

## CHAPTER 17

# Origins and Development of Morality

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## INTRODUCTION

Morality is a central aspect of social life and has been at the core of psychological theories for more than a century. The scientific study of morality poses enduring questions about how individual psychological needs for autonomy and attachment to groups and society can be met while also ensuring the integrity, dignity, and equal and fair treatment of others. Drawing on philosophy, biology, anthropology, and sociology, developmental scientists have addressed these questions by studying the origins and acquisition of morality as well as the sources and nature of change.

Debates about the nature of morality have a long history dating back to the Greek philosophers. Plato, who wrote about idealized forms of morality in 380 B.C., was challenged by his student, Aristotle, who speculated about what it means to live a good life. Aristotle appealed to virtues as well as to core principles of justice. In the 1700s, debates about morality arose which have continued to this day. Hume (1739/1969) focused on the sentiments (emotions) that motivate morality, and Kant (1785/1959) theorized about rationality and the categorical imperative (e.g., “Act only in accordance with that maxim through which you can at the same time will that it become a universal law” (p. x). Evolutionary (Darwin, 1871/2004) and sociological theory (Durkheim, 1925/1973) also brought new claims to bear on the conceptualization of morality. Current philosophers have continued these debates, albeit in different forms. They have drawn on psychological theories and provided new interpretations of classic theories to develop more integrated treatments of morality, which are influential in how developmental scientists study morality today (Appiah, 2005; Gewirth, 1978; MacIntyre, 1981; Nussbaum, 1999; Rawls, 1971; Sen, 2009).

Despite varying interpretations, most developmental scientists agree that morality refers to individuals’ treatment of others, not (just) the self, and reflects individuals’ intentions and motivations for actions. Beyond this, there are many different emphases, issues, and methodological approaches, which we will review in this chapter. Because conceptual and methodological approaches vary, comparisons across different theoretical perspectives and research programs are often difficult. Nevertheless, as we detail here, developmental approaches derived from very different foundational theories have moved toward more integrative approaches. Progress toward integration does not mean that controversies no longer exist; they do and will be identified here. Yet, some of the heated arguments

of 50 years ago have changed, with disagreements taking on new dimensions.

## Organization of the Chapter

Developmental scientists have made tremendous progress in understanding the origins and development of morality (for a review of different approaches, see Killen & Smetana, 2014). This is promising because developmental science and the study of morality continue to serve as reference points for scholarship and research across a wide range of fields, as well as foci for the popular media.

We begin with a description of the major developmental science definitions of morality. We provide a brief review of the theories that provided the foundation for research over the past half-century and then reflect on the controversies and misconceptions that still exist. Next, we review current literature on the developmental roots of morality, mental state knowledge and morality, and moral judgments and reasoning. Subsequent sections examine the various contexts, ranging from the family and peer groups to society, in which moral development occurs. We conclude with implications and directions for research. Throughout the chapter, we demonstrate how the study of morality has shed light on fundamental topics in developmental science, contributed novel methods, and discovered new knowledge about child development.

## Overview of Definitions of Morality

In this section we review and highlight the different ways that developmental scientists have defined morality and its acquisition. We identify some of the central positions, recognizing that our brief overview does not fully capture the complexity or nuances of any given approach.

### *Deontological Moral Judgments*

For researchers studying moral judgment, the definition of morality is derived primarily from moral philosophers taking a deontological perspective (Kant, 1785/1959). According to this approach, morality refers to a set of prescriptive norms about how individuals ought to treat one another, including concerns with fairness, others’ welfare, equality, and justice. To act in a way consistent with moral principles, one is required to be impartial and fair and to not be bound by the dictates of group norms or consensus when they are in conflict with fairness and justice. According to Gewirth (1978), morality is a set of categorically obligatory requirements for action for which compliance

is mandatory regardless of institutional norms, laws, or etiquette. Moral judgments, in their full and realized form, promote equality and reflect a focus on intentions, not outcomes. Further, Gewirth (1978) argues that moral judgments respect the integrity of persons and recognize the importance of promoting others' welfare. Notably, this definition identifies what is not included in the moral domain, such as personal desires and laws or customs. Researchers who study moral judgment development examine the emergence of these judgments in ontogeny and focus on the social experiences and relationships that contribute to the child's changing understanding of morality.

### ***Morality as Empathy and Prosocial Obligations***

Stemming from the moral philosophy of Hume (1739/1969), a robust line of research emphasizes the emotional basis of morality. Here the focus is on the human capacity for sympathy, compassion, and empathy, which are viewed as the motivations for prosocial and altruistic behavior. Morality is defined by these emotions, and research investigates how empathy and other emotions emerge and change over time. Empathy involves an emotional and cognitive reaction that often leads to acts that benefit others. Prosocial behavior includes sharing and donating resources, cooperating, comforting others, and volunteering to help another without benefit to the self.

Empathy is of concern not only in Hume's (1739/1969) theory but also in Kantian (1785/1959) philosophy, which has identified perfect and imperfect duties. Perfect duties involve acts with a high level of obligation, such as not harming others, acting in a fair and impartial manner, and treating others as an end rather than as a means to an end. Imperfect duties, including beneficence and caring for others, are acts that are good to do but not obligatory in the same way as perfect duties; while it is good to help others, there are contexts in which helping others is not viewed as a moral obligation. The focus of research on empathy and prosocial behavior has been on imperfect duties, such as being prosocial, kind, and compassionate toward others, and, centrally, caring for others. One goal of this research is to examine individuals' motivations to be moral. Moreover, both emotions and judgments (understanding) have been included in these investigations, albeit with different emphases and priorities.

### ***Morality as an Evolutionary Mechanism***

The developmental course of morality is an evolutionary one, and thus biological theories of evolution also have provided insights regarding the adaptive mechanisms

involved in moral development in humans. The evidence for this comes from cross-species comparisons as well as from neuroscience studies, with a focus on evolutionary principles of adaptation and change. Evolutionary theorists propose that morality functions to regulate social interactions cooperatively, not selfishly, and to promote the community's common good. The assertion is that the emergence of cooperation requires specific mechanisms that balance the organism's self-interest with concern and respect for others. Darwin (1871/2004) believed that morality was derived from a social instinct and developed toward rationality. Even though his goal was to introduce a biological (not philosophical) basis for morality, Darwin defined morality as the Golden Rule, which resembles the Kantian categorical imperative: "To do good unto others—to do unto others as ye would they should do unto you—is the foundation-stone of morality" (p. 166).

As discussed next, a wide range of researchers share the belief that investigating the building blocks of morality is essential for understanding moral development. Research on the evolutionary bases for morality has most often focused on the behavioral mechanisms that explain the adaptive functions of moral judgments and emotions that contribute to survival. Complementing evolutionary perspectives, technologies such as functional magnetic resonance imaging (fMRI) and electroencephalogram (EEG) have provided new lenses into moral judgments and emotions by documenting the neurological underpinnings of responses to a range of moral problem-solving tasks. Revealing the neuro-circuitry and brain activation associated with moral responses provides insights about what makes moral judgments and emotions unique.

### ***Morality and Identity***

Research on moral identity focuses on the extent to which morality is central to one's identity and motivates one to act in a moral manner. Moral identity is seen as the core of morality and is tied to judgments of personal responsibility and integrity, or the realization that consistency (between judgment and action) is at stake in moral action. The focus of this approach is often on individual differences in moral identity, moral motivation, and personality development. Current research on moral identity has focused on its role in promoting civic engagement, exemplary moral actions, and positive political action. Most of the research, however, has been conducted with adolescents and adults, although conceptual connections exist with early research on conscience, the emerging moral self, and shame in young children.

***Morality as Conscience***

Research on conscience stems from Freud's (1930/1961) theorizing and refers to the internalization of—and compliance with—parental (and societal) norms. Freud defined conscience as the development of the superego (a result of the internalization of parental values) and positive interindividual behavior toward others, which is maintained through a sense of guilt. Early views of conscience involved an internalized mechanism that enables children to do the right thing (as defined by one's society) and to feel bad when they misbehave. Current research on conscience measures internalization as a function of responses to parental disciplinary strategies, which produce individual differences in the strength of conscience. Conscience is most often measured in terms of children's behavioral and emotional responses, including resistance to temptation and self-regulation.

***Morality as Cultural Norms***

Researchers inspired by anthropological and sociological theories define morality in terms of cultural norms. Morality is seen as including justice and harm, but these approaches extend the moral domain to include interpersonal duties and familial obligations. Cultural perspectives often focus on cross-cultural variations in moral judgments, along with different perspectives on sources of influence and change. Historically, cultural-developmental approaches have defined morality in relativistic terms (e.g., as delineated and varying by cultures), but this area of research has also examined universal applications of morality (for instance, fairness and the avoidance of harm, as manifested by individuals in varying cultural contexts).

Cultural influences on children's acquisition of morality have been examined by studying how cultural agents communicate moral values. The categories of "individualism" and "collectivism" were introduced by cultural theorists to examine how morality is conveyed and developed in ways consistent with these broad ideological templates in Western ("individualistic") and non-Western ("collectivistic") cultures (Shweder et al., 2006). These categories have undergone extensive scrutiny, resulting in research examining their coexistence within as well as between cultures.

**Classical Theories of Morality and Their Evolution**

Definitions of morality reflect different theoretical approaches and traditions that guide the central constructs,

measures, descriptions of development, and conclusions to be drawn. Definitions, however, do not fully capture the complexity of theories, as we illustrate here. As one example, in recent years emotion researchers have come to appreciate the processes beyond emotions that are necessary for a full explanation of morality (Carlo, 2014). Conversely, researchers studying moral judgment have incorporated attributions of emotions as a fundamental aspect of morality (Arsenio, 2014; Turiel & Killen, 2010). For this reason and to highlight the source of many assumptions in current research, we review traditional developmental theories along with current extensions. Current researchers trace their theoretical roots to different foundational theories, which are reviewed here, along with extensions of these theories: evolutionary theory, prosocial developmental theory, and social domain theory.

