed or forbidden) and about a person's preferences (what someone likes), children under 5 tend to predict that people will want to behave, and will be happier behaving, according to rules, whereas older children recognize that people will want to and will be happier satisfying their preferences (Kalish & Shiverick, 2004).

Children's understandings of intentions, too, change in ways similar to their understandings of beliefs and desires. Piaget's (1932/1965) early observations, that young children tend to focus on consequences while overlooking intentions, were followed by research suggesting that when information about intentions is not confounded with information about consequences, even 5- and 6-year-olds judge intentional acts to be more wrong than accidental acts (Berndt & Berndt 1975; Darley, Klosson, & Zanna, 1978; Karniol, 1978; Keasey, 1977; Nelson-Le Gall, 1985; Shultz, Wright, & Schleifer, 1986), and when not asked to weigh intentions against consequences, even 3-year-old children can distinguish between a deliberate and an accidental breach (Harris & Nunez, 1996; Nunez & Harris, 1998; Siegal & Peterson, 1998). Nonetheless, researchers continued to acknowledge that young children's early understandings of intentions and motives are not as complete as those of older children (Jones & Nelson-Le Gall, 1995; Karniol, 1978; Nelson-Le Gall, 1985). Decades later, theories-of-mind

researchers articulated the development of children's understandings of intention differently but they, too, pointed to the limits of young children's understandings. Whereas early work spoke about young children's relative tendency to overlook information about intentions in favor of information about consequences, more current thinking (Astington & Gopnik, 1991b; Moses, 1993; Wellman, 1990) has been that young children do not yet understand that intentions are mental representations distinct from action and outcomes. Empirical evidence in support of this proposition abounds.

For example, when presented with pictures of a child who is either performing an action (e.g., playing on the swings) or getting ready to perform an action (e.g., running towards a swing set), the majority of 3-year-olds cannot yet identify the latter picture as representing prior intention. Their tendency to pick instead the picture depicting the act in progress suggests that they confuse intention and action (Astington, 2001). Other research has shown that children between the ages of 3 and 4 inaccurately report their own intentions in ways that match the actual outcomes of their actions (Phillips, Baron-Cohen, & Rutter, 1998; Schult, 2002) and, in studies using deviant causal chains, 3- and 4-year-olds equate intentions with outcomes thereby confusing fulfilled desire with unfulfilled intention (Schult, 2002). Consistent with these confusions, too, young children are likely to assume that if something happens to be the case, it is because someone intended it to be so, even when provided information to the contrary (Kalish, 2005).

B. AND WHAT DO THEY KNOW ABOUT PERSONS' EMOTIONS?

Whereas often investigated separately from their understandings of beliefs, desires, and intentions, children's understandings of emotions constitute an integral part of the network of mental state concepts that, we propose, children bring to bear on their construals of moral situations. The role of emotion understanding in moral thinking is unquestioned. Moral development researchers have recognized early on that the development of moral concepts is, at least in part, related to the perception of the distress experienced by victims (Arsenio, Gold, & Adams, 2006; Arsenio & Lover, 1995; Turiel, 1983a). Theories-of-mind researchers have also been quick to point out that children's moral intuitions are inextricably bound up with their understanding of emotion (Dunn, 2000; Harris, 1989). As it turns out, children seem able to infer basic emotions from both situations and facial expressions very early on. Even infants recognize different facial expressions displayed by others and, by the end of their first year, display discriminating behavioral responses to the emotional expressions of others (Harris, 1989). By the age of 2, children understand that they can affect another

person's emotions, as demonstrated by their deliberate efforts to do so through teasing, hurting, comforting, and joking (Dunn, 1991, 1999), and by the age of 3, they recognize that people with different past experiences may have different emotional reactions to the same event (Lagattuta & Wellman, 2001).

These early understandings suggest that even before they recognize that other people may have beliefs and intentions different from their own, young children can already grasp that others have some sort of mental life separate from their own (Dunn, 1991, 1999). This, along with children's early realization that they can influence the emotions of others, is of tremendous relevance to moral development inasmuch as it suggests that a young child can understand that a person's suffering may be caused and alleviated by the actions of another person. Nonetheless, young children's understandings of emotion are still limited, as children tend to conflate the inner experience of emotion with external indicators of emotion (Arsenio, Gold, & Adams, 2006; Gnepp, 1989; Gnepp & Klayman, 1992).

Young children's limited understanding of emotion underlies their difficulty recognizing that people can hide their emotions. Indeed, before the age of 5 or 6, children do not understand that people can, for example, feign joy while experiencing distress or disappointment, and do not seem to be aware of the potentially misleading effect this dissemblance can have on others (Harris, 1989). Similarly, young children also tend to assume that a person's emotion can be explained in terms of outcomes or circumstances in the world. Therefore, when asked to predict what someone else may be feeling, or to explain someone's unexpected emotional expression, young children tend to rely on the valence of outcomes and on situational cues, rather than on information about what a person may be thinking or wanting. To return to an example we discussed previously, 3-year-olds expect that a child whose desire to hit a peer was fulfilled would feel sad rather than pleased—that is, they attribute emotions based on the objective desirability of certain outcomes, rather than on the relation between outcomes and subjective desires (Yuill et al., 1996). Similarly, before the age of 5, children tend not to incorporate information about a person's intentions when making attributions about a person's guilt but, instead, make guilt attributions based largely on the outcomes of a person's actions (Denham & Kochankoff, 2002; Lagattuta, 2005; Nunner-Winkler & Sodian, 1988). Finally, because of their relative inattention to internal experience and over-reliance on outward expression, children aged 5 and younger have difficulties attributing or explaining emotions when the situation is equivocal (i.e., when there is not one emotion typically associated with an event; e.g., Gnepp & Klayman, 1992) or when a person's outward emotional expression is inconsistent with other situational cues (Harris, 1989; Lagattuta & Wellman, 2001).

Another manifestation of young children's inadequate understanding of the internal experience of emotion is their limited understanding of mixed

emotions (Harris, 1989; Harter & Whitesell, 1989; Nunner-Winkler & Sodian, 1988; Stein & Trabasso, 1989). In part because they conflate mental states with their external manifestations, and perhaps also because they have difficulty focusing on more than one aspect of a situation at a time, children younger than 6 cannot conceive of two emotions being experienced simultaneously. Beginning at around 6-8 years, children can describe two consecutive emotions resulting from the same event (e.g., "Getting my training wheels taken off my bike made me feel happy, but when I fell down I felt sad"), but 6-year-olds consistently display a bias towards reporting "good" feelings whenever mixed feelings are possible. Soon after, children can describe situations that cause two simultaneous emotions, but begin by combining two feelings of similar valence, and not until the age of 11 or so do children recognize that a single situation can elicit simultaneous feelings of opposite valence.

In all, children's understandings of emotion can be thought of as undergoing a shift not unlike that exhibited by their understandings of belief, desire, and intention. In line with their "copy" theory of mind, up to about the age of 4 or 5, children have difficulty distinguishing between the inner experience of emotion and external indices of emotion, and focus on the outward expressions of emotion (facial expressions and behavior) and on their knowledge of typical event-emotion associations (e.g., getting a shot at the doctor is associated with negative emotion). At around the age of 5 they begin to link desire to emotion, and by the age of 7-8, as they move beyond their "copy" theory of mental life, they begin to recognize that a person's emotional expression may belie the actual affective state which is, in turn, related to a person's subjective beliefs about and appraisals of his or her experience.

It is important to note here, for it is relevant to the arguments we develop in the next section, that in spite of the significant developments in children's understandings of emotion, even older children and adults are poor at distinguishing between real and displayed emotion (Denham & Kochanoff, 2002; Harris, 1989). Indeed, none of the developments described in this and the previous section results in true "mind reading." And yet, even though children may not become more accurate at reading another's mind in the sense of being able to tell, accurately, what another person feels—or, for that matter, what another person thinks, intends, or wants—they do become more capable of acknowledging the complexity of mental states and the interrelatedness of mental life. It is this more complex understanding of psychological experience rather than an ability to know precisely what other people feel or think—that is likely to render their construals of social and interpersonal conflicts substantially different from those of younger children. In a very real sense, a child with a more complex understanding of mental life is, in fact, evaluating a very different situation from that of a child with a more rudimentary understanding of the mind. This, in a nutshell, is the topic of the next section.

IV. Children's Moral Judgments about the Behaviors of Persons as Understood

Recall that our original starting point was that, in construing moral situations, children must account for the mental states (e.g., beliefs, intentions, and so on) of those involved. We have now provided a thumbnail sketch of what children, at different ages, actually understand about mental life. Now it remains to be examined how their developing psychological knowledge becomes implicated in their moral thinking. In our research examining the manifestations of psychological knowledge in children's moral reasoning, we at first focused exclusively on the role played by children's understandings of belief, and only later did we consider the role played by children's understandings of other mental states. This strategy is only to be understood in heuristic terms rather than as implying that children's understandings of beliefs have any sort of privileged status vis-à-vis their moral thinking. For it is children's understanding of the person as a whole—of the moral agent as an intentional agent—that informs how they interpret the agent's actions and construe the moral situation.

In this program of research, we have employed two distinct methods, each of which allowed us to examine different aspects of this relation. One method involved presenting participants with hypothetical stories depicting characters who were engaged in harmful or unfair behavior and whose beliefs-beliefs upon which the characters themselves presumably grounded their behavior were explicitly given and experimentally manipulated. For example, in a series of studies (Shaw & Wainryb, 1999; Wainryb, 1993; Wainryb & Ford, 1998; Wainryb, Shaw, & Maianu, 1998) participants between the preschool and college years were asked to evaluate characters who engaged in harmful behaviors on the basis of beliefs different from their own (e.g., a teacher who puts down her students because she holds the belief that the way to teach children is to put them down when they make mistakes). Using this method we obtained important information about whether and how children of different ages account (or do not account) for other people's different beliefs in evaluating their harmful behaviors. The intrinsic constraint of this approach is that it does not make it possible to ascertain whether children actually consider other people's mental states when information about mental states is not provided explicitly in the stimuli.