***Psychoanalytic Theory***

Freud's (1930/1961) theory of morality was based on the centrality of parent–child relationships in early life. Freud (1930/1961) wrote about the necessity of understanding the reciprocity inherent in the "categorical imperative," which refers to the Kantian notion of the Golden Rule. Freud's developmental theory did not include an explanation of how individuals come to subscribe to the categorical imperative from the internalization of parental norms. Likewise, although Freud's theory of moral development was based on the social-emotional aspects of parent–child relationships, he did not provide a basis for the acquisition of a general set of moral principles, because the values that are incorporated into the superego were left unspecified (e.g., which parental values are incorporated?). Development was characterized in stages, but only through the first few years of life and culminating in the development of conscience, which was seen as formed by 5 years of age. Early social relationships with parents provide the basis for personality development as well as the formation of morality.

Current research on conscience examines how young children develop mechanisms for inhibiting negative behavior and promoting positive behavior as a result of internalizing parental norms. Conscience is conceptualized as an inner guidance or self-regulatory system involving an integration of moral emotion and conduct (with a limited focus on cognition). This emphasis is partly on the development of a mutually responsive orientation between the parent and child that sensitizes the child to learn proper conduct, codes of caring for others, and

committed compliance. This is exemplified by Kochanska's research on conscience (Kochanska & Aksan, 2006) as well as Thompson's research on early childhood morality (Thompson, 2014).

### **Behaviorism**

Behaviorism, as described by Watson (1930), and later expanded by Skinner (1971), proposed that psychological theories should derive solely from observable behavior. Watson conducted animal experiments focusing on conditioning and also authored a book on the psychological care of infants and children using his behavioral theory of classical conditioning. This theory contributed to a line of research on how learning principles might explain the child's acquisition of morality. Skinner's (1950) theory of operant conditioning elaborated on these notions. Although not specifically applied to child development, Skinnerian behaviorism had a major impact on American psychology, including theories about morality. Skinner (1971) contended that moral values were subject to the same environmental contingencies as any other learned behavior, such as language acquisition and riding a bicycle. Rewards and punishments were deemed sufficient to account for the acquisition of new behavior. This theory created debates within developmental psychology because Skinner rejected the notion of age-related constraints on development, along with propositions about cognitive developmental changes.

### **Social Learning Theory**

Following and extending Skinner's foundational research, Bandura and McDonald (1963) argued for a social learning theory approach to development. The proposition was that children learn through imitation and observation, not just through behavioral contingencies associated with reinforcement. The results from research using Bandura and McDonald's (1963) "forbidden toy" paradigms (in which children were asked to refrain from touching a toy when an adult was absent) suggested that childhood morality was acquired through adult mandates and from learning correct behavior from adult models. Extensive research conducted from this perspective has focused on the role of parental socialization, disciplinary strategies, and the environmental models that induce behavioral compliance to adult standards as measures of successful moral internalization. More recently, researchers from this perspective have argued for a consideration of parents' different goals for children's socialization (see Grusec, Goodnow, &

Kuczynski, 2000). Parents provide structure and strategies to learn domain-appropriate skills, respond to children's distress, and discipline appropriately.

### **Constructivism**

Piaget's theory of constructivism (Piaget, 1932, 1970), with its larger goal of charting the origins of knowledge, provides a foundation for current research on moral judgment development. Piaget's (1932) classic book, *The Moral Judgment of the Child*, was an in-depth account of how moral judgment and behavior emerge in development. Piaget (1970) focused on how moral knowledge arises through the interaction of biological givens (adaptive mechanisms) and environmental influences (peer and adult-child interactions). His theory was based on the premise that knowledge stems from action and that the acquisition of moral knowledge is a continual process of experience, abstraction, reflection, and evaluation.

Reflecting on the unilateral constraint of authority relationships, Piaget proposed that children are initially heteronomous (defining morality as compliance with rules set by an authority) and then become autonomous by 8–10 years of age. This transition was thought to emerge not from parents but through peer interactions, which, due to children's equal status, are characterized by mutual respect. This assertion was a radical thesis at the time (and still is) because Piaget's proposal that parents inhibit morality due to their unilateral authority relationships with children contrasts with the commonly held assumption that parents teach children morality. Rather, Piaget viewed peer interactions as equal, mutual relationships that promote conceptions of equality and fairness. Piaget (1932) was concerned with social interaction (behavior) as well as judgments, as revealed in his analyses of children's actual conflicts and deliberations regarding social rules and norms in peer exchanges, as well as evaluations of hypothetical dilemmas drawn from the child's world. Research has clearly established that peer relations and particularly friendships play important roles in children's moral understanding. Moreover, unlike Piaget's characterizations, adult-child interactions reflect both unilateral and mutual forms of relationships. In addition, Piaget's description of early morality as heteronomous has not survived empirical scrutiny, as recent research has shown that even young children understand the intrinsic basis for rules and do not evaluate transgressions solely on the basis of authority. Piaget's early theories about morality launched research programs in the 1960s and 1970s focusing squarely on

morality (see Turiel, 2006, for a review), as well as current research on intentionality, mental states, cooperation, and theory of mind. These have illuminated the complexity of morality in early development and changes in moral judgments from childhood to adolescence.

### *Cognitive-Developmental Theory*

In the context of American psychology in the 1960s, Kohlberg's (1969) extension of Piaget's (1932) theory of morality contrasted sharply with behaviorism. Kohlberg criticized socialization theory (and behaviorism) for ignoring the child's construction of moral knowledge. He argued that imitation and observation were not sufficient to enable children to understand concepts of justice, fairness, and others' welfare because adults are often erroneous, immoral and subject to flawed logic, leaving unanswered the question of how children who have immoral adult role models formulate mature moral judgments.

Cognitive developmental theory was applied to morality (Colby & Kohlberg, 1987) to identify the underlying logical thinking necessary for moral judgment development. Drawing from Rawls's (1971) theory of justice and his own interview studies, Kohlberg posited that morality develops through six stages organized within three levels (preconventional, conventional, and postconventional) of moral thinking.

Kohlberg's goal of empirically testing philosophical theories with psychological data sparked extensive debates between psychologists and philosophers. His conceptual model created a research agenda for studies of moral development for several decades. Kohlberg proposed that his moral stages were "structured wholes" and that his moral stage system reflected an invariant sequence, similar to Piaget's logical-scientific stages (see Lapsley, 2006, for an elaboration). Individuals were hypothesized to progress through one stage to the next and logically could not skip stages. Despite extensive research, this aspect of his theory was not empirically validated. Many criticisms have been applied to Kohlberg's system by researchers both within and outside his theoretical framework (see Lapsley, 2006; Turiel, 2014; Walker, 2006). Despite these limitations, this program of research was important for providing a developmental theory for the study of how individuals reason about moral issues.

### *Prosocial Development*

Eisenberg and colleagues (Carlo, 2014; Eisenberg, Spinrad, & Knafo-Noam, Chapter 15, this *Handbook*, this volume) extended and revised Kohlberg's global stage theory by

focusing more specifically on prosocial development. They drew from Hume (1739/1969) as well as from Kant (1785/1963) to more closely examine the roles of empathy and sympathy in motivating prosocial behavior. Eisenberg and colleagues showed that children's prosocial moral reasoning, or their thinking about situations in which others have needs that require an opportunity to help, develops through a series of stages. Like Kohlberg, they viewed later stages as reflecting developmentally more advanced modes of thinking, but unlike Kohlberg, they proposed that individuals can use a variety of different levels in their reasoning and that reasoning may vary across different situations and circumstances.

Furthermore, as part of their account of prosocial development, these researchers distinguished between the moral emotion of *empathy*, an affective response that stems from the awareness of another's emotional state (and is similar to what the other person is feeling), and *sympathy*, or an emotional reaction in response to another's state without necessarily experiencing the same emotion as the other (Eisenberg, Spinrad, & Morris, 2014). Age-related changes in prosocial development have revealed that young children are sensitive to the needs of others, help others without external rewards, are not punishment-oriented, and are willing to engage in helping behaviors that do not benefit the self. This line of research has revealed the emotional and cognitive components of prosocial behavior and has offered a more specific and differentiated theory of morality than Kohlberg's global stage model.

### *Social Domain Theory*

Over the past 40 years, social domain theory, formulated by Turiel (1983, 2006), Smetana (2006), and Nucci (2001), has asserted that morality is one of three domains of social knowledge and is constructed out of social interactions. Morality is revealed by the individual's evaluation and interpretation of social events (rather than from direct teaching or transmission). Rather than positing domain-general, global stages of moral development, social domain theory postulates that different domains of reasoning coexist in development. These include the *moral* (issues of fairness, equality, justice, rights, and other's welfare, e.g., physical and psychological harm), *societal* (concerns about conventions, group functioning, social institutions, group norms, traditions, and cultural rituals), and *psychological* (concerns with personal goals, autonomy, identity, and individual prerogatives; Nucci, 2001) domains. These domains of reasoning and social interactions emerge early in ontogeny and follow different

developmental trajectories. In contrast to traditional cognitive-developmental characterizations of early moral development, social domain theory research has shown that young children evaluate moral transgressions as wrong even when there is no punishment or authority mandate. In addition, social domain theory has shown that moral development does not emerge from a self-oriented, pre-moral level (Kohlberg's stages 1 and 2), moving through a group-conventional level (stages 3 and 4), and culminating in a justice level (stages 5 and 6). Instead, empirical research has demonstrated that moral, societal, and psychological orientations coexist within individuals and are brought to bear when evaluating both straightforward and complex events. Children focus on moral concerns in some situations but are also concerned with group functioning or conventions (the societal domain) or with autonomy and personal goals (the psychological domain) in other situations. As well, there are social issues that reflect aspects of all three domains; in these cases individuals may give priority to one consideration while weighing multiple factors.

Social domain research has examined the different criteria as well as the reasons children use to evaluate the legitimacy or wrongness of rule violations. This is important, because judgments of transgression severity, naughtiness, and deserved punishment do not necessarily reflect moral evaluations. For example, there are good (or more effective) ways to brush your teeth, as well as good, expected, or conventional ways of calculating algebra problems, and good (that is, more aesthetically pleasing) poems or artworks. Moral rules are considered to be generalizable across contexts. Theoretically, moral transgressions are wrong even if the agent does not get in trouble or an authority condones the act. Further, the evaluation of moral transgressions is not contingent on the presence of rules; moral violations are wrong even if there are no rules governing them. In contrast, conventional (societal) rules are those rules that individuals view as alterable and a matter of consensus; their wrongness is contingent on rules and authority mandates. Children have been found to apply these criteria to evaluate moral and conventional events at an early age, although perhaps unevenly at first. For example, very young children may recognize that conventional rules are contingent on authority (that authority can deem an act to be legitimate) but not yet understand that conventional rules are alterable and can be changed.