For the purposes of understanding whether and how children account for mental states in their own construals of interpersonal conflicts, in subsequent research we withheld explicit information about the other person's mental states. In one such study (Brehl & Wainryb, 2005), for example, we used hypothetical scenarios depicting conflicts between peers whose mental states were left ambiguous, and asked participants to explain why actors may have behaved the way they did. Additional information relevant to these questions was gleaned

from a study (Wainryb, Brehl, & Matwin, 2005) in which participants were asked to provide narrative accounts about their own interpersonal conflicts with their peers. In all, this program of research has provided evidence of how children's stance in relation to the mind as passive or active, informs, in significant ways, their construal of moral situations.

A. BELIEFS, FALSE BELIEFS, WRONG BELIEFS, AND MORAL JUDGMENTS

In a first series of studies, we focused on whether children took account of other people's different beliefs, and whether doing so impacted the ways in which they construed and evaluated moral situations. Recall that earlier in this chapter we described research (e.g., Turiel, Hildebrandt, & Wainryb, 1991; Wainryb, 1991) suggesting, first, that in making moral decisions children apply moral concepts to their own—sometimes mistaken or biased—construals or interpretations of the relevant facts and, second, that children's divergent construals are consistently associated with their divergent moral judgments. In the research we describe in this section we asked, in a sense, whether children have a grasp of this process, that is, whether they recognize that people who make seemingly immoral decisions may be proceeding from beliefs different from their own, and whether they are differentially forgiving of people who act on the basis of different types of mistaken or wrong beliefs. The findings from this first series of studies were central for understanding the ways in which developments in children's stance toward mental life differently inform their construals and evaluations of moral transgressions. This research was also valuable for understanding when that does not happen.

The general strategy we used in these studies was to tell participants (who, in various studies, were between the ages of 3 and 21 years) about characters who engaged in seemingly harmful behaviors because of factual beliefs different from the participants' beliefs; for the purposes of comparison, characters were also depicted as engaging in the same or similar behaviors because of moral beliefs different from the participants' beliefs (the characters' factual and moral beliefs were given explicitly in the stimuli, and baseline assessments were used to ascertain that participants thought that the depicted behaviors were harmful and that the underlying factual and moral beliefs were untrue/wrong). For example, in one study with 3-, 5-, and 7-year-olds (Wainryb & Ford, 1998), we asked children to consider "a teacher who tells one of his students that his picture is dumb" because he held one of two beliefs, namely, that "it will teach the child to do a better job next time" (a factual belief with which participants disagreed) or that "it is alright to be mean to children" (a moral belief with which participants disagreed). Another example was of "a teacher who gave girls

more snack food than boys" because she believed either that "girls need more food than boys" or that "it is alright to be nicer to girls and not as nice to boys." Unsurprisingly, 3-year-old children did not understand that the characters depicted in the stimuli had beliefs different from their own even when they were explicitly and repeatedly told that this was the case, and thus uniformly evaluated the characters' behaviors in terms of what they themselves thought to be true and right. By comparison, 5- and 7-year-olds had little difficulty attributing to characters' factual and moral beliefs different from their own. Still, not all 5- and 7-year-olds considered the characters' actions to be acceptable even when based on the characters' different factual beliefs; nearly half judged the characters' behaviors in accord with their own factual beliefs. Furthermore, even when they understood that characters were acting on the basis of different moral beliefs, the majority of 5- and 7-year-olds judged behaviors based on non-normative moral beliefs to be wrong.

Starting at about the age of 8-9, children attended to the characters' beliefs when judging the seemingly harmful practices those characters engaged in, but accounted differently for moral and factual beliefs. In general, they made negative judgments of practices that were based on moral beliefs different from their own, but were more accepting of the same practices if they were based on factual beliefs different from their own. For example, in one study (Wainryb, 1993) children and adolescents (ages 11-21) negatively judged the actions of people in a (hypothetical) culture who beat their children with sticks because they believe that it is alright to hurt children (a moral belief with which participants disagreed), but judged less negatively the same actions by people in a different culture who believe that children who misbehave are possessed by evil spirits that can only be exorcized with such beatings (a factual belief with which they disagreed). Their reasoning was largely that, unlike people who merely held to a different belief about what is "right," people who had a different factual understanding of what causes misbehavior were well-intentioned in beating their children. A number of participants speculated, further, that children who are beaten by their parents under such a different factual understanding of reality might themselves experience the beating as less hostile or more helpful due to their sharing of those beliefs (see also Shaw & Wainryb, 1999; Wainryb, Shaw, & Maianu, 1998). Similar findings were obtained with scenarios in which parents prevented girls from attending school or inflicted harm on their children as the children reached puberty (Shaw & Wainryb, 1999; Wainryb et al., 1998), as well as for teachers who prevented some children, but not others, from playing certain games, or divvied up resources unequally among boys and girls (Wainryb & Ford, 1998).

When taken as a whole, these findings serve to illustrate how children's developing understandings of belief function—in this context—to inform and constrain, in systematic ways, children's moral judgments. Three-year-olds,

who understand neither the representational nature of beliefs nor the possibility that others may act on the basis of different beliefs, make moral judgments based on their own beliefs of what is true and right. In all likelihood, in fact, such young children do not view even themselves as having based their judgments on their own beliefs. Rather, they probably proceed as though their judgments refer to the world as it is. Five-year-olds, in contrast, understand that persons can form and act on the basis of different beliefs. However, their copy theory of mind is such that they tend to assume that different beliefs are mistaken or false and indicative of ignorance or misinformation. It is not surprising, therefore, that even as 5-year-olds understand that other people's actions may be grounded on different beliefs, they often disallow the legitimacy of these "false" beliefs and make moral judgments based on their own "true" beliefs. Somewhere between the ages of 7 and 9, informed by a more mature, representational, understanding of belief, children begin to grasp that whatever people believe to be true (whether accurate or not) is bound to inform their moral decisions. Their more forgiving judgments of people who proceeded on the basis of different factual beliefs suggests that by middle childhood children have begun to understand the unavoidably interpretive nature of human knowledge and its implacable effects on behavior. Their reasoning also suggests something else of significance. Recall that participants reasoned that people who acted on different factual understandings of, say, spirits and misbehavior, were in fact intent on helping, rather than hurting, their children. Thus it appears that, in addition to grasping the connection between people's beliefs and behaviors, by the age of 7-9, children have also begun to contemplate the connection among different mental states (e.g., beliefs and intentions) and to use one to infer the other—something to which we shall return later.

And yet, it would be a mistake to think that this is all there is to these data. For, as you may recall, in stark contrast to their increasingly accepting and forgiving judgments of those acting on different factual beliefs, children (even older children and adolescents) judged harshly those who engaged in the same behaviors, but did so on the basis of different moral beliefs. The implications of these findings therefore are, in our view, two-pronged. Prior to the age of 5, children's primitive psychological understandings significantly constrain their construals and judgments of moral situations. Older children's more mature understanding of the mind renders them capable of recognizing that other people may behave according to different beliefs. Nevertheless, it cannot be merely assumed that, from that point on, children will positively judge persons who behave in harmful or unfair ways based on *any* type of different belief. Indeed, these findings strongly suggest that children's thinking about diversity of belief is constrained in domain-specific ways.

Whether children's views about belief diversity are domain-specific or not is a matter of some controversy. Our own research with participants between

the ages of 5 and 9 (Wainryb et al., 2004) and 9 and 22 (Wainryb et al., 2001) has shown that, in regards to a wide range of disagreements, 5-year-olds, as might befit those adhering to a copy conception of belief, thought that there is always only one right belief and, for the most part, judged that it was unacceptable for people to hold beliefs different from their own. Starting at the age of 7, children began to distinguish consistently between diversity in moral beliefs and diversity in other realms of belief. With regard to moral diversity, they thought that some beliefs are right and some are wrong, and stated unabashedly that it is unacceptable for people to hold the wrong moral beliefs. Even college students, who according to some accounts of epistemological development (e.g., Kuhn, Cheney, & Weinstock, 2000), might have been expected to be more uniformly tolerant of diversity of belief, declared variation in moral beliefs to be both undesirable and unacceptable. At the same time, most children 7 and older also thought that diversity in realms of belief other than morality was acceptable. This is not to say that they thought that all knowledge is relative and that there are no true or right answers; on the contrary, their conception of knowledge was decidedly domain-specific. In their view some realms of belief (e.g., taste, religion) are subjective and relative whereas other realms (e.g., perceptible and verifiable facts) support a single unequivocal right answer. However, they judged that wrong beliefs in nonmoral realms—unlike wrong beliefs in the moral realm—should be tolerated (Wainryb et al., 2001, 2004).

This pattern of findings suggests that, when faced with persons who engage in seemingly harmful or unjust behavior because they are acting on different beliefs, children 5 and older might not only take account of those beliefs, but also attend in systematic ways to the types of beliefs in question. The finding that children do not view moral beliefs different from their own as acceptable explains why they are not likely to think it acceptable for persons to engage in harmful behaviors on the basis of different moral beliefs. The finding that children are tolerant of other (non-moral) beliefs with which they disagree does not, however, imply that they would necessarily think it acceptable for persons to engage in harmful behaviors because they are proceeding from those different beliefs. Evidence from one of our studies (Shaw & Wainryb, 1999) indirectly suggests that college students draw distinctions, in their judgments, between factual misconstruals that are merely mistaken and those that are disingenuous and self-serving. In all, then, knowing that a child is capable of understanding belief as a mental representation is not enough to predict how that child might construe and evaluate a situation. This, in turn, suggests that the relation between children's psychological knowledge and moral thinking is not as straightforward as it might otherwise seem. We shall return to this point towards the end of this chapter.

B. MENTAL STATES, TRANSPARENCY, AND MORAL JUDGMENTS

Even as our findings indicate that, by middle childhood, children have a fairly sophisticated understanding of the bearing of factual beliefs on moral decisions and make discriminating judgments about other persons' decisions and behaviors, their discerning judgments must be considered within the particular conditions specified in our research. Recall that in the aforementioned studies, children were always told *explicitly* what the characters in the stories believed to be factually true (e.g., "those people believe that children who misbehave are possessed by evil spirits that can only be exorcised with beatings") or morally right (e.g., "those people believe that it is alright to hurt children"); moreover, the beliefs were systematically crafted and parsed out so that they would represent prototypical instances of factual or moral beliefs.

Outside the confines of the laboratory, in the context of real-life interactions and conflicts, the mental states of others are not transparent or immediately accessible, and thus children (and adults) must make inferences about what others are thinking and feeling in constructing an understanding of these situations. It therefore bears asking whether, when information about other people's beliefs, desires, and intentions is not explicitly given, children infer such information and take account of it in their moral judgments. Evidence from social psychological research with adults suggests that this might not necessarily be the case. In the absence of explicit information about what other people think, it has been argued, adults tend to underestimate the extent to which other persons proceed from factual beliefs different from their own and, instead, judge the actions of others as being reflective of personal values and traits (e.g., Pronin, Gilovich, & Ross, 2004; Ross, 2001; Ross & Ward, 1996). To address this question, we turned next to examining children's own construals of hypothetical (Brehl & Wainryb, 2005) and real (Wainryb, Brehl, & Matwin, 2005) interpersonal conflicts.

In the Brehl and Wainryb (2005) study, 112 boys and girls in three age groups (mean ages were 4½, 7, and 10), and a comparison group of adults, were presented with hypothetical scenarios in which one child hurt the feelings of a peer through excluding this peer from a group, making unequal distribution of desired goods, or saying something mean. In each scenario, the only information provided was whatever would be immediately observable to a third party witness; the mental states of the actor were left ambiguous. For example, one story depicted a group of children sitting four at a table working on a project. The teacher tells them that as soon as everyone at a table has completed the assignment, all four children are allowed to go outside to play. Jake, the main character in this story, asks only two of his peers at the table to go outside and play with him. In another story, the teacher gives Jayna, the

main character, a bag of candy, and asks her to go around the room and give some candy to each of the students. Jayna gives each child three pieces of candy, but gives one child only one piece of candy. In each case, the "victim" is depicted as looking sad and stating that his or her feelings were hurt. After hearing each story, participants were asked to explain the main character's behavior.

Analyses of the data thus obtained indicated that when construing situations entailing interpersonal conflict, unfairness, and hurt feelings, even young children appreciated that people's behavior is informed by what they think and feel. Indeed, even though situational (e.g., "maybe he ran out of candy") and dispositional (e.g., "he's always mean") explanations were present, they accounted for a small percentage of all explanations (18 and 6%, respectively). In all, children as young as 41/2 spontaneously attributed to actors a variety of mental states (see also Bartsch & Wellman, 1989). More specifically, the large majority (82%) of participants of all ages offered explanations that included at least one reference to the actors' desires and preferences (e.g., "Jake doesn't like that kid and wanted to play with his other friends," "Jayna wanted to have more candy for herself"); about half the children (49 and 44%, respectively) included in their explanations at least one reference to intentions (e.g., "Jake was trying to make it clear that the other kid wasn't welcome," "that kid must've done something mean to Jayna before, and so Jayna was trying to pay her back") and to beliefs (e.g., "Jake thought that this kid wouldn't want to play with them," "Jayna thought that this kid didn't like candy so much"), and some (22%) also included in their explanations at least one reference to emotions ("Jake didn't let that kid play because he was angry at that kid for some reason," "I think Jayna was having a bad morning, like maybe she got in a fight with her mom, and so she was letting out all her bad feelings on that girl"). In all, desires accounted for 37% of all explanations offered; references to intentions and beliefs accounted for an additional 14 and 10%, the attribution of emotions for 5%, with the remainder of explanations consisting of conflations between various mental states and the actors' actions or their consequences.

Although the attribution of beliefs made up only a small proportion of all explanations in this study, this should not be taken as meaning that children (and adults) generally failed to acknowledge that the actors may have understood or construed the situation differently. In everyday discourse, beliefs are often understood to be both implied and efficiently communicated through the assertion of desires, preferences, and intentions. For example, a child who explains that Jayna gave another child less candy because "she didn't want her running around and around and not sitting still" implies that Jayna believed that candy would lead that one child to become hyperactive or ill-behaved. Thus, it may be that children do not find it necessary to speak explicitly about belief except when a belief is not made evident through the communication of a desire, preference, or intention (see also Bartsch & Wellman, 1989).

Although in our past research (e.g., Shaw & Wainryb, 1999; Wainryb, 1991, 1993; Wainryb & Ford, 1998, Wainryb, Shaw, & Maianu, 1998) we had referred to divergent factual beliefs as markers of differences in interpretation, an examination of children's spontaneous explanations of harmful and unfair behavior revealed that (as noted earlier, see page 147) children often used mental states other than belief to indicate differences in interpretation. In many cases, for example, explanations referring to the actor's intentions also implied a difference in interpretation on the part of the actor (e.g., "maybe Jayna was trying to make sure that kid didn't get sick by not giving her too much candy"). When re-examining the data without equating the attribution of interpretive differences with the attribution of differences in factual belief, we found that 36% of children gave explanations that implicated interpretive differences. In general, the content of these explanations suggested that, in the view of participants, the actor had construed the situation in such a way that his or her behavior did not entail harm (e.g., "maybe Jake didn't ask the other kid to play because he thought that kid didn't like that game").

Interestingly, as evidenced in children's narrative accounts of their own interpersonal conflicts with others (Wainryb, Brehl, & Matwin, 2005), this pattern of findings is not confined to children's explanations of the behaviors of hypothetical others. In this study, 112 boys and girls in four age groups (mean ages were 5, 7, 10, and 16) were asked to provide narrative accounts of an instance in which they had been harmed by a peer ("victim") and one in which they had inflicted harm on a peer ("perpetrator"), along with moral evaluations of their own and the other child's actions. The narratives were analyzed in terms of the semantic elements they included (e.g., the proportion of references to the perpetrator's harmful behavior, the victim's response, the perpetrator's and victim's emotions) as well as in terms of various measures of narrative structure (e.g., topic maintenance, event sequencing, fluency). Many aspects of the semantic and structural analyses are not relevant to our present purposes and are discussed in detail elsewhere (Wainryb et al., 2005). Of interest to our present purposes is whether children bring their psychological knowledge to bear on their construals of their own interactions, and whether (and how) their psychological construals are related to their moral thinking. We note here that the narratives were elicited using broad, non-directive probes (e.g., "Tell me about a time when you said or did something that hurt another kid; tell me everything you can remember about that time"). Therefore, any references to mental states were entirely spontaneous.

The findings of this study, not unlike those of the Brehl and Wainryb (2005) study, indicated that when children set out to make sense of interpersonal conflicts in which they had been directly involved, either as victims or as perpetrators, they frequently referred to their own mental states and those of the child with whom they had a conflict. Although children's narratives included

references to the perpetrator's harmful behavior ("I pushed him down," "they kept on calling me a baby"), the victim's behavioral response ("he went and told the recess monitor on us," "they ditched me, so I called them and pretended that I'd been attacked to make them feel bad"), and the resolution of the episode ("she got over it and now we're friends and everything," "he didn't even say he was sorry"), on the average, about half of all references that made up the narratives related to mental states. Overall, 90% of narratives included at least one reference to mental states. In terms of the types of mental states to which children referred, 62% of narratives included references to the perpetrator's intentions, 74% included references to emotions, and 75% included references to other mental states, such as desire and belief.

In depicting their own intentions and those of others, children largely referred to perpetrators as intending to pursue goals unrelated to the harm inflicted on the victim, with the resulting harm being mainly incidental (e.g., "Well, I didn't play with her because I kind of wanted to play with another friend because I wanted to make new friends so I could have lots of friends"); 33% of narratives that included references to intentions referred to the pursuit of such goals. Children also referred to acting with the intention of securing retribution for a past injury (13%; e.g., "she started spreading rumors about me, so I put some gross smelling stuff in her locker") and to acting without the intention to cause harm (20%; e.g., "it was just a really bad joke, I didn't mean to get her that upset").

When depicting the emotions of victims, children spoke largely of themselves and others as feeling sad or generally "bad," and to a lesser extent as feeling angry. Perpetrators were depicted as feeling guilty and angry (so few children described either themselves or others as having positive emotions as perpetrators that these references were not included in the analyses). Children also referred to desires (e.g., "she really wanted to play animals"; "I didn't want to give it back to her"), beliefs about the way things were (e.g., "he had thought we were just joking around"; "I noticed he had his jacket and his keys and all the stuff he usually has when he just takes off from school, and I thought he was just gonna take off without me"), and beliefs about the way things should have been (e.g., "I think that if she's going to say that, she should come to me and ask me first"; "we've been friends for so long, and friends just shouldn't do that to each other").

Although these findings cannot be directly compared to those obtained in the Brehl and Wainryb (2005) study with hypothetical scenarios, it is nevertheless worthy of notice that, in each case, the large majority of children included in their explanations at least one reference to desires, and about half included references to intentions and beliefs. The single striking difference between the two studies was in regards to the frequency of emotion attributions. Whereas, in all, about 30% of children included a reference to emotion in explaining hypothetical situations of wrongdoing, a full 74% did so when describing

situations involving actual (their own or their peers') wrongdoing. This difference, however, is misleading, as the larger figure (74%) refers to the emotions attributed to both the perpetrator and the victim. When only the emotions attributed to the wrongdoer are considered, the figure (26%) is much closer to that obtained with hypothetical transgressions. In all, then, mental state attributions seem remarkably similar whether they were provided in regard to hypothetical or real conflicts.