Current research on social domain theory has examined how complex issues such as social exclusion and prejudice (Killen & Rutland, 2011), parent–adolescent conflict

(Smetana, 2011), tolerance of cultural practices (Turiel, 2006; Wainryb & Recchia, 2014), and rights (Helwig, Ruck, & Peterson-Badali, 2014) reflect moral, societal, and psychological considerations. These studies challenge traditional views of global stages of development, which would expect that only one form of reasoning would dominate all of individuals' moral thinking at different development periods.

### *Evolutionary Theories*

In his foundational and ground-breaking book, *The Descent of Man*, Darwin (1871/2004) claimed that human beings have a moral sense, or a prosocial disposition. This was seen as the outcome of a natural evolutionary process rather than divine intervention or religious teaching (Hinde, 1982). This has implications for debates about innate origins of morality as well as the role of adult transmission in moral development. Darwin believed that morality is an adaptation that provides a selective advantage, enabling civilizations to thrive and progress. As with Piaget (1932), morality was seen as stemming from experience and social interactions rather than from direct teaching, because the environment influences the behaviors that are selected.

Darwin identified two main steps by which a moral sense developed in humans. Morality was rooted in prosocial instincts, derived from caring for the young, which offset instincts to be aggressive toward outgroup members. The second step was in the intellectual faculties, revealed through memory, reflection, and the development of conscience (defined as reciprocity or “the Golden Rule”). Darwin theorized that humans were biologically inclined to be altruistic, sympathetic, and moral (de Waal, 2006, 2014) and not solely aggressive and competitive, as has often been mistakenly alleged.

Darwin contrasted nonhuman animals and early hominoids (“tribes”) to modern humans. Much of this analysis is theoretical rather than empirical, drawing on his observations of human civilization and theory of natural selection. Evolutionary theorists often debate the evidence for what counts as morality in human and nonhuman primates. Moreover, because most of Darwin's writing focused on the phylogenetic emergence of morality (human evolution across cultures and species), he did not speculate about when during childhood the shift from an early social predisposition to a moral intellectual capacity occurs. Darwin's theory influenced developmental accounts of morality in humans as well as provided the groundwork for more recent research on the biological basis of morality and the existence of morality in nonhuman animals.

Current research on the biological basis of morality includes research on the evolutionary origins of morality as reflected in the behavior of nonhuman primates as well as other animals (de Waal, 2006), investigations of cooperation in young children and primates (Warneken, Chen, & Tomasello, 2006), genetic and biological markers for the recognition of distress in others (Hastings, Miller, Kahle, & Zahn-Waxler, 2014), and neurological evidence for moral thinking and emotion (Decety & Howard, 2014). These viewpoints share a common focus on the biological basis for morality, with some differences regarding the characteristics that are proposed to be uniquely human. The literature overwhelmingly supports a biological basis for morality, which is consistent with a developmental perspective.

### **Beyond False Dichotomies**

A significant change over the past 50 years in the field of morality and moral development has been the move beyond false dichotomies. Below we discuss several such false dichotomies: nature versus nurture, judgment versus action, emotions versus judgment, justice versus care, and cultural relativism versus generalizability.

#### *Nature Versus Nurture*

The recent interest in the origins of morality, stemming from constructivist, nativist, biological, and comparative approaches, has led to renewed interest in what has been framed as debates between “nature versus nurture.” Yet, our understanding of the origins of morality (nature and nurture) has become more complex and nuanced. For example, our notions of nature are no longer restricted solely to genetic predispositions or inborn temperamental characteristics. Researchers who emphasize nature focus on the biological or evolutionary basis for morality, the innate capacities of the mind, neurological responses to morally relevant stimuli, and the genetic basis for individual differences in moral responses. Research on gene  $\times$  environment interactions has revealed that neither nature nor nurture is static. Genetic information is changed by environmental conditions before and after birth (epigenetic change) and, in addition, individuals respond differentially to environmental stimuli as a function of their genetic make-up (Fox et al., 2005). Thus, nature and nurture are intertwined and mutually influential.

In studying morality, nurture is no longer characterized simply as environmental contingencies or parental socialization. Whereas socialization initially referred to a

top-down process by which parents molded children, who were seen as passive “sponges” absorbing information, extensive research indicates that children are cognitive beings, actively interpreting, transforming, and evaluating social information as early as infancy. Thus, socialization occurs through varied social experiences involving bidirectional and interactive processes (e.g., Kuczynski & Parkin, 2007).

#### *Judgment Versus Behavior*

Another false dichotomy is that of judgment versus behavior. Traditionally, sharp distinctions have been drawn between approaches that focus on one or the other. Initial discussions about the relationships between judgment and behavior focused on whether individuals’ judgments about the right course of action are correlated with their actual behavior. A central limitation of framing the issue in this way, however, is that most situations are multifaceted. Actual situations are complex and involve multiple considerations (e.g., the relationship between a transgressor and a victim, their past history, the degree of harm inflicted, the intentions of the actor). To adequately compare hypothetical and actual situations there needs to be a control on the number of variables in each context (Turiel, 1983). It is important to know how individuals weigh these considerations in comparing judgments and actions; otherwise the analysis is incomplete. Reflections about the context bear on (and are related to) individuals’ determinations of the right course of action. Moreover, theorists often point out that behavior alone does not elucidate moral motivations because intentions can be positive or negative. Judgments that concern issues that individuals have confronted, whether abstractly or in actuality, provide the basis by which to draw connections between experiences, inferences, interpretations, and outcomes.

Further, neuroscience research has revealed the close interaction between cognitive functioning and behavior, making it difficult to fully differentiate the two. Cognition occurs while individuals are interacting in the world. Saxe (2009), a neuroscientist who studies morality, argued that observable behavior reveals only a small amount of information about “what matters,” because humans are much more interested in perceiving and inferring mental states. In fact, few researchers examine only judgment or behavior in actual situations; most studies include different measures of attitudes, judgments, and evaluations along with social experience, interactions, relationships, and behavior to study their interrelationships. This issue remains a prominent theme that warrants further investigation.

### *Emotions Versus Judgment*

Emotions and judgments are both central to morality and yet, these constructs are too often portrayed as an overly simplified dichotomy. Hume did not define morality solely as emotions, nor did Kant define morality exclusively as judgment, although interpretations of their work and the psychological science research they have generated continues to discuss these constructs as mutually exclusive. Empathy and sympathy, for example, reflect feeling states but also cognitive components regarding the target of empathy, the attribution of harm or distress, and the motivation of the recipient of empathy (Hoffman, 2000; Nussbaum, 1999). Conversely, judgments about respect for life and the integrity of persons involve elements of caring for another individual (Carlo, 2014; Turiel, 2014). Artificially demarcating some responses as “emotions” or “judgments” runs the risk of ignoring the full meaning of morality. Yet, debates remain about whether morality is fundamentally about judgments regarding fairness and equality, or emotional processes and interpersonal care. Recent research on these different orientations reveals that both constructs are important and coexist within individuals.

A recent instantiation of the emotions versus judgments duality can be seen in writings emphasizing the role of moral intuitions over judgments (e.g., Haidt, 2001, 2007). Haidt’s social intuitionist view draws on both evolutionary theory and moral neuroscience to argue that responses to moral events are primarily affective, intuitive, and automatic, whereas moral judgments, when they occur, reflect post-hoc rationalizations (see Decety & Howard, 2014, for an alternate developmental neuroscience view). The argument is that an automatic, very fast, and emotional system evolved to respond to threat and does most of the moral “heavy lifting” (Haidt, 2001). Haidt argues that although moral deliberations may have a role in morality, the cognitive system is an evolutionarily newer and more limited adaptation that is restricted to overriding intuitive responses. These notions have gained much currency recently, particularly in social psychology, but the direct evidence for these propositions is limited and based on experimental tasks posing highly unusual and extreme situations (e.g., eating your dog; incest). Furthermore, developmental data supporting these notions are rarer still. Yet, as others have claimed (Turiel, 2006), processes that look automatic in adulthood may appear so because they have been deliberated and negotiated during childhood, thus becoming habitual over time. In addition, the intuitive viewpoint of morality does not help

to understand the sometimes difficult deliberations that children, adolescents, and adults engage in when making complex moral decisions.

### *Justice Versus Interpersonal Care*

Interest in gender differences in morality has ebbed and flowed over the years. Gilligan (1982) pointed to statements that Freud, Piaget, and Kohlberg all made regarding gender differences in morality suggesting that morality in females is inferior to that in males. Gilligan (1982) argued instead that females and males have different moral orientations and that characterizations of females’ moral orientations were undervalued. More specifically, she proposed that Kohlberg’s moral reasoning stages, which focus on the developing understanding of justice, were characteristic of males, whereas females develop a morality of care entailing responsibility to others, the need to avoid harm, and the self as embedded in relationships. Gilligan believed that care reasoning was overlooked in theories of moral development because the prominent theorists were males and because Kohlberg’s theory was originally developed with a sample of boys.

Although Gilligan’s hypotheses generated a storm of interest, she conducted little systematic investigation of her hypotheses, relying primarily on exemplars of boys’ and girls’ reasoning. Extensive research in the 1980s and 1990s, as well as a meta-analysis of studies (reviewed by Walker, 2006) investigating her claims led to the conclusion that there are few systematic sex differences in children’s moral reasoning. In fact, much research revealed that both males and females value justice (e.g., equal rights) and care (e.g., family responsibilities). Indeed, the proposition that fairness is a male orientation ignores the significant efforts women have made to fight for their own just, fair, and equitable treatment. However, Gilligan’s work called attention to the need to include care, compassion, and others’ welfare in definitions and assessments of morality. These views have become integrated into current conceptions of morality and moral development.

### *Cultural Relativism Versus Cultural Generalizability*

Finally, the issue of culture and context is fundamental to the study of morality, and there have been dramatic changes over the past several decades in how these issues have been conceptualized and studied. Culture is central on many levels. Cultural norms and ideologies often provide frameworks for considerations of who is worthy of or should receive fair treatment, as reflected in concepts of personhood, the status of nonhuman animals,

the relationship of humans to nature, and many other fundamental components of moral decision-making. Conceptually, the ways in which cultural ideologies frame, influence, and contribute to moral development continue to be extensively debated.

Defining morality in terms of cultural norms, however, runs the risk of relativism. Spiro (1987), an anthropologist, pointed out that some positions on relativism have a prescriptive basis, such as “one should not impose one’s values on other groups and cultures; each society has its own morality.” Spiro (1987) argues that this form of relativism is actually a call for tolerance, rather than an extreme form of “anything goes.” Moreover, acts of genocide, violations of human rights, and war crimes are viewed as wrong by most individuals around the world, because they involve suffering inflicted on others. At the same time, supporting universalism does not mean that cultural norms are unimportant or are not influential in morality. Cultural norms provide challenges and obstacles as well as protective factors in daily life and must be understood in relation to morality.

Use of expansive categories such as individualism versus collectivism (Shweder et al., 2006) to characterize cultures has declined over the past few decades. Instead, researchers have focused more on within-culture studies and have examined how different characteristics coexist within cultures (and within individuals; see Oyserman, Coon, & Kimmelmeier, 2002; Wainryb & Recchia, 2014). Nonetheless, cultural psychology has been influential in pushing developmental scientists to broaden the samples used to study morality. For this reason, and because so many studies on morality include diverse cultural samples, we have incorporated issues of culture throughout the chapter rather than isolate culturally relevant studies in a separate section. In the next section we begin our review of the six central areas of morality and development covered in this chapter.

## THE ROOTS AND EARLY EMERGENCE OF MORALITY

An understanding of moral development requires an examination of its origins. Documenting the roots of morality is important because it addresses fundamental questions about the role of nature and nurture and the evolutionary basis of behavior. We do not take a position here on what aspects of morality are uniquely human. Yet, the types of evidence supporting both continuity (what we share

with other species) and discontinuity (what makes humans unique) are relevant for morality, given that both developmental and comparative psychologists are interested in charting the origins of sociality.

In fact, current research demonstrates that infants are social beings from the very start, before there is much opportunity for imitation or the ability to learn from modeling. While research on the early roots of morality does not negate claims that these processes are important in moral internalization, it demonstrates that children have moral propensities at very early ages.

### Early Origins: Awareness of Moral Categories in Infancy

The distinction between *sociality* and *morality* is crucial for interpreting research relevant to the origins of morality. All social behavior is not necessarily moral behavior; the bar for what counts as moral is more stringent and includes an obligation to treat others in a fair and just manner. Much of the research on the early roots of morality focuses on cooperation and prosocial behavior. Because these behaviors lack a prescriptive, obligatory basis, questions have been raised about whether these constitute moral behaviors—or positive socially oriented behaviors that contribute to the development of morality. Nevertheless, social awareness is a central prerequisite for morality. For this reason we review literature on early sociality that bears on moral development.

Recent research shows that infants spontaneously engage in social interactions without extrinsic rewards and orient toward helping and caring for others. Evidence for sociality in infancy is extensive and includes a wide range of behaviors, such as having intentional goals toward others (Woodward, 2009), engaging in reciprocal and positive interactions in family contexts (Dunn, 2014), helping others in the second year of life (Brownell, 2013), and responding to the distress of others (Hastings et al., 2014). Due to limitations in the types of responses obtainable from preverbal infants and toddlers, recent evidence has been experimental and laboratory-based, employing a constrained set of behavioral responses (for instance, looking time in infants; reaching behavior in toddlers). This is in contrast to early foundational studies of infant behavior, such as Piaget’s (1952) naturalistic observations of his own children’s reaching, grasping, and finding objects, and Bowlby’s (1969) studies of attachment, which documented children’s needs to maintain proximity to their caregivers in threatening situations.

Once children reach preschool age, the responses available to researchers widen to include verbal reasoning and judgments, spontaneous peer interactions, and responses to social dilemmas in the context of experimental situations. Next we focus on the roots of morality in infancy and early childhood, considering three areas: awareness of others' welfare (physical and psychological harm); awareness of equality, equity, and fairness (resource allocation and turn-taking); and children's cooperation, helping, and empathy.

### *Awareness of Others' Welfare*

Research by Zahn-Waxler, Hastings, and their colleagues (Hastings et al., 2014) has demonstrated that toddlers respond to others' distress and make overtures to help, revealing an orientation toward concern for others. These studies have developed a standard experimental paradigm where an adult experimenter feigns accidental self-harm (cutting one's finger on a board or hurting one's knee and crying "ouch!"), and coders measure toddlers' responses to the experimenter's distress. Research employing this paradigm has found that, by 14 months of age but not before, infants show both nonverbal and verbal concern for the adult. This benchmark reflects toddlers' spontaneous response and orientation to help another without adult encouragement, extrinsic reward, or instructions.

Recently, Davidov, Zahn-Waxler, Roth-Hanania, and Knafo (2013) have called into question the assumption that concern for others does not emerge until the second year of life. Contrary to previous theories, they report that self-other differentiation is evident in 1-year-olds. For example, infants show more distress in response to another infant's cries than to their own (Dondi, Simion, & Caltran, 1999). Davidov and colleagues (2013) refer to these forms of self-other distinction as implicit rather than explicit (e.g., as evidenced by touching one's rouged nose in the mirror). Along with others, they view the self-other distinction as a prerequisite for responding to another's distress. Thus, they argue that their findings provide the basis for responding to the distress of another even earlier, in infancy, than presumed before.

While prosocial responses are a central aspect of morality, more research is needed to document when young children view acts as wrong because of the harm caused to another person and the experience of harm felt by a potential victim. A new line of research with infants provides more information on this issue. To measure whether infants under one year of age distinguish between positive and negative acts toward another agent,

Hamlin and her colleagues conducted experiments that measured whether 6- and 10-month-old infants preferred to look at a "helper" or a "hinderer," depicted in a short video where two blocks moved together up a steep incline (Hamlin, 2013; Hamlin, Wynn, & Bloom, 2007). A round-shaped block (animated with eyes) moved, while another square block nudged it from behind. On separate trials, infants watched the same round block move up the incline but with a triangular-shaped block pushing the round block back down the incline, thus hindering its actions.

The research examined whether infants would view the former actions as "good" and the latter actions as "bad" (for a review, see Wynn & Bloom, 2014). Findings showed that infants preferred to look at the helper longer and reached for the "helper" rather than the "hinderer" when given the option to choose. Other experiments have shown that infants will reach for puppets demonstrating prosocial rather than apparently antisocial intentions (Hamlin, 2013). These prosocial orientations, as measured by visual preference and behavioral reaching, are seen as providing evidence for an innate basis for morality. Although these findings have generated some controversy, the surprising aspect of the Hamlin et al. studies is the very early ages (6–10 months) at which human infants reveal an agent-oriented (social object) rather than object-oriented preference. This early agent-oriented set of behaviors may provide the basis for the development of evaluative rules about the prescriptive treatment of others, but further research is needed to demonstrate this by making direct connections between the types of responses observed in infants and in young children's moral judgments.

Research by Warneken and Tomasello (2009) with toddlers has shown that 14-month-olds will help an adult stranger open a box, get a pencil, and solve a problem when the adult looks mildly distressed or confused. Whether toddlers' behaviors reflect responses to the distress of an adult or prosocial actions designed to help another is not fully known, but the data have provided further evidence that responses to another's concern are evident very early in development (Warneken & Tomasello, 2009); importantly, these behaviors are not performed simply to obtain external rewards. Further research is needed to determine whether toddlers view it as necessary or obligatory to help and wrong if one does not. Research with toddlers has shown that they evaluate moral and nonmoral social interactions differently (Smetana, 1984), indicating that their sense of obligation emerges during this age.

*Awareness of Fair and Equal Resource Allocation*

Children's understanding of fairness is a central moral concept that also emerges in early childhood. Foundational research by Damon (1977) documented moral understanding regarding the fair distribution of resources by middle childhood. More recent research has investigated whether a preference for the fair allocation of resources, or an understanding of the wrongfulness of unfair allocation, emerges in infancy and early childhood. A range of approaches and methods drawing on behavioral economics (Fehr, Bernhard, & Rockenbach, 2008), comparative psychology (Brosnan & de Waal, 2012; Warneken, Lohse, Melis, & Tomasello, 2011), cognitive development (Geraci & Surian, 2011), and moral development (Cooley & Killen, in press; Smetana, 1985) have shown that children younger than the age of 6 years have a preliminary understanding of the importance of distributing resources equally or equitably.

Research on fairness in young children from various disciplinary perspectives has addressed somewhat different questions. Research from behavioral economics aims to demonstrate how individuals (mostly adults) maximize the best outcome given a range of possible strategies to achieve this goal. It also examines the strategies individuals use when playing the Dictator game, which involves choosing among multiple options for maximizing an advantageous outcome; the paradigm has been modified and simplified for children in several studies (Gummerum, Hanoch, Keller, Parsons, & Hummel, 2010). In contrast, evolutionary perspectives draw on cross-species and phylogenetic data, using behavioral tasks to address the central question of the origins of human cognition. In this view, resource allocation is viewed as an adaptive mechanism in development (Brosnan & de Waal, 2012). In contrast, the focus of infant cognition research is to determine how early in ontogenesis humans can discriminate between different stimuli that reflect constructs such as morality, albeit in a preliminary form. These studies rely on visual habituation and visual looking time to demonstrate preferential knowledge.

Geraci and Surian (2011) examined infants' (10- to 16-month-olds') preferential looking and behavioral choices to the outcomes of computer-animated events depicting equal and unequal distribution of resources. Older infants looked longer at the fair than at the unfair distributor. In addition, infants in the older group—but not the younger group—were more likely to pick up a toy that was identical to the computer-generated image of the fair rather than the unfair distributor. The researchers concluded

that a preference for fair distribution is evident in infancy. Furthermore, the authors noted that the results were consistent with other recent studies involving nonhuman primates; capuchin monkeys showed negative reactions to unequal reward distributions in exchanges with human experimenters (Brosnan & de Waal, 2003). In addition, monkeys refused to participate if they observed a conspecific obtain a more attractive reward for equal effort. These findings suggest that there is an evolutionary basis for a concern with fairness.