It is also worth mentioning that even though children in the Wainryb, Brehl, and Matwin (2005) study were generally more likely to refer to their own mental states (82% of narratives included such references) than to the mental states of the child with whom they had had a conflict (73%), both their own and the other child's mental states were present in the large majority of all narrative construals. When children had been the perpetrators, however, they referred most frequently to their own intentions (74% of narratives included such references) and the victim's emotions (73%). In contrast, when children had been the victims, their most frequent references were to their own emotions (67%) and their own beliefs and desires (60%). Regardless of which perspective they themselves had filled, references to the perpetrator's emotions were infrequent (only 26% of narratives included such references). In spite of these differences, the extent to which mental state references were central to children's construals of their own interactions is noteworthy, as is the extent to which they attended not only to their own thoughts, feelings, and intentions, but also to those of the other child.

Recall, now, that we started out asking two questions. First we asked whether children refer to mental states in their construals of moral situations when such information is not provided. In accordance with our findings, the answer to this question is straightforward. Yes, children do refer to mental states in their construals, and they do so quite often. Indeed, in this regard our findings run contrary to the expectation (e.g., Pronin, Gilovich, & Ross, 2004; Ross, 2001; Ross & Ward, 1996) that, in the absence of explicit information about alternative construals of a situation, children might rely largely on dispositional or situational explanations. It is possible that our open-ended methods, which do not call for ratings of specific dimensions (e.g., the actor's undesirable traits), serve to facilitate such consideration of differences in belief, construal, and intention. In any case, children's construals of their own transgressions and those of others—real or hypothetical—were rich in mental state information. Our second question referred to the role that the developmental constraints on young children's understandings of the mind play in their construals and evaluations of moral situations. If before the age of 7 children view the mind as passive, one would expect significant age-related differences in children's abilities to construct psychological explanations of harmful behavior. Thus, it is to these differences that we now turn.

C. PASSIVE MINDS, ACTIVE MINDS, AND MORAL JUDGMENTS

Based on the aforementioned findings, children of all ages clearly referred to psychological information in their attempts to understand (and explain) interpersonal conflicts. Nevertheless, there were also significant age differences in the prevalence of psychological explanations and in the types of mental states to which participants of different ages referred. In the Brehl and Wainryb (2005) study, in which children explained the harmful behaviors of actors in hypothetical transgressions, only about half (57%) of 4-year-olds' explanations included references to mental states (i.e., beliefs, desires, emotions, and intentions), as compared to 75% of explanations given by 7- and 10-year-olds and adults. Similar age differences were observed in the Wainryb, Brehl, and Matwin (2005) study, where children described situations involving moral transgressions in which they themselves had participated. The finding that younger children referred less frequently than did older children to mental states is not surprising in light of young children's view of the mind as passive. Given that young children do not recognize that the mind is involved in actively interpreting experience and assume, instead, that there is a one-to-one match between internal mental life and the external world, it makes sense that they would include fewer mental states in their construals of situations entailing harm. Indeed, speaking about mental states from the perspective of the mind as passive is akin to replicating a description of the scenario "as it was."

As would be expected, age differences were found not only in regards to the overall number of references to mental states, but also in the types of mental states (i.e., belief, desire, emotion, and intention) to which children referred. For example, age differences were found in the frequency with which children referred to beliefs and intentions—differences which were in keeping with what is known about the development of children's understandings of mental states. In the Brehl and Wainryb (2005) study, only 12% of 4-year-olds referred at least once to intentions, as compared to 42-59% of 7- to 10-year-olds and 81% of adults. Similarly, only 16% of 4-year-olds referred at least once to the actor's beliefs, as compared to 42-50% of 7- to 10-year-olds, and 67% of adults. In the Wainryb et al. (2005) study, 68% of 5-year-olds, as compared to 95% of 10- to 16-year-olds, referred at least once to intentions. Similarly, only 18% of 5-yearolds, but 75% of 10- to 16-year-olds included references to their own or the other party's beliefs about what the situation was like and how it should have been (all differences were statistically significant unless noted). Age differences were also observed in the Brehl and Wainryb (2005) study in regards to explanations which involved attributing to actors a different interpretation of the situation. Only a minority of 4-year-olds (7%) and 7-year-olds (25%), as compared to 40% of 10-year-olds and the large majority of adults (71%), provided such explanations.

In addition to the differences in the number and type of mental state explanations offered by younger and older children, young children offered two types of explanations that were infrequent or nonexistent among the older children. These explanations, one involving quasi-interpretations and the other conflations between mental states and outcomes, serve to illustrate further the ways in which young children's limited understandings of the mind shape their construals of harmful behavior.

The following explanation, spontaneously offered by a 7-year-old in response to why Jake may have excluded a peer from play, serves to illustrate what we have called "quasi-interpretive" explanation: "Jake didn't ask that kid to play with him because that boy had a cold and couldn't go outside." In one respect, this sort of explanation resembles the "interpretive" explanation inasmuch as it, too, attributes to Jake, the actor, a different interpretation of the situation (i.e., Jake did not think that he was harming his peer, he had a different understanding of what happened). Unlike the "genuine" interpretive explanations, however, this explanation makes reference to features not present in the original situation (i.e., Jake did not differently construe the same information; he was privy to additional information, namely, that the victim "had a cold"). This sort of quasi-interpretive explanation, which we think is more consistent with an understanding of false belief than with the more advanced understanding of interpretation, was offered by 32% of 7-year-olds (only a small minority of 4-year-olds and no older children or adults offered such an explanation).

The other type of explanation that betrays the limited psychological understandings of young children involved a lack of differentiation between, on the one hand, indices of mental activity (desires, beliefs, intentions, and emotions), and on the other hand, behavior and its consequences. An example of such an explanation is the statement by a 4-year-old who, when asked to explain why Jake may have excluded a peer from play, reasoned that Jake "left that kid out and hurt his feelings because he was trying for him to have hurt feelings." In conflating the actor's intention with the actor's behavior and the consequences of such behavior, this child's explanation amounted to saying, essentially, that the actor did x because he was trying to do x. Additional examples of this type of reasoning were "Jayna gave that kid only one candy because she wanted her to only have one candy," and "Jayna was mean because she was thinking to be mean." Each of these examples features a failure to distinguish between mental states and behavior (for strikingly similar instances of young children's conflated explanations, see research on 4-year-olds' comprehension of verbs referring to mental activity; Miscione et al., 1978; Wellman & Johnson, 1979). This type of reasoning is in stark contrast with the sorts of explanations offered by older children who, while holding that the behavior was not accidental nevertheless differentiated between the reason for acting and the action itself or its end result (e.g., "Jake just wanted to play

with his friends, and he didn't really know that kid"; "that kid did something mean to her before, and so Jayna was trying to pay her back"). Analyses indicate that 4-year-olds were more likely (28%) to provide explanations conflating mental states with outcomes than were older children (7%); no adults provided such explanations.

What do these differences between younger and older children's psychological explanations amount to as far as their moral thinking is concerned? We have thus far shown that young children tend to refer less frequently, in their construals and explanations of moral situations, to mental states—in particular, they include fewer references to intentions and beliefs. They also consider less frequently the possibility that actors may have behaved on the basis of alternative interpretations, and conflate mental states and outcomes thereby concluding that actors had intended whatever outcome came about. We suggest that these features of young children's construals may be responsible for young children's documented tendency to over-attribute intentionality (Astington, 2001; Kalish, in press; Piaget, 1932/1965) and make categorical moral judgments (Helwig & Turiel, 2003; Shaw & Wainryb, 2006; Smetana, 2006).

How, you might ask, can the finding that young children refer *less* frequently to intentions be taken to underlie children's tendency to *over*-attribute intentionality? We suggest that the reason young children tend to neglect referring to an actor's intentions is that they conflate intentions and actions/outcomes. In other words, if young children equate intention with actions/outcomes, it stands to reason that they would not discuss intention separately from action and would make infrequent explicit references to an actor's intention. Therefore, implied in young children's tendency to *not* consider intentions when they make sense of moral situations (or to do so infrequently) is their propensity to over-attribute intentionality, that is, their propensity to assume that whatever outcomes are in place have, indeed, been intended. In contrast, older children, who have developed an understanding of intention as a mental state distinct from action, should be more likely to refer to an actor's intention as separate from her or his behavior.

The implication of this tendency goes beyond the greater or lesser frequency with which older and younger children refer to intentions in construing moral situations. Older children, we suggest, are less likely to over-attribute intentionality: They are, indeed, more likely to recognize that the outcome of someone's actions is distinct from whatever that person may have intended. This difference, between younger children's inability and older children's ability to recognize the distinction between intentions and actions/outcomes, translates into differences in younger and older children's moral judgments of what are, ostensibly, the same acts. Our research provided direct evidence to this effect. In the Wainryb, Brehl, and Matwin (2005) study, for example, younger children made categorically negative judgments of their own and the other child's

transgressions (e.g., "It was just not okay to leave him out because it made him feel not so good"). By contrast, older children and adolescents gave more mixed evaluations of similar situations and, importantly, their justifications demonstrated their ability to distinguish between intentional behavior (that is, behavior that is not accidental) and the intention behind such behavior. Thus, although older children acknowledged both that the behaviors discussed were not accidental and that the outcome of such behaviors was that harm had been inflicted on someone, they also recognized that the intention behind those behaviors had not been to inflict harm (e.g., "It was kind of okay and also kind of not okay, because I wasn't trying to hurt her feelings when I didn't invite her to come over, I was really just trying to get to know another group of people, but still she did get hurt"). This complex and less categorical moral judgment stands in stark contrast to the younger child's judgment that "It was just not okay to leave him out because it made him feel not so good." Younger children's limited ability to understand cases in which the outcome of the act was in conflict with a stated intention (as when a harmful outcome was incidental to an actor's pursuit of a neutral goal, for example), explains their categorically negative moral judgments.

It would be a mistake, of course, to assume that young children's categorical moral judgments are solely related to their limited understanding of intention. In their construals, young children also referred less frequently than their older peers to the characters' beliefs—a feature that can also be explained in relation to their nonrepresentational conceptions of the mind (why refer to beliefs, if they are nothing but copies of the way things are?). We suggest that their limited understanding of belief, too, contributes to their construing moral situations as though they implicated only a "surface" or behavioral dimension. Furthermore, as shown in our research concerning young children's thinking about other persons' different beliefs, their limited understanding of belief was directly associated with their tendency to make unforgiving or intolerant moral judgments of the actions of others (Wainryb & Ford, 1998; Wainryb et al., 2004).

Children's limited understandings of emotions, especially mixed emotions and emotions experienced in equivocal contexts, also have substantial consequences for young children's construals and judgments of moral situations. Whereas the findings we have reviewed thus far indicate that children of all ages attend to emotions, especially those of the victim, in construing moral situations, they were less informative in regards to how age differences in emotion understanding may impact moral construals and moral judgments. Other research, however, has shown that young children, who find it difficult to acknowledge that the phenomenological experience of emotion may differ from its outward expression, are likely to misunderstand the emotional experience of both victims and wrongdoers.

Young children's limited understanding of the experience of wrongdoers has been amply documented in terms of the "happy victimizer" phenomenon (e.g., Arsenio & Lover, 1995; Nunner-Winkler & Sodian, 1988). Young children also experience difficulties deciphering the emotions—and hence experiences of victims, especially when victims respond in ways that are not transparent or straightforward. For example, in a study by Shaw and Wainryb (2006), children in five age groups (5, 7, 10, 13, and 16 years) were presented with hypothetical situations in which victims either openly resisted, complied with, or covertly subverted unfair demands made by another child (e.g., a demand to surrender personal property or to complete someone else's chores). Consistent with the notion that young children conflate mental states with external cues (Gnepp, 1989; Gnepp & Klayman, 1992; Harris, 1989; Yuill et al., 1996), 5-year-olds thought that victims who complied (more so than other victims) felt "good" for having acted pro-socially (e.g., for "sharing" her markers, or "helping" with someone's chores). Older children, understanding that internal mental states are not necessarily equivalent to external indicators, thought that victims who complied may have felt afraid and victims who resisted or subverted may have felt good for standing up for themselves. Children's understandings of emotion were also found to be involved in their construals and evaluations of the victim's response. Children between the ages of 7 and 16 judged a victim's resistance more positively than compliance and subversion, referring to the selfaffirming consequences of such a response for the victim. Meanwhile, 5-yearolds judged compliance more positively than resistance and subversion, referring to the pro-social nature of compliance and to the unfairness of open or covert resistance. In all, these data, along with evidence about young children's misattributions of the emotions of victimizers lend support to the proposition that young children's limited understandings of emotions, too, are implicated in their miscontruals of moral situations and their categorical judgments.

Finally, we suggest that young children's non-interpretive understanding of the mind, as evidenced in their limited understanding of the representational nature of mental states and their ensuing tendency to conflate internal mental activity with actions and outcomes, is also implicated in the fractured nature of their understandings of moral conflict. Findings from the Wainryb, Brehl, and Matwin (2005) study relating to the structural features of children's narratives about their own experiences with interpersonal conflict help illustrate this argument. Recall that children participating in this study provided narrative accounts of conflict situations in which they had been directly involved. All narratives were rated on various indicators of coherence, such as topic maintenance, event sequencing, completion, and fluency and, in each respect, young children's narratives, especially those of 5-year-olds, were found to be less coherent than those of older children. Additionally, on a measure of overall coherence, only a minority of the narratives of younger children (30%), as

compared to 66% of those of older children, were deemed coherent. Narrative coherence is generally thought to reflect the integration (or lack thereof) of different aspects of an experience (McAdams, 1988; Polkinghorne, 1988). We speculate that the ability to understand the psychological dimension of human behavior—the ability to consider people's desires, beliefs, intentions, and emotions that guide behavior—is what glues together fragmented behavioral moments into a coherent experience (Bruner, 1986, 2002). Thus their limited psychological understandings contribute to the fractured quality of young children's construals of moral experiences—a quality that becomes manifested not only in their judgments (e.g., Shaw & Wainryb, 2006), but also in the behavioral strategies they employ for resolving conflicts (e.g., Dunn & Herrera, 1997; Shantz & Hartup, 1992).

Taken together, the studies we have conducted since the 1990s go to show that children's developing psychological understandings play a central role in their construals and judgments of situations of moral conflict. We have provided evidence that children use information about an actor's mental states to evaluate both the actor and his/her behavior (Shaw & Wainryb, 1999; Wainryb, 1993; Wainryb & Ford, 1998; Wainryb, Shaw, & Maianu, 1998; Wainryb et al., 2001, 2004), and that even when such information is not given, children spontaneously consider what actors (and victims) may have felt, thought, or wanted, as they attempt to make sense of moral conflicts. Importantly, our research has also shown that the specific characteristics of young children's still developing psychological knowledge shape in significant and predictable ways their moral thinking. Before the age of 5, children have limited understandings of mental states as such and thus are unable to account for mental state information even when such information is explicitly provided (Wainryb & Ford, 1998). Beginning at age 5, children recognize the diversity of mental life but ascribe such diversity to mistakes in perception or logic, thus continuing to use their own assumptions about the situation as the default from which to make sense of other people's behavior. It is therefore not surprising that at 5, children were much less likely than older children to spontaneously attribute mental states to actors and victims, be it themselves or others, and, even when such information was explicitly provided, were less likely to consider what it actually means that others may have differently understood moral situations. Indeed, for as long as children subscribe to a passive "copy" theory of the mind, psychological information does not appear to add much of importance to their understanding of moral conflicts beyond what is immediately observable (i.e., outward expressions of emotion, behaviors, and situational cues). Beginning around the age of 7, as they shift into viewing mental life as active and constructive, children's construals and evaluations of moral situations reflect a deeper understanding of and concern with the intentional nature of moral agents.

V. Conclusions and Future Challenges

Our research program is not alone in its attempt to document the relations between children's psychological and moral understandings. The interest in the connection between the two fields has grown over the years (Astington, 2004; Baird & Astington, 2004; Chandler, Sokol, & Wainryb, 2000; Dunn, Cutting, & Demetriou, 2000; Kalish, 2005; Lagattuta, 2005; Leslie, 2000; Nunez & Harris, 1998; Peterson & Siegal, 2002; Sokol & Chandler, 2004; Yuill et al., 1996), and considerable efforts in theories-of-mind research have been devoted to examining the ways in which children, with age, increasingly draw on both psychological and moral concepts in interpreting, explaining, and predicting human behavior.

As examples, research on the "happy victimizer" phenomenon (e.g., Arsenio & Lover, 1995; Arsenio, Gold, & Adams, 2006; Nunner-Winkler & Sodian, 1988), to which we referred earlier in this chapter, has asked about the ways in which children attribute emotion to story characters that break moral rules. Research by Lagattuta (2005) extended those findings by asking how children make emotion attributions in situations in which there is conflict between a person's desire and a prohibitive rule. Together, this research has shown that, with age, children increasingly come to recognize that emotional satisfaction is shaped by fulfillment of both desire and rules and obligations. Kalish and colleagues (e.g., Kalish & Shiverick, 2004) have similarly shown that, with age. children become more able to coordinate both moral and psychological information when making predictions about how people want, and are likely, to behave. Other research has investigated the relation between children's interpretive stance and their ability to identify situations of rule violation and rule conformity (e.g., Cummins, 1996; Harris & Nunez, 1996; Nunez & Harris, 1998) and assign blame and responsibility in situations of moral transgression (e.g., Baird & Astington, 2004; Sokol & Chandler, 2004).

Even as evidence accumulates showing that children bring to bear moral concepts along with psychological understandings when explaining or predicting people's actions and emotions, the relation between children's psychological and moral concepts is not yet well understood. Although some (e.g., Nunez & Harris, 1998) have argued for the view that the closely interwoven nature of the two realms of development results from children transposing their psychological understandings to the moral domain and vice versa, others (e.g., Sokol & Chandler, 2004) have rejected such domain-specific and modularist propositions (see also Astington, 2004). In spite of their differences, both the domain-specific and domain-general propositions share, implicitly, a recognition that the nature of the relation between children's moral and psychological concepts cannot be fully understood except in reference to the underlying developmental processes.

We have put forth a framework for explaining this relation. Our starting point was the process through which children develop moral concepts and make moral judgments. Next, we proceeded to explain why and how, within this developmental process, children's psychological concepts come to bear on their moral thinking. Finally, we provided a detailed analysis of how children's developing psychological concepts differently impact their ability to make sense of and judge moral situations at different ages. The latter point, concerning the varying constraints that younger and older children's psychological understanding place on their moral thinking, merits further discussion. In particular, we have described at some length the precise constraints in young children's moral thinking as related to their limited psychological understandings, but we have said comparatively little about the implications, for moral thinking, of having a mature theory of mind. Attending to this question will, in turn, illuminate further the nature of the relation between psychological and moral concepts throughout development.

As we have alluded to earlier in this chapter, in referring to developments in children's psychological understandings we do not mean that children become increasingly more accurate mind readers. Like theories-of-mind researchers, we refer to children's growing understanding of the complex nature of people's psychological experiences. Children become increasingly more able to understand that people may have beliefs and desires different from their own and may differently interpret aspects of reality, that people's outward expressions of emotion may be misrepresentative and deceiving, and that people often intend to do things but fail, and do things not as intended. This increasing ability renders older children capable of appreciating subtleties in moral situations that younger children unavoidably miss. It is not that younger children are not concerned with fairness and the welfare of others—on the contrary, their categorical moral judgments suggest that their moral concerns are firm and unwavering—it is that they do not find injustice and pain in the same places as do their older peers.

And yet, our argument that young children are bound to apply their moral concepts to incomplete, unelaborated, fractured, and disjointed construals of reality funneled by their limited psychological understandings does not imply that the reverse is true for older children. Older children too are unavoidably bound to misread other people's intentions, beliefs, and emotions, sometimes for self-serving reasons and sometimes not. Research, as well as everyday experience, makes it abundantly clear that other people's mental states never become transparent (some might say that even our own mental states never become entirely transparent), and even adults display systematic biases when explaining why a person may have acted a certain way (e.g., Malle, 2004; Ross, 1990, 2001; Ross & Ward, 1996). Therefore, even older children who have developed a more mature theory of mind are bound, at least some of the times,

to apply moral concepts to misconstruals of reality. An advanced or mature theory-of-mind cannot ensure otherwise.