Warneken et al. (2011) showed that when 3-year-old children performed a task together that resulted in a reward, children were more likely to share equally than not, even when the rewards could be monopolized. In the first of several studies, children were more likely to share resources when the rewards were gummy bears rather than stickers, but the researchers did not find a difference between food and nonfood rewards in the follow-up study. These results indicate that there is an emerging sense of equality for distributing rewards, which leads to successful collaborations in early childhood. However, the researchers did not examine why 3-year-olds shared equitably and how this compares with other findings showing benefits to the self or ingroup preference regarding resource allocation; this issue requires further inquiry and explanation.

Moreover, decisions about resource allocation do not occur in a vacuum. A number of contextual features are activated in most allocation contexts, including social relationships, the history of interactions, and group dynamics. When such partner features are included in the research designs, young children weigh these social dimensions in their resource allocation decisions. For example, Olson and Spelke (2008) found that friendship status affected 3.5-year-olds' allocations; young children more often allocated equal resources to puppet friend than nonfriend dyads. Moore (2009) replicated this finding in the same age group when distributing resources to an actual friend. These findings suggest the importance of including relationship contexts and interaction features in this research. Moving forward, measuring social and moral reasoning may illuminate why children prefer one type of choice over another.

Several recent studies have examined young children's reasoning about resource allocation and revealed that young children (prior to the age of 6) understand equality and merit. Baumard, Mascaro, and Chevallier (2012) found that preschoolers focused on effort when they were given the option to distribute a large or small cookie to a hard-working child (who made the cookies) or a lazy

one (who did not). This study revealed a rudimentary understanding of merit in 4-year-olds. Although children were able to match the amount of the resource with greater effort, Baumard et al. (2012) found that children preferred to distribute cookies equally when this option was made available. In fact, only a small minority of children explicitly used merit as the reason for their decision. For example, children who gave the larger cookie to the harder worker often gave nonmoral reasons such as “She has a bigger mouth.” These findings suggest that merit-based reasoning emerges slowly in early childhood, with some children acknowledging merit but most preferring equal allocation when given the opportunity to do so.

In another study, young children’s preference for equality (equal allocation of resources) was pitted against their loyalty to group norms (Cooley & Killen, in press). When asked to divide resources between the ingroup and the outgroup (defined by classroom affiliation), 3.5- to 6-year-old children supported an ingroup member who wanted to divide resources equally, even when the rest of the group wanted to keep more for themselves. Children gave priority to equal allocation over group norms, and used reasons based on equality. With age, children increasingly expected that the group would be less favorable toward the equal allocating deviant than did younger children (even though they were favorable towards this “ingroup deviant”). These results differed from previous research because equal allocation in this study design meant going against their peer group’s desire to keep most of the resources for their own group. Young children are willing to challenge an ingroup norm in order to maintain their preference for equality.

### ***Cooperation, Helping, and Caring***

Research has also shown that young children cooperate spontaneously. Brownell (2013) pointed to a dramatic shift in cooperation from the first to the second year of life when engaged in nonverbal tasks designed to enable two children to coordinate their actions to obtain a desired toy. Brownell, Ramani, and Zerwas (2006) found that 12- and 18-month-old peers did not take their partners’ behavior into account in this task and were not able to cooperate to obtain their goals. However, 24- to 27-month-olds were able to do so successfully and by 30 months, they conveyed information to their peers about what to do. Thus, Brownell and colleagues have documented age-related shifts in the coordination of behavior to cooperate and achieve mutual goals. These findings contrast with those of Warneken and Tomasello (2007), who have shown that 14-month-olds

can cooperate with adults. The differences between these results may reflect differences in the partners (peer or adult) studied, because adults can fine-tune their behavior to accommodate children’s intentions. Consistent with Piaget’s (1932) claims, Brownell noted that social knowledge created in adult–child and peer exchanges are qualitatively different. Piaget believed that equal relationships between peers provided a basis for the construction of morality, but in the experimental studies demonstrating early cooperation in adult–child encounters, adult experimenters asked children for help in solving a problem and thus functioned more like peers.

Warneken and his colleagues (2006) have conducted other studies comparing children’s cooperative behavior (with an adult partner) to that of chimpanzees. These studies examined whether shared intentionality (e.g., when both interacting partners have a joint goal and develop joint attention or plans for achieving their shared goal) is uniquely human. The tasks were nonverbal to facilitate cross-species comparisons. In one study, Warneken et al. (2006) gave 18- to 24-month-old children four tasks involving tools that required cooperation to solve successfully. For example, in one task, a tube with handles had a toy inside, and obtaining the toy required that two people simultaneously pull both ends. The results showed that cooperative behavior has roots very early in childhood. Children were able to cooperate with an adult partner, and the ability to coordinate significantly improved from 18 to 24 months of age. Studying even younger children (14-month-olds), Warneken and Tomasello (2007) demonstrated that infants helped an adult open a box for no external rewards. These studies point to the ontogenetic origins of cooperative behavior.

Vaish, Carpenter, and Tomasello (2010) studied prosocial behavior toward those who helped or harmed others. In many ways, this research is a natural extension of the Hamlin (2013) studies into early childhood. Vaish et al. (2010) recorded children’s behavior while observing an adult who helped the recipient (by picking up the fallen objects) or harmed another child (by breaking necklaces, or tearing up pictures made by the other child). Children took into account another’s harmful actions when deciding whether or not to help them. Children were less likely than would be expected by chance to help the adult who acted harmfully, but no differences were found for the adult who helped. The authors acknowledged that children may have been afraid of the harmful adult and thus acted out of self-protection rather than in response to moral concerns with fairness and rights.

To partially address this possibility, Vaish, Missana, and Tomasello (2011) investigated 3-year-old children's interventions in third-party moral transgressions using the same experimental paradigm but involving two puppets (not an adult). Children either observed a puppet destroy a picture made by another puppet or watched another puppet act in a similar manner without destroying the puppet's picture. Children protested the destruction of the picture and tattled on the actor; they behaved more prosocially toward the recipient who had an object destroyed than the one who did not. Thus, as young as 3 years of age, children protested another agent's moral transgressions.

Most of the studies reviewed here involve behavioral measures of cooperation, allocation decisions, or refraining from helping a harmful adult but do not reveal why children acted as they did. An interesting and important next step in this research would be to connect these behavioral responses with children's reasoning about their preferences and choices. This would add more information about children's motives and intentions regarding helping and cooperation, as well as their interpretation of these events. In the next section, we discuss research that includes young children's reasoning about issues of fairness, equality, and others' welfare; these issues will be expanded in the following section on moral reasoning and judgments.

### **Moral Judgments in Early Childhood**

Researchers have conducted experimental and observational studies to determine whether children's decisions and methods of conflict resolution, evaluations of rule transgressions, and responses to peer and adult protests reflect an understanding of moral concerns about fairness, equality, and harm (Nucci & Nucci, 1982). In studies of conflict resolution, for example, young children left to play with toys on their own and in the absence of adults have been shown to use moral reasons about fairness when discussing object disputes, despite expectations from adults that they would resort to aggressive strategies (Hay, 2006; Ross & Conant, 1992). In fact, during adult-supervised activities, children are more likely to turn to teachers to resolve conflicts rather than to use collaborative modes of discourse to bargain, compromise, and trade toys, as documented in peer exchanges (Killen & Turiel, 1991).

Further, young children 2.5 to 6 years of age increasingly use verbal information to identify ownership when playing with toys. Blake, Ganea, and Harris (2012) found that by 4 years of age, children interpreted third-person statements, such as "That's Billy's ball," as more reliable

cues to ownership than first-person statements, such as "That's my ball." In a related study, Blake and Rand (2010) found that children's preferences regarding resources affected children's willingness to donate stickers; children donated their least favorite more often than their favorite stickers. These findings reveal that children use information regarding ownership and value preferences to determine how to allocate resources and that they considered these factors more with age.

A number of studies have employed structured interviews with preschool children to obtain their evaluations of straightforward, hypothetical, and prototypical moral violations (for instance, hitting, teasing, or taking another child's toys) as compared to conventional violations (such as standing during naptime, wearing pajamas to daycare, or not saying "please"). These studies provide robust evidence that by about 3 years of age and more consistently by the age of 4, young children distinguish moral from social conventional violations; both forms of transgressions are also understood as distinct from issues of personal jurisdiction and autonomy (see Smetana, 2013; Smetana, Jambon, & Ball, 2014, for reviews). For example, children treat moral transgressions as more generalizably wrong (e.g., wrong across several contexts) and more wrong in the absence of rules and authority sanctions than social-conventional transgressions. These distinctions have been validated in a wide range of cultures, including samples from North America, China, Central and South America, Europe, and the Middle-East (see review by Smetana, 2013). For instance, in interviews with 4- and 6-year-old Chinese children from lower socioeconomic status families in Hong Kong, Yau and Smetana (2003) found that all children viewed prototypical moral transgressions as more serious, more wrong across contexts, and more wrong independent of authority than conventional events, based on justifications regarding the harmful or unfair consequences of the events for others. They also distinguished personal domain events from both moral and conventional ones. Children in Cartagena, Colombia, as well, viewed moral transgressions about harm as distinct from conventions and issues about personal choice (Ardila-Rey & Killen, 2001). Thus, these studies reveal that these distinctions are broadly applicable across diverse cultures.

Young children also treat harm to others (such as a child pushing another child off a swing) as more wrong than harm to the self (such as when a child purposely jumps off a swing), even when violations have similar consequences (Tisak, 1993). Indeed, children treat moral transgressions as more wrong even when prudential violations have

more severe consequences than moral ones or when the consequences of moral violations are depicted as minor (Tisak, 1993). Thus, these judgments are not based on severity but rather on whether acts cause harm to others as opposed to the self.

Most of the research on moral judgments in early childhood has been cross-sectional, but recently, Smetana and her colleagues (Smetana, Rote, et al., 2012) examined longitudinal changes over 1 year in 2.5- to 4-year-olds' judgments regarding prototypical moral transgressions. At the first of the three assessments, children (divided into two age groups for this analysis) distinguished moral and conventional rules and transgressions on nearly all of the criteria studied (although younger children did not make this distinction in terms of deserved punishment). Furthermore, age-related changes in the acquisition of moral concepts based on these criteria as well as individual differences in the rate of growth were found. Thus, these findings suggest that robust domain distinctions are evident early in development and that different experiential factors influence how moral concepts are conceptualized and consolidated in early childhood.

Furthermore, experimental studies have demonstrated that children make moral judgments and distinguish moral from conventional rules on the basis of their features rather than their knowledge of the specific content of acts. When young children (3-year-olds) were asked to evaluate events that were unspecified and labeled using nonsense words, they made moral judgments when acts were depicted as wrong across contexts and having consequences for others' welfare. In contrast, they made conventional judgments when acts were described as contextually relative and prohibited by adults although they did not cause harm or violate rights (Smetana, 1985). These findings are consistent with studies described earlier showing that young children are concerned about harm and unfairness.

Preschool children's moral understanding also differs according to whether they were the victims or perpetrator of transgressions. Wainryb, Brehl, and Matwyn (2005) obtained preschoolers' (as well as 5-, 7-, 11-, and 16-year-olds') narrative descriptions of moral conflict situations where they either hurt or were hurt by a peer. Their extensive analyses demonstrated that children's descriptions became more complex with age, but they also varied as a function of whether children narrated experiences as victims or perpetrators. When reporting being victimized, children primarily focused on the harm inflicted on them and on their own emotions. In contrast, when narrating experiences as perpetrators, and increasingly with

age, children offered more complex narratives that focused on their own and the victim's experiences and included a broader range of concerns and emotions.

In keeping with these findings, preschool victims of actual moral transgressions (as observed in their preschool) rated those transgressions as more serious and more deserving of punishment than did the same children, when they were violators. However, when children were in the role of transgressor, they viewed their behavior to be more justified than they did when they were victims (Smetana, Toth, et al., 1999). The factors that contribute to different attributions of these situations warrant further examination.

In some studies, children apply moral criteria at younger ages when the moral events reference physical harm than when these events pertain to psychological harm or unfairness (see Smetana et al., 2014, for a review), but more research is needed to understand why children apply moral criteria at earlier ages to acts involving physical than psychological harm or unfairness and why some transgressions are more complex for children to understand.

### Summary: Roots and Early Emergence of Morality

Over the past decade, there has been a substantial increase in interest in studying the early roots of morality in infancy and early childhood. This research has been motivated by a variety of different theoretical perspectives and concerns and has drawn on new methods developed for research with preverbal infants and young children. Studies of the fair allocation of resources, others' welfare and harm, and cooperation provide compelling evidence that children are attuned to moral concerns at very early ages. Thus far, however, little research has connected these very early predispositions to the development of moral concepts across different ages. This is a crucial next step for research and will be important for understanding trajectories of moral development across the lifespan.

At present, the early developmental story is intriguing but remains incomplete. More expansive criteria are needed for defining what "counts" as a moral behavior or response, especially in infancy, and particularly for the distinction between moral and prosocial responses. In addition, there has been little attention to issues of generalizability across different ethnic groups, cultures, and socioeconomic statuses. This may stem from the theoretical assumptions motivating these different lines of research, particularly the assumption that these reflect universal moral developmental achievements. These issues warrant further empirical attention.

Finally, the studies of early moral judgments reviewed in this section indicate that children make distinctively moral judgments regarding both hypothetical and actual prototypical transgressions when they are straightforward and involve simple connections between intentional acts and the negative outcomes produced. As we discuss in the following section, however, an understanding of others' mental states is needed to appreciate more complex situations, where the links among acts, intentions, and outcomes are less straightforward.

### **MORALITY AND KNOWLEDGE ABOUT MENTAL STATES**

Over the past 10 years, there has been a great deal of new research examining the role of mental state knowledge in young children's moral development. This research has increased our understanding of both the limitations and emerging competencies in young children's morality and the developmental processes that may underlie them. In this section, we describe studies on theory of mind, psychological knowledge, and intentionality awareness as they bear on morality.

The notion that children's understanding of others' mental states may be implicated in children's developing morality is not new. Piaget (1932) was among the first to recognize the importance of children's psychological understanding in the development of moral judgments. As noted earlier, he believed that young children have a limited understanding of intentionality but that with age, they begin to consider actors' intentions in their moral judgments. These claims were extensively tested and expanded in the 1970s and 1980s, but as interest in Piagetian stage theories waned, research on the role of psychological knowledge in moral judgment development languished. Although research on theory of mind has flourished over the past 25 years, research and theorizing about the intersections between theory of mind and moral development has been quite recent (Chandler & Lalonde, 1996; Wainryb & Brehl, 2006; Wellman & Miller, 2008).

Despite ongoing theoretical debates about the nature of and processes involved in theory of mind, there is a fair amount of convergence in descriptions of the developmental trajectory of children's mental state understanding (see Hughes & Devine, Chapter 14, this *Handbook*, this volume). Infants evidence goal-directed behavior during the first year of life, reflecting an early precursor of intentionality and of children's psychological understanding more generally (Wellman, 1990; Woodward, 2009).

Most research on children's developing psychological knowledge has focused on achievements during the preschool and early school years, especially the development of an understanding of false beliefs, although some researchers have shown that psychological understanding continues to develop well beyond these ages (Chandler & Lalonde, 1996). Mental state knowledge has been shown to develop in a fairly predictable sequence (Wellman & Liu, 2004), although some cultural differences have been found in the ordering of specific abilities (Fang, Wellman, Liu, Liu, & Kang, 2009). More generally, development is seen as reflecting a shift from a view of the mind as a copy of reality to a more active and constructivist view (Chandler & Lalonde, 1996; Wainryb & Brehl, 2006). Thus, children come to understand that their view of the world may differ from others' and that individuals actively interpret their experiences based on their beliefs and expectations.

There is less agreement about which theory of mind abilities are implicated in moral development and the nature of their interrelationships. Associations between mental state knowledge and children's moral understanding (and behavior) typically have been examined by studying children's responses to hypothetical, morally salient stories (sometimes but not always associated with theory of mind tasks). Some studies have also examined children's discourse or narratives for evidence of young children's use of mental state language. Increasingly, researchers have employed behavioral tasks or tasks that require minimal verbal ability (Vaish et al., 2010). Most of the research on intersections between theory of mind abilities and morality has focused on young children. This is changing, though, as we will demonstrate, with new measures allowing for investigations of mental state knowledge in middle childhood and adolescence.

In their research on references to mental states when discussing the roles of victims and perpetrators, Wainryb and her colleagues (2005) concluded that young children are unable to grasp the psychological aspects of their moral conflicts. References to mental states increased from the ages of 5 to 16 years (at which point half of their accounts include such references), and the large majority of older children's narratives focused on both their and others' beliefs, intentions, and emotions as they interpreted situations and tried to figure out what was happening.

### **False Beliefs, Diverse Beliefs, and Moral Judgments**

Because the capacity to understand false beliefs is often seen as a hallmark in the acquisition of theory of mind in

childhood, a number of studies have focused specifically on how acquiring this understanding results in advances in moral judgments. For instance, Takagishi, Kameshima, Schug, Koizumi, and Yamagishi (2010) found that preschoolers who passed a standard false belief task proposed more equitable solutions than those who did not. Because more than a third of the children who failed the false belief task also proposed fair offers, the researchers concluded that mental state understanding may enhance fairness in this context but may not be a necessary condition for it. Yet, an explanation for why false belief knowledge might spur greater fairness remains to be delineated.

In a study of 4-year-olds, Dunn, Cutting, and Demetriou (2000) also found associations between false belief understanding and children's understanding of moral transgressions. These researchers found that more advanced false belief understanding as assessed on standard theory of mind tasks was associated with greater use of moral justifications focusing on the welfare and feelings of others when considering hypothetical victims of moral transgressions. Thus, Dunn et al. (2000) viewed children's understanding of other minds (as well as their emotion understanding) as central to the development of moral understanding.

Flavell and colleagues (Flavell, Mumme, Green, & Flavell, 1992) viewed the standard assessments of false belief understanding as reflecting only one type of false belief and examined commonalities between "factual" false beliefs and differences of opinion regarding conventional or moral values and property ownership beliefs. Children's understanding of these different beliefs was highly correlated, leading these researchers to conclude that the ability to appreciate diverse beliefs is applied in similar ways to different content domains. Furthermore, consistent with other research (Wellman & Liu, 2004), Flavell et al. (1992) found that 4- and 5-year-olds but not 3-year-olds were able to attribute different beliefs (including those about morality) to others.

Yet, Wainryb and Ford (1998) have asserted that moral judgments may change in ways that go beyond what would be expected based simply on cognitive advances in theory of mind. Children's developing psychological understanding may constrain but not necessarily predict children's moral judgments. These researchers examined the role of 3-, 5-, and 7-year-olds' moral beliefs and informational (factual) beliefs in making moral judgments. They found that 3-year-olds were unable to grasp that others held divergent beliefs of either type; in contrast, older children were able to correctly attribute different moral and informational beliefs to others. Further, with age, an understanding that

others may have different factual (but not moral) beliefs led to greater acceptance of unfair or harmful practices. Wainryb, Shaw, and Maianu (1998) found that tolerance increased with age, but acceptance of divergent moral and informational beliefs varied in complex ways depending on whether individuals were depicted as holding different beliefs, publicly expressing them, or acting on them.

Killen and colleagues (Killen, Mulvey, Richardson, Jampol, & Woodward, 2011) proposed that when false beliefs are embedded in morally relevant situations, different (and potentially more complex) considerations are implicated than when considering factual false beliefs. This notion was tested by directly comparing an understanding of false beliefs separate from moral judgments among children at 3.5, 5.5, and 7.5 years of age. A novel aspect of the study was the use of three separate measures: a prototypical moral judgment task, a factual false belief task, and a morally relevant false belief task. The findings revealed that morally relevant false beliefs were more challenging than standard false beliefs. Further, children who failed standard false belief tasks also incorrectly believed that the accidental transgressor's moral behavior was intentional, leading to judgments of greater harm and more deserved punishment.