Relatedly, the fact that older children have a more advanced theory of mind does not imply that they will necessarily make more fair or caring moral judgments or display more positive behavior toward others. As is widely acknowledged, psychological knowledge can be used for good as well as for evil. Research has shown that children's psychological understandings are related to various indicators of social competence (e.g., Astington, 2003; Lalonde & Chandler, 1995; Peterson & Siegal, 2002; Slaughter, Dennis, & Pritchard, 2002). For example, a greater understanding of emotion contributes to more positive play among 4-year-olds (Denham & Kochanoff, 2002) and moral sensibility among school-aged children (Dunn, 2000), and conversely, aggressive children demonstrate deficits in emotion understanding (e.g., Denham & Kochanoff, 2002; Dodge, 2003). However, there is also evidence that an advanced theory-of-mind does not guarantee social competence or pro-social behavior (Repacholi et al., 2003; Sutton, 2003). Conduct-disordered children, for example, have been depicted as having "intact but skewed theories-ofmind-perhaps a theory of nasty minds" (Happé & Frith, 1996, p. 395). And it is not only conduct-disordered children, or bullies, or psychopaths, who use their psychological knowledge for anti-social purposes. Developmental research suggests that most children use their psychological knowledge to comfort others and also use the same knowledge to provoke, deceive, and hurt others (Dunn, 1991, 1999; Harris, 1989). Indeed, it is not hard to see how a representational understanding of the mind can be used both to respond forgivingly to someone who acted on mistaken information and to pull the wool over someone else's eyes.

Along with Davies and Stone (2003), who described a theory of mind as "a collection of neutral tools that can be used for good or ill" (p. 339), we conclude that a mature theory of mind does not ensure a certain type of moral thinking but rather, as we have argued throughout, enables certain kinds of moral construals. Moreover, as we have suggested in an earlier section, even this statement must be qualified. For, even after having developed an understanding that people actively interpret reality and thus come up with divergent beliefs about reality, children do not merely judge that all alternative beliefs and interpretations are equally legitimate. Older children and adolescents, we have shown, are not accepting of persons who behave in harmful or unfair ways based on *any* type of different belief or interpretation.

Altogether, our argument thus far is twofold. On the one hand, we claim that young children's limited understandings of the mind severely constrain their construals of moral situations in ways that predict that their moral judgments will be, understandably, less attuned to the complexities and ambiguities related to the various psychological perspectives of those involved, and more

negative. On the other hand, we also claim that knowing that an older child is capable of understanding that people are guided by their own interpretations of reality is not sufficient to predict how that child might construe and evaluate moral situations.

This twofold argument might make it seem as though we are revitalizing Kohlberg's "necessary but not sufficient hypothesis" (1969, 1971). Although this hypothesis has not received adequate empirical support (for further discussion of these issues, see Turiel, 1983b), it is important that we consider it here in relation to our arguments, for the "necessary but not sufficient" proposition is often readily and uncritically accepted and has, in fact, been alluded to specifically in relation to the connection between moral and psychological knowledge (see Astington, 2003). In keeping with the commonly held view of mental structure as encompassing the mind as a whole, Kohlberg (1969, 1971; see also Colby & Kohlberg, 1987) hypothesized that development through a sequence of moral judgment stages is partially dependent upon development in cognitive stages. Specifically, he maintained that the prior emergence of certain stages of cognitive development is a necessary prerequisite for, but does not guarantee, the emergence of certain moral judgment stages.

Although our proposition is similar to Kohlberg's inasmuch as we claim that the emergence of some types of psychological understandings is necessary for, but do not guarantee, certain types of construals and moral evaluations, our view of the nature of moral development is fundamentally at odds with the main assumptions underlying the "necessary but not sufficient hypothesis" as formulated by Kohlberg (1969, 1971). Our view of moral development is grounded on a constructivist and interactional view (Turiel, 1983a, 1998), according to which children construct a realm, or domain, of moral understandings that is not dependent upon nonmoral structures. Children's moral concepts stem, not from cognitive structures or social-cognitive structures, but from their own experiences bearing on matters of welfare, justice, and rights. Children not only observe but are often involved, sometimes as targets and sometimes as perpetrators, in interpersonal conflicts involving physical or psychological aggression, social exclusion, or unfairness. It is through their abstractions from and reflection on features of those experiences (e.g., the consequences that such actions have for themselves or others) that moral development proceeds. Thus, we argue, conceptual changes in children's moral understandings do not depend on conceptual changes in children's psychological understandings. It is the application of moral concepts, and not their development, that is informed by children's specific psychological understandings.

And yet, the ways in which children make sense of the actions and interactions of those involved in situations of moral conflict—their construals of those people's beliefs, intentions, and emotions—constitute the context within which conceptual change in moral understandings happens. Therefore, even as

their development does not depend upon each other, moral and psychological knowledge are inextricably intertwined in children's experiences. The tight interconnection of children's psychological concepts and moral thinking underscores the importance of considering the development of psychological knowledge when examining children's moral reasoning, as what may seem to be age differences in moral thinking may in fact reflect age differences in children's understandings of persons and their actions. This, in turn, represents a particular challenge for those interested in understanding moral development as manifested in children's actual interpersonal interactions because, though it may be feasible to ensure that participants of all ages have a shared understanding of the hypothetical situations about which they make moral judgments, this task becomes much more complicated outside the research lab. Thus, we propose that a fundamental challenge of researchers intent on charting children's moral development is to distinguish between the complexity of moral concepts and the complexity of the background of psychological understandings against which such concepts are applied.

REFERENCES

- Arsenio, W. F., Gold, J., & Adams, E. (2006). Children's conceptions and displays of moral emotions. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 581-610). Mahwah, NJ: Erlbaum.
- Arsenio, W. F., & Lover, A. (1995). Children's conceptions of sociomoral affect: Happy victimizers, mixed emotions and other expectancies. In M. Killen & D. Hart (Eds.), Morality in everyday life: Developmental perspectives (pp. 87-128). New York: Cambridge University Press.
- Asch, S. (1952). Social psychology. Englewood Cliffs, NJ: Prentice-Hall.
- Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology*, 53, 500-505.
- Astington, J. W. (2001). The paradox of intention: Assessing children's metarepresentational understanding. In B. F. Malle & L. J. Moses (Eds.), *Intentions and intentionality:* Foundations of social cognition (pp. 85-103). Cambridge, MA: MIT Press.
- Astington, J. W. (2003). Sometimes necessary, never sufficient: False-belief understanding and social competence. In B. Repacholi & V. Slaughter (Eds.), *Individual differences in theory of mind: Implications for typical and atypical development* (pp. 13–38). New York: Psychology Press.
- Astington, J. W. (2004). Bridging the gap between theory of mind and moral reasoning. In J. A. Baird & B. W. Sokol (Eds.), *Connections between theory of mind and sociomoral development* (pp. 63-72). San Francisco: Jossey-Bass.
- Astington, J. W., & Gopnik, A. (1991a). Theoretical explanations of children's understanding of the mind. *British Journal of Developmental Psychology*, 9, 7–31.
- Astington, J. W., & Gopnik, A. (1991b). Developing understanding of desire and intention. In A. Whiten (Ed.), *Natural theories of mind: Evolution, development and simulation of everyday mindreading* (pp. 39-50). Cambridge, MA: Basil Blackwell.

- Baird, J. A., & Astington, J. W. (2004). The role of mental state understanding in the development of moral cognition and moral action. *New directions for Child and Adolescent Development*, 103, 37-49.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development: Theory, research, and applications* (pp. 45–103). Hillsdale, NJ: Erlbaum.
- Bartsch, K., & Wellman, H. M. (1989). Young children's attribution of action to beliefs and desires. *Child Development*, 60, 946–964.
- Beck, A. T. (1967). Depression: Clinical, experimental, and theoretical aspects. New York: Hoeber.
- Berg, C. A., Meegan, S. P., & Deviney, F. P. (1998). A social-contextual model of coping with everyday problems across the lifespan. *International Journal of Behavioral Development*, 22, 239 261.
- Berndt, T. J., & Berndt, E. G. (1975). Children's use of motives and intentionality in person perception and moral judgment. *Child Development*, 46, 904-912.
- Brehl, B., & Wainryb, C. (2005). Children's explanations of harmful behavior: Naive realism and interpretation. Unpublished manuscript, University of Utah.
- Bruner, J. (1986). Actual minds: Possible worlds. Cambridge, MA: Harvard University Press.
- Bruner, J. (2002). Making stories: Law, literature, life. New York: Farrar, Straus and Giroux.
- Chandler, M. J., & Lalonde, C. E. (1996). Shifting to an interpretive theory of mind: 5- to 7-year-olds' changing conceptions of mental life. In A. J. Sameroff & M. M. Haith (Eds.), Five to seven year shift: The age of reason and responsibility (pp. 111-139). Chicago: University of Chicago Press.
- Chandler, M. J., Sokol, B. W., & Wainryb, C. (2000). Beliefs about truth and beliefs about rightness. *Child Development*, 71, 91-97.
- Colby, A., & Kohlberg, L. (1987). The measurement of moral judgment, Vol. 1: Theoretical foundations and research validation; Vol. 2: Standard issue scoring manual. New York: Cambridge University Press.
- Crick, N. R., & Ladd, G. W. (1990). Children's perceptions of the outcomes of aggressive strategies. *Developmental Psychology*, 26, 612-620.
- Cummins, D. (1996). Evidence of deontic reasoning in 3- and 4-year-old children. *Memory & Cognition*, 24, 823-829.
- Dalgleish, T., Taghavi, R., Neshat-Doost, H., Moradi, A., Canterbury, R., & Yule, W. (2003). Patterns of processing bias for emotional information across clinical disorder: A comparison of attention, memory, and prospective cognition in children and adolescents with depression, generalized anxiety and posttraumatic stress disorder. *Journal of Clinical Child & Adolescent Psychology*, 32, 10-21.
- Darley, J. M., Klosson, E. C., & Zanna, M. P. (1978). Intentions and their contexts in the moral judgments of children and adults. *Child Development*, 49, 66-74.
- Darley, J. M., & Zanna, M. P. (1982). Making moral judgments. *American Scientist*, 70, 515-521.
- Davies, M., & Stone, T. (2003). Synthesis: Psychological understanding and social skills. In B. Repacholi & V. Slaughter (Eds.), *Individual differences in theory of* mind: *Implications for typical and atypical development* (pp. 305-352). New York: Psychology Press.
- Denham, S. A., & Kochanoff, A. (2002). "Why is she crying?" Children's understanding of emotion from preschool to preadolescence. In L. F. Barrett & P. Salovey (Eds.),