Although all children evaluated the prototypic moral transgression as wrong, they did not fully understand accidental harm embedded in a false belief context until 7 years of age. Thus, successfully passing the morally salient false belief task accounted for some but not all of the age-related differences observed in children's moral understanding. Children's developing mental state understanding influenced their construal of the situation. In a follow-up study conducted with Chinese children, Fu, Xiao, Killen, and Lee (2014) replicated the U.S. findings and determined that second-order theory of mind was related to older children's moral judgments. These studies implicate the importance of intentionality in moral judgments, an issue we more fully explore in the following section.

### Understanding of Intentionality and Moral Judgments

Piaget's initial insights regarding children's understanding of intentions (versus outcomes) in their moral judgments generated a great deal of research. Contrary to Piaget's findings, research has consistently shown that children as young as 3 years of age can take intentions into account and distinguish intentional from accidental transgressions, as long as information about intentions is made explicit

and intentions are not confounded with outcomes (Helwig, Zelazo, & Wilson, 2001; Zelazo, Helwig, & Lau, 1996).

Researchers such as Zelazo et al. (1996) have argued that the ability to coordinate intentions, acts, and outcomes is constrained by more general cognitive changes in children's information-processing abilities or executive function and their ability to coordinate different rules—abilities that are thought to increase between the ages of 3 and 7 years. In a clever study design, Zelazo et al. (1996) examined children's moral evaluations in situations entailing normal causality (e.g., hitting causes pain) or unusual or noncanonical causality (e.g., hitting causes pleasure). They found that 3-year-olds judged the acceptability of acts and the amount of punishment deserved based on the objective aspect of the situations (e.g., on the basis of the outcome or harm caused), even in noncanonical situations. However, children's ability to integrate different kinds of information and use higher order rules in making moral judgments increased with age during the preschool years. Other research has shown that, as children grow older, they increasingly distinguish intentions from other mental states such as desires, although they do not fully understand this distinction until around 7 years of age (Schult, 2002).

Until middle childhood, children lack the ability to fully integrate the information necessary to make accurate judgments in more complex situations, for instance, those that include considerations of negligence. This was demonstrated in a novel study by Nobes and colleagues (Nobes, Panagiotaki, & Pawson, 2009). They investigated 3- to 8-year-olds' coordination of information about intentions, consequences, and acts performed as a result of negligence. Nearly all children considered ill-intentioned acts to be wrong and deserving of punishment even when due to negligence, but with age, they were better able to distinguish between well- and ill-intentioned acts. In addition, 3- to 6-year-olds often misattributed negligence to transgressors, even when they were described as careful and not intending to cause harm.

Studies also have shown that preschool children's judgments of intentionality vary as a function of whether acts lead to negative moral outcomes (that is, whether the foreseen consequences of the act are harmful, or caused an actor to feel happy or sad). In a paradigm developed with adult samples, Leslie, Knobe, and Cohen (2006) demonstrated that 4- and 5-year-olds (but not 3-year-olds) judged that a foreseen side effect was intentional when that side effect was morally negative (for example, making someone sad), even when that actor was described as not intending to cause those consequences or not caring

about them, but not when the side effect was positive (for example, making someone happy). Thus these researchers asserted that this “side-effect effect” is evident by 4 or 5 years of age. Furthermore, the asymmetrical nature of children's intentionality judgments appears robust, regardless of different ways of manipulating the explicitness of the foreknowledge (Pellizoni, Siegal, & Surian, 2009).

As these studies suggest, the vast majority of research examining intersections between morality and theory of mind have focused on children between the ages of 3 and 7 years. Yet, an understanding of mental state knowledge continues to develop beyond age 7 years. Recently, Jambon and Smetana (2014) extended this to examine 5- to 11-year-olds' ability to coordinate the psychological perspective of others in their moral evaluations of situations of “necessary harm,” or harm that is well intended and done to prevent additional serious harm. With age, children increasingly understood that causing harm to others may be morally justifiable in certain circumstances, based on justifications regarding the actor's positive motives and intentions. As children grew older, they demonstrated a greater tendency to coordinate competing concerns, particularly when considering psychological as compared to physical harm. Thus, along with others, Jambon and Smetana (2014) asserted that children's developing understanding of others' mental states allows for the emergence of novel, more complex patterns of moral thought but that this understanding does not in itself determine children's evaluations of particular moral situations.

The studies reviewed in this section converge to show that children's understanding of intentionality increases during middle childhood, especially when intentionality is embedded in complex moral situations involving multiple components.

### **Desires, Emotions, and Moral Judgments**

Studies of how children coordinate intentions or desires with their emotions have yielded new findings about their understanding of intentionality. Extending research on children's concepts about others' desires in the moral domain, Yuill, Perner, Pearson, Peerbhoy, and Ende (1996) examined children's attributions of emotions in moral situations that vary the actor's desires and whether or not the actor achieved the desired outcome. These researchers sought to integrate children's understanding of others' “wicked desires” and associated emotions with research on “happy victimizers” (Arsenio, 2014). This research has revealed that young children (but not older ones) believe

that victimizers will feel happy when they obtain material resources through aggressive means.

Yuill et al. (1996) found that 3-year-olds judge that actors with bad motives feel sad, even though they have achieved their desired outcome. However, by 5 years of age, children matched desires and outcome in bad-motive stories and judged that moral transgressors would feel happy when negative outcomes were realized, as research on happy victimizers would suggest. But older children (7-year-olds) shifted back to believing that actors feel sad (remorseful). Thus, as found in studies of false beliefs, young children appear to evaluate the transgressor's emotions on the basis of the objective value of the outcome, but with age, they become able to fully understand the implications of moral transgressions for moral emotions. Likewise, when examining children's emotion and behavior predictions in situations involving psychological harm, Helwig et al. (2001) found that 3-year-olds evaluated psychological harm in terms of the objective aspects of the situations (for example, outcomes). With age, 5- and 7-year-old children focused on intentions or were able to coordinate intentions and outcomes.

Lagattuta (2005) has conducted a number of studies to examine how emotion attributions bear on children's social and moral cognition. For example, Lagattuta noted that the fulfillment of desires in transgression situations may lead to positive emotions, whereas focusing on rules may lead to negative emotions, because one has failed to follow the rules. She demonstrated that in early childhood, children develop the ability to coordinate an understanding of links between emotions and desires (for example, getting what one wants feels good) with an understanding of moral obligations in prohibitive rule situations (Lagattuta, 2005). When there were no rules, 4- to 7-year-olds reported very positive emotions associated with fulfilling their desires, but they reported feeling less positive when fulfilling desires by breaking rules. In situations involving emotions and desires with rules, 4- and 5-year-olds attributed positive emotions to rule-breakers (much as Yuill et al., 1996, found), with increasingly positive or mixed emotion attributions with age to hypothetical actors who were depicted as using willpower to abstain from rule breaking. The most dramatic shift in making connections among desires, rules, and emotions—as well as in employing mental state language—occurred between 5 and 7 years of age, when children, like adults, attributed positive emotions to actors who exhibited willpower and desisted from transgressing, while attributing negative emotions to transgressors. This approach to the development

of moral judgment includes social cognition as well as emotion attributions.

### Direction of Effects Between Moral Judgments and Theory of Mind

Although the research reviewed thus far is almost entirely cross-sectional, it has been guided by the assumption that the development of children's mental state understanding leads to changes in children's moral understanding. However, there is also evidence for reverse causation; several researchers (Knobe, 2005; Leslie et al., 2006) have found that the presence or absence of negative moral outcomes influenced whether preschool children viewed acts as intentional. Smetana, Jambon, Conry-Murray, and Sturge-Apple (2012) explicitly examined connections between theory of mind as assessed using standard theory of mind tasks and moral judgments longitudinally over one year in a sample of 2.5- to 4-year-olds. Using cross-lagged path models, the researchers found that the direction of effects depended on the specific moral criterion judgment examined. Some of the moral criterion judgments led to greater theory of mind understanding, but, over time, children also came to view prototypical moral transgressions as less deserving of punishment and as less wrong (although still unacceptable) when they conflicted with school rules. This is consistent with past research suggesting that children come to make more forgiving moral judgments with age (Jambon & Smetana, 2014; Killen et al., 2011). Thus, young children's psychological understanding and moral judgments appear to be transactional, bidirectional processes. Moral experiences may provide children with opportunities that facilitate their understanding of others' minds, which in turn serves to inform and guide the development of moral thinking.

### Neuroscience of Intentionality and Morality

With the expansion of neuroscience research more generally, there has been an outpouring of interest in the biological basis for thinking about intentionality and morality. Much of the innovation in this research has come from the development of methods, such as the use of functional magnetic resonance imaging (fMRI), which has only recently been used with children and adolescents rather than solely with adults. The findings of studies on mental state understanding and morality have been examined in recent research combining assessments of children's judgments of intentional versus accidental harm,

depicted as involving damage to people or objects, using neurophysiological measures (Decety & Howard, 2014; Decety, Michalska, & Kinsler, 2012; Young & Saxe, 2011). In an ambitious project that included participants from preschool-aged children to adults, Decety and colleagues (2012) yoked responses to morally laden scenarios with assessments of neurophysiological reactions, obtained using eye tracking and fMRI data. Decety et al.'s (2012) youngest participants were able to correctly identify whether an action was intentional or not and rated harm to persons as more wrong than harm to objects.

Ratings that intentional harm was more wrong than accidental harm to persons increased with age and also were associated in a curvilinear fashion with signal changes in the amygdala. Amygdala responses, which are associated with emotion processing, declined with age in childhood and then increased into adulthood. In contrast, among older participants, signals in the dorsolateral prefrontal cortex and medial prefrontal cortex increased. As these latter brain regions are associated with metacognitive representations, the findings reflect an increased integration between the prefrontal cortex and the amygdala (e.g., between emotion and cognition). Thus, evaluations of whether an act is morally salient or not depends on more than affective sensitivity; an understanding of others' mental states must be integrated with a representation of the consequences of actions.