- The wisdom in feeling: Psychological processes in emotional intelligence (pp. 239-270). New York: Guilford Press.
- Dennett, D. (1978). Brainstorms: Philosophical essays on mind and psychology. Montgomery, VT: Bradford Books.
- Dodge, K. A. (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.), The Minnesota Symposium on Child Psychology (Vol. 18, pp. 77-125). Hillsdale, NJ: Erlbaum.
- Dodge, K. A. (2003). Do social information-processing patterns mediate aggressive behavior? In B. B. Lahey & T. E. Moffitt (Eds.), Causes of conduct disorder and juvenile delinquency (pp. 254-274). New York: Guilford Press.
- Duncker, K. (1939). Ethical relativity? Mind, 48, 39-53.
- Dunn, J. (1991). Understanding others: evidence from naturalistic studies of children. In A. Whiten (Ed.), Natural theories of mind: Evolution, development and simulation of everyday mindreading (pp. 51-61). Cambridge, MA: Basil Blackwell.
- Dunn, J. (1999). Making sense of the social world: Mindreading, emotion, and relationships. In P. D. Zelazo, J. W. Astington, & D. R. Olson (Eds.), *Developing theories of intention: Social understanding and self-control* (pp. 229-242). Mahwah, NJ: Erlbaum.
- Dunn, J. (2000). Mind-reading, emotion understanding, and relationships. *International Journal of Behavioral Development*, 24, 142-144.
- Dunn, J., Cutting, A. L., & Demetriou, H., (2000). Moral sensibility, understanding others, and children's friendship interactions in the preschool period. *British Journal* of Developmental Psychology, 18, 159-177.
- Dunn, J., & Herrera, C. (1997). Conflict resolution with friends, siblings, and mothers: A developmental perspective. Aggressive Behavior, 23, 343-357.
- Fabricius, W. V., & Imbens-Bailey, A. (2000). False beliefs about false beliefs. In P. Mitchell & K. J. Riggs (Eds.), *Children's reasoning and the mind* (pp. 267–280). Hove, UK: Psychology Press.
- Fabricius, W. V., & Schwanenflugel, P. J. (1994). The older child's theory of mind. In
 A. Demitriou & A. Efklides (Eds.), *Intelligence, mind, and reasoning: Structure and development* (pp. 111-132). New York: Elsevier.
- Flavell, J. H., Everett, B. A., Croft, K., & Flavell, E. R. (1981). Young children's knowledge about visual perception: Further evidence for the Level 1-Level 2 distinction. *Developmental Psychology*, 17, 99-103.
- Gergen, K. J. (1991). Emerging challenges for theory and psychology. *Theory & Psychology*, 1, 13-35.
- Gnepp, J. (1989). Children's use of personal information to understand other people's feelings. In C. Saarni & P. L. Harris (Eds.), Children's understanding of emotion (pp. 151-180). New York: Cambridge University Press.
- Gnepp, J., & Klayman, J. (1992). Recognition of uncertainty in emotional inferences: Reasoning about emotionally equivocal situations. *Developmental Psychology*, 28, 145-158.
- Goldman, A. I. (2002). Simulation theory and mental concepts. In J. Dokic & J. Proust (Eds.), *Simulation and knowledge of action* (pp. 1–19). Amsterdam, Netherlands: John Benjamins.
- Hadwin, J., & Perner, J. (1991). Pleased and surprised: Children's cognitive theory of emotion. British Journal of Developmental Psychology, 9, 215-234.
- Hammen, C., & Zupan, B. A. (1984). Self-schemas, depression, social problem solving, and social competence in preadolescents. Cognitive Therapy and Research, 9, 685-702.

- Happé, F. G. E., & Frith, U. (1996). Theory of mind and social impairment in children with conduct disorder. *British Journal of Developmental Psychology*, 14, 385-398.
- Harris, P. L. (1989). Children and emotion. Oxford, UK: Blackwell.
- Harris, P. L. (1991). The work of the imagination. In A. Whiten (Ed.), *Natural theories of mind: Evolution, development and simulation of everyday mindreading* (pp. 283-304). Cambridge, MA: Blackwell.
- Harris, P. L., & Leevers, H. J. (2000). Reasoning from false premises. In P. Mitchell & K. J. Riggs (Eds.), *Children's reasoning and the mind* (pp. 67-86). East Sussex, UK: Psychology Press.
- Harris, P. L., & Nunez, M. (1996). Understanding of permission rules by preschool children. *Child Development*, 67, 1572-1591.
- Harter, S., & Whitesell, N. R. (1989). Developmental changes in children's understanding of single, multiple, and blended emotion concepts. In C. Saarni & P. L. Harris (Eds.), *Children's understanding of emotion* (pp. 81–116). New York: Cambridge University Press.
- Helwig, C. C., & Turiel, E. (2003). Children's social and moral reasoning. In P.K. Smith & C. H. Hart (Eds.), Blackwell handbook of childhood social development (pp. 475-490). Oxford, UK: Blackwell.
- Hobson, R. P. (1991). Against the theory of "theory of mind". British Journal of Developmental Psychology, 9, 33-51.
- Jones, E. F., & Nelson-Le Gall, S. A. (1995). The influence of personal effort cues on children's judgments of morality and disposition. *Merrill-Palmer Quarterly*, 41, 53-69.
- Kalish, C. W. (1998). Natural and artifactual kinds: Are children realists or relativists about categories? *Developmental Psychology*, 34, 376-391.
- Kalish, C. W. (2005). Becoming status conscious: Children's appreciation of social reality. *Philosophical Explorations*, 8, 245 263.
- Kalish, C. W., & Shiverick, S. M. (2004). Children's reasoning about norms and traits as motives for behavior. *Cognitive Development*, 19, 401-416.
- Karniol, R. (1978). Children's use of intention cues in evaluating behavior. *Psychological Bulletin*, 85, 76-85.
- Keasey, C. B. (1977). Children's developing awareness and usage of intentionality and motives. *Nebraska Symposium on Motivation*, 25, 219-260.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347-480). Chicago: Rand McNally.
- Kohlberg, L. (1971). From Is to Ought: How to commit the naturalistic fallacy and get away with it in the study of moral development. In T. Mischel (Ed.), Cognitive development and epistemology (pp. 151-235). New York: Academic Press.
- Kuhn, D., Cheney, R., & Weinstock, M. (2000). The development of epistemological understanding. *Cognitive Development*, 15, 309-328.
- Lagattuta, K. H. (2005). When you shouldn't do what you want to do: Young children's understanding of desires, rules, and emotions. *Child Development*, 76, 713-733.
- Lagattuta, K. H., & Wellman, H. M. (2001). Thinking about the past: Early knowledge about links between prior experience, thinking, and emotion. *Child Development*, 72, 82-102.
- Lalonde, C. E., & Chandler, M. J. (1995). False belief understanding goes to school: On the social-emotional consequences of coming early or late to a first theory of mind. *Cognition and Emotion*, 9, 167–185.

- Leslie, A. M. (2000). Theory of mind as a mechanism of selective attention. In M. Gazzaniga (Ed.), The new cognitive neurosciences (pp. 1235-1247). Cambridge, MA: MIT Press.
- Lewis, M. D. (2001). Personal pathways in the development of appraisal: A complex systems/stage theory perspective. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: theory, methods, research* (pp. 205-220). London: Oxford University Press.
- Malle, B. F. (2004). How the mind explains behavior: Folk explanations, meaning, and social interaction. Cambridge, MA: MIT Press.
- McAdams, D. (1988). Biography, narrative, and lives. *Journal of Personality*, 56, 1-17. Miscione, J. L., Marvin, R. S., O'Brien, R. G., & Greenberg, M. T. (1978). A developmental study of preschool children's understanding of the words "know" and "guess". *Child Development*, 49, 1107-1113.
- Mitchell, P. (2003). Acquiring a theory of mind. In A. Slater & G. Bremner (Eds.), An introduction to developmental psychology (pp. 237-257). Malden, MA: Blackwell.
- Moses, L. J. (1993). Young children's understanding of belief constraints on intention. *Cognitive Development*, 8, 1–25.
- Nelson-Le Gall, S. A. (1985). Outcome matching and outcome foreseeability: Effects on attribution of intentionality and moral judgments. *Developmental Psychology*, 21, 332-337.
- Nunez, M., & Harris, P. L. (1998). Psychological and deontic concepts: Separate domains or intimate connection? *Mind & Language*, 13, 153-170.
- Nunner-Winkler, G., & Sodian, B. (1988). Children's understanding of moral emotions. *Child Development*, 59, 1323-1338.
- Perner, J. (1991). On representing that: The asymmetry between belief and desire in children's theory of mind. In D. Frye & C. Moore (Eds.), *Children's theories of mind: Mental states and social understanding* (pp. 139-155). Hillsdale, NJ: Erlbaum.
- Peterson, C. C., & Siegal, M. (2002). Mind-reading and moral awareness in popular and rejected preschoolers. *British Journal of Developmental Psychology*, 20, 205-224.
- Phillips, W., Baron-Cohen, S., & Rutter, M. (1998). Understanding intention in normal development and in autism. *British Journal of Developmental Psychology*, 16, 337–348.
- Piaget, J. (1952). The origins of intelligence in children. New York: International Universities Press.
- Piaget, J. (1960). The child's conception of the world. Oxford, UK: Littlefield Adams. (Original work published 1929).
- Piaget, J. (1965). The moral judgment of the child. New York: Free Press. (Original work published 1932).
- Piaget, J., & Inhelder, B. (1969). The psychology of the child. New York: Basic Books.
- Pillow, B. H. (1988). The development of children's beliefs about the mental world. *Merrill-Palmer Quarterly*, 34, 1-32.
- Pillow, B. H., & Henrichon, A. J. (1996). There's more to the picture than meets the eye: Young children's difficulty understanding biased interpretation. *Child Development*, 67, 803-819.
- Pillow, B. H., & Mash, C. (1999). Young children's understanding of interpretation, expectation, and direct perception as sources of false belief. *British Journal of Developmental Psychology*, 17, 263-276.
- Polkinghorne, D. (1988). Narrative knowing and the human sciences. Albany, NY: State University of New York Press.

- Prinstein, M. J., Cheah, C. S., & Guyer, A. E. (2005). Peer victimization, cue interpretation, and internalizing symptoms: Preliminary concurrent and longitudinal findings for children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, 34, 11-24.
- Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self versus others. *Psychological Review*, 111, 781-799.
- Repacholi, B., Slaughter, V., Pritchard, M., & Gibbs, V. (2003). Theory of mind, Machiavellianism, and social functioning in childhood. In B. Repacholi & V. Slaughter (Eds.), *Individual differences in theory of mind: Implications for typical and atypical development* (pp. 67-97). New York: Psychology Press.
- Ross, L. (1990). Recognizing the role of construal processes. In I. Rock (Ed.), *The legacy of Solomon Asch: Essays in cognition and social psychology* (pp. 77-96). Hillsdale, NJ: Erlbaum.
- Ross, L. D. (2001). Getting down to fundamentals: Lay dispositionism and the attributions of psychologists. *Psychological Inquiry*, 12, 37-40.
- Ross, L. D., & Nisbett, R. M. (1991). The person and the situation: Perspectives on social psychology. Philadelphia: Temple University Press.
- Ross, L. D., & Ward, A. (1996). Naive realism in everyday life: Implications for social conflict and disagreement. In E. S. Reed, E. Turiel & T. Brown (Eds.), *Values and knowledge* (pp. 103-136). Mahwah, NJ: Erlbaum.
- Schult, C. (2002). Children's understanding of the distinction between intentions and desires. *Child Development*, 73, 1727-1747.
- Sedlak, A. J. (1979). Developmental differences in understanding plans and evaluating actors. *Child Development*, 50, 536-560.
- Shantz, C. U., & Hartup, W. W. (1992). Conflict and development: An introduction. In C. U. Shantz & W. W. Hartup (Eds.), *Conflict in child and adolescent development* (pp. 1-14). New York: Cambridge University Press.
- Shaw, L., & Wainryb, C. (1999). The outsider's perspective: Young adults' judgments of social practices of other cultures. British Journal of Developmental Psychology, 17, 451-471.
- Shaw, L., & Wainryb, C. (2006). When victims don't cry: Children's understandings of victimization, compliance, and subversion. *Child Development*, 77, 1050-1062.
- Shultz, T. R., Wright, K., & Schleifer, M. (1986). Assignment of moral responsibility and punishment. *Child Development*, 57, 177 184.
- Shweder, R. A. (1999). Culture and development in our postcultural age. In A. S. Masten (Ed.), *Cultural processes in child development* (pp. 137-148). Mahwah, NJ: Erlbaum.
- Siegal, M., & Peterson, C. C. (1998). Preschoolers' understanding of lies and innocent and negligent mistakes. *Developmental Psychology*, 34, 332-341.
- Slaughter, V., Dennis, M. J., & Pritchard, M. (2002). Theory of mind and peer acceptance in preschool children. British Journal of Developmental Psychology, 20, 545-564.
- Slaughter, V., Jaakkola, K., & Carey, S. (1999). Constructing a coherent theory: Children's biological understanding of life and death. In M. Siegal & C. Peterson (Eds.) *Children's understanding of biology and health* (pp. 71–98). Cambridge: Cambridge University Press.
- Smetana, J. G. (1981). Reasoning in the personal and moral domains: Adolescent and young adult women's decision-making about abortion. *Journal of Applied Developmental Psychology*, 2, 211-226.

- Smetana, J. G. (2006). Social domain theory: Consistencies and variations in children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 69–91). Mahwah, NJ: Erlbaum.
- Sokol, B. W., & Chandler, M. J. (2004). A bridge too far: On the relations between moral and secular reasoning. In J. Carpendale & U. Muller (Eds.), *Social interaction and the development of knowledge* (pp. 155–174). Mahwah, NJ: Erlbaum.
- Stein, N. L., & Trabasso, T. (1989). Children's understanding of changing emotional states. In C. Saarni & P. Harris (Eds.) *Children's understanding of emotion* (pp. 50-77). New York: Cambridge University Press.
- Sutton, J. (2003). Tom goes to school: Social cognition and social-values in bullying. In B. Repacholi & V. Slaughter (Eds.), *Individual differences in theory of mind: Implications for typical and atypical development* (pp. 99 – 120). New York: Psychology Press.
- Turiel, E. (1983a). The development of social knowledge: Morality and convention. New York: Cambridge University Press.
- Turiel, E. (1983b). Domains and categories in social-cognitive development. In W. Overton (Ed.), *The relationship between social and cognitive development* (pp. 53-89). Hillsdale, NJ: Erlbaum.
- Turiel, E. (1998). The development of morality. In W. Damon (Ed.), *Handbook of child psychology: Vol. 3.* N. Eisenberg (Ed.), *Social, emotional, and personality development* (5th ed., pp. 863–932). New York: Wiley.
- Turiel, E., Hildebrandt, C., & Wainryb, C. (1991). Judging social issues: Difficulties, inconsistencies, and consistencies. *Monographs of the Society for Research in Child Development*, 56 (2, Serial No. 224).
- Turiel, E., Killen, M., & Helwig, C. C. (1987). Morality: Its structure, functions, and vagaries. In J. Kagan & S. Lamb (Eds.). *The emergence of morality in young children* (pp. 155–243). Chicago: University of Chicago Press.
- Wainryb, C. (1991). Understanding differences in moral judgments: The role of informational assumptions. *Child Development*, 62, 840-851.
- Wainryb, C. (1993). The application of moral judgments to other cultures: Relativism and universality. *Child Development*, 64, 924-933.
- Wainryb, C. (2000). Values and truths: The making and judging of moral decisions. In M. Laupa (Ed.), Rights and wrongs: How children evaluate the world. New Directions for Child Development (Vol. 89, pp. 33-46). San Francisco: Jossey-Bass.
- Wainryb, C. (2004). Is and Ought: Moral judgments about the world as understood. In J. Baird & B. Sokol (Eds.), New Directions for, Child and Adolescent Development: Vol. 103. Mind, morals, and action: The Interface between Children's Theories of Mind and Socio-moral Development (pp. 3–17). San Francisco: Jossey-Bass.
- Wainryb, C., Brehl, B., & Matwin, S. (2005). Being hurt and hurting others: Children's narrative accounts and moral judgments of their own interpersonal conflicts. *Monographs of the Society for Research in Child Development*, 7 (3, Serial No 28).
- Wainryb, C., & Ford, S. (1998). Young children's evaluations of acts based on beliefs different from their own. *Merrill-Palmer Quarterly*, 44, 484-503.
- Wainryb, C., & Laupa, M. (1994). Moral and informational components in social decisionmaking: Young adults' reasoning about capital punishment. Poster presented at the annual meeting of the Jean Piaget Society, Chicago.
- Wainryb, C., Shaw, L., Langley, M., Cottam, K., & Lewis, R. (2004). Children's thinking about diversity of belief in the early school years: Judgments of relativism, tolerance, and disagreeing persons. *Child Development*, 75, 687-703.

- Wainryb, C., Shaw, L., Laupa, M., & Smith, K. R. (2001). Children's, adolescents', and young adults' thinking about different types of disagreements. *Developmental Psychology*, 37, 373-386.
- Wainryb, C., Shaw, L., & Maianu, C. (1998). Tolerance and intolerance: Children and adolescents' judgments of dissenting beliefs, speech, persons, and conduct. *Child Development*, 69, 1541-1555.
- Wainryb, C., & Turiel, E. (1993). Conceptual and informational features in moral decision making. *Educational Psychologist*, 28, 205-218.
- Weiner, B., & Graham, S. (1984). An attributional approach to emotional development. In C. E. Izard, J. Kagan, & B. Zajonc (Eds.), *Emotions, cognitions, and behavior* (pp. 167-191). New York: Cambridge University Press.
- Wellman, H. M. (1990). The child's theory of mind. Cambridge, MA: MIT Press.
- Wellman, H. M., & Johnson, C. N. (1979). Understanding mental processes: A developmental study of "remember" and "forget". Child Development, 50, 79-88.
- Wellman, H. M., & Woolley, J. D. (1990). From simple desire to ordinary beliefs: The early development of everyday psychology. *Cognition*, 25, 245-275.
- Wellman, H. M., Cross, D., & Watson, D. (2001). Meta-analysis of theory-of-mind development: The truth about false belief. *Child Development*, 72, 655-684.
- Wimmer, H., & Perner, J. (1983). Beliefs about beliefs: Representation and constraining function of wrong beliefs in young children's understanding of deception. *Cognition*, 13, 103-128.
- Yuill, N. (1984). Young children's coordination of motive and outcome in judgments of satisfaction and morality. *British Journal of Developmental Psychology*, 2, 73-81.
- Yuill, N., Perner, J., Pearson, A., Peerbhoy, D., & van den Ende, J. (1996). Children's changing understanding of wicked desires: From objective to subjective and moral. *British Journal of Developmental Psychology*, 14, 457-475.