### **Deception, Lying, and Theory of Mind**

The topic of lying is also an important area of investigation. Research has examined changes with age in viewing lying as a moral transgression and their associations with mental state knowledge. As Lee (2013) explains, to lie successfully, "individuals must represent and differentiate the mental states of themselves and the listener, and make appropriate statements to conceal the truth while instilling false beliefs into the mind of the listener" (pp. 91–92). Age trends found in young children's lying in experimental resistance-to-temptation situations (e.g., being told by an experimenter not to peek or play with a toy when the experimenter leaves the room) are consistent with developmental trends in theory of mind understanding. While the majority of 2- to 3-year-olds who violate an experimenter's instructions confess their transgressions, older children often lie (stating that they did not peek or play with the toy). Their lies have been interpreted as efforts

to deceive the experimenter (Lee, 2013). Furthermore, older preschoolers (4- to 5-year-olds) are more likely than 3-year-olds to confess if there was an eyewitness to their transgression (Fu, Evans, Xu, & Lee, 2012), and young children who lie have been shown to have better false belief understanding than those who confess (Evans, Xu, & Lee, 2011).

In addition, and further revealing the role of intentionality in lying, there are developmental changes between 2 and 7 years of age in how children respond to follow-up questions about their lies. Although 2- to 3-year-olds are not good at covering up their lies and make blatantly inconsistent statements, as they grow older, children grow less clumsy and inconsistent in explaining how they acquired their knowledge of the identity of a hidden toy. As Dunn (2014) has noted, having an understanding of others' mental states can be put to good as well as nefarious ends. For example, lying to avoid being caught touching a forbidden toy has a different moral status from lying to avoid offending someone or to protect another person from danger. Further progress in this line of investigation may be made by studying the intention to deceive in conjunction with the type of act.

### **Summary: Morality and Mental State Knowledge**

Research conducted over the past decade provides robust evidence that children's understandings of others' mental states, as examined in different ways and on various types of tasks, are associated with increasing sophistication in children's moral judgments. In particular, children's ability to consider mitigating circumstances and apply their understanding of others' emotions, intentions, and desires when making moral judgments increases with age, with major leaps in the coordination of different concerns occurring between the ages of 5 and 7 years. Additionally, new methods from social neuroscience have advanced our understanding of the biological bases of these interconnections.

In past research, studies were largely limited to the use of simple responses (e.g., ratings of naughtiness), as associated with early-developing theory of mind competence. Expanding the focus beyond early childhood to include more complex forms of moral and mental state understanding would be fruitful. More research determining whether the ability to coordinate concepts varies as a function of the type of moral acts depicted is also needed.

## MORAL JUDGMENTS AND MORAL REASONING

The comprehensive literature on children's moral judgments and reasoning reveals that judgments about the wrongness of physical harm and unfair distribution of resources appear in infancy and toddlerhood. These two moral issues are predominant in early childhood due to their salience and frequency (e.g., hitting and not sharing toys) as sources of disputes, as well as their concrete nature. A large body of evidence now indicates that knowledge of other moral issues typically thought to be too complex for children to understand emerges early as well, although in a rudimentary form. This includes an understanding of psychological harm (such as teasing others), concepts of rights (such as freedom of expression, property ownership, and self-determination), knowledge about unfair treatment of others (such as prejudice, discrimination, and stereotyping), and awareness of social inequalities (such as unfair distribution of resources based on group membership). Thus, children's knowledge reflects various moral categories, which are coordinated (or not) with other concepts such as psychological and societal group issues in the context of moral judgment and decision-making.

### Social-Cognitive Developmental Processes

In addition to the role of psychological knowledge (such as intentionality) in moral judgments, children and adolescents become increasingly aware of groups, group membership, and group processes, which bear on the development of morality in multiple ways. Group identity enables children to affiliate with a larger community beyond the family, which is essential for healthy development. At the same time, identification with groups creates ingroup preference that can lead to prejudice and outgroup dislike. In fact, morally relevant issues such as discrimination, exclusion, and prejudice require knowledge about groups, increasing the social-cognitive complexity of these moral judgments. Along with these multifaceted issues are judgments about rights, which require knowledge about the equal treatment of others and basic human needs (e.g., the right to express views freely or the right to self-determination). Further, other social cognitive skills such as processing capacities, attributions of emotions, and understanding of intentional states continue to develop and

bear on moral judgments. We discuss research on these topics in this section.

### Straightforward and Complex Social Interactions

Even though judgments about the wrongness of intentionally inflicting physical harm on an undeserving person emerge very early in development, situations entailing harm can be straightforward or complex, regardless of age. Whereas most adults are likely to view prototypic acts of harm, such as the murder of an innocent child, to be wrong, other harmful acts involving provocation, retaliation, and retribution, as well as self-defense, deterrence, and security, may include different (e.g., psychological, societal, and nonsocial) considerations. Thus, the meaning and interpretation of harmful acts must be examined to understand how individuals evaluate and coordinate different types of concerns.

Similarly, for young children, judgments and decisions about how to distribute a few toys between two friends may be relatively straightforward, but concepts of the fair distribution of resources become complex very quickly. Considerations such as the nature of the resource (how necessary it is), the legitimacy of ownership claims, modes of distribution, and relationships among the recipients all bear on resource allocation decisions. In addition, judgments become more complex when different groups or communities have to consider competing claims, goals, and needs for how to distribute fundamental resources. Thus, although there appears to be a developmental trajectory in the types of considerations that individuals weigh when making moral decisions, the developmental picture is also complicated by the fact that there are variations in whether contexts are straightforward or multifaceted and contain different components.

As an empirical example of the distinctions between straightforward and complex events, Turiel (2008) conducted a study in which children's judgments about actual transgressions (on the playground, in the classroom) were compared with their judgments about hypothetical transgressions. The findings revealed that moral judgments were applied to both the actual and hypothetical contexts, but there were also differences between them. Moral transgressions in hypothetical contexts were judged as less permissible and more rule-contingent than in actual situations. Contextual information was brought to bear on judgments in actual situations requiring children to

weigh more diverse sources of information when making their judgments. For instance, knowledge of children's histories of interactions contributed to attributions of blame (e.g., transgressors were judged differently when participants reported that they had been taunted by the presumed victim for several weeks).

In the following sections, we review research on judgments about harm to others, the fair distribution of resources, the unfair and prejudicial treatment of others, and conceptions of rights.

### **Judgments About Harm to Others**

As discussed earlier, research has shown that by early childhood, children judge straightforward acts of harm to be wrong due to the physical or psychological pain such acts inflict on other people. Beyond this, children are able to grasp such factors as the underlying intentions and the deservedness of the recipient. As we have seen earlier, they are also able to apply moral criteria (such as generalizability) to moral acts. In more complex contexts, other considerations are taken into account, such as whether the act was provoked and in retaliation for a previous act. For example, Smetana, Campione-Barr, and Yell (2003) found that U.S. middle-income 6- and 8.5-year-olds judged hypothetical, prototypical (e.g., unprovoked) moral transgressions to be more wrong and more deserving of punishment than provoked transgressions, and more wrong when retaliation involved hitting rather than teasing. However, children's moral condemnation of provocation increased with age. Thus, "in-kind" retaliation was more acceptable than retaliation that was greater in magnitude than the original offense.

Research in Colombia, South America, has examined moral judgments of harm among war-affected children, who had been exposed to high levels of violence, poverty, lawlessness, and displacement. Posada and Wainryb (2008) interviewed 7- to 15-year-old Colombian children living in a poor slum near Bogotá regarding prototypical instances of stealing and physical harm, as well as the same acts in the context of survival and revenge. All children judged it wrong to steal or hurt someone, even when it would help for survival, based on reasons pertaining to justice and others' welfare. However, a sizable proportion endorsed stealing and hurting in the condition of revenge and expected that others would do the same. Whereas younger children expected that the protagonist would feel guilt as well as shame, older children expected a mixture of guilt, shame, and happiness at revenge. Importantly, this study

demonstrates that concerns with others' welfare generalize to more extreme situations, but it also reveals some of the contextual factors that may change the application of moral concepts to different situations involving threats to the self.

To examine the role of socioeconomic status and exposure to violence on concepts of harm, Ardila-Rey, Killen, and Brenick (2009) conducted a study of both low- and middle-income children in Colombia. They found significant differences in 6- to 12-year-olds' moral judgments based on levels of exposure to violence and living conditions. All children viewed acts of harm (hitting) and unfair distribution of toys (not sharing) as wrong using moral reasons (e.g., concerns for others' welfare). However, displaced children from Bogotá shanty towns, who had suffered extreme exposure to violence and who lived in very poor conditions, judged it more legitimate to hit in reaction to provocation or retaliation than did nondisplaced children from Cartagena, who had experienced minimal exposure to violence. Surprisingly and somewhat hopefully, however, all children viewed postconflict reconciliation between the transgressor and recipient as feasible and worthwhile. Astor (1994) found somewhat similar results studying a sample of U.S. children in Chicago who experienced family and peer violence. Children justified their moral judgments using moral reasoning when evaluating straightforward issues, but they used less moral reasoning when considering provocation and retribution.

Posada and Wainryb's (2009) study, described previously, as well as a recent study by Gasser, Malti, and Gutzwiller-Helfenfinger (2012), also demonstrate that emotion attributions are important in the application of moral judgments regarding harm. Further, there are individual differences due to aggressive profiles. Gasser et al. (2012) studied 7- and 9-year-old Swiss children's moral understanding of retaliation as compared to unprovoked aggression and found that aggressive children judged retaliation as less serious and referred less often to the harmful and emotional consequences of retaliation than did nonaggressive children.

Another line of research has focused on "happy victimizers" and age-related changes in the reading of emotional cues in the context of aggression and inflicting harm on another. Nunner-Winkler and Sodian (1988) analyzed 4-, 6-, and 8-year-olds victimizers and victims' emotional attributions after an incident in which the victimizer gained access to a material resource through aggressive means (e.g., pushing someone off the swing to get a turn). They found that the majority of 4-year-olds expected the victimizer to feel happy, in contrast to 8-year-olds, who

predicted that the victimizer would feel guilty or bad. Arsenio (2014) has argued that the shift from happy attributions to a mixture of emotions (happy and sad) reflects a conflict that is increasingly resolved with age during middle childhood.

As we described earlier in terms of Yuill et al.'s (1996) research on theory of mind, children must coordinate the victim's and victimizer's responses with their judgments about the wrongfulness of inflicting harm on others. In addition, this situation creates a conflict between children's judgments and their affective responses when gaining a desired resource (because it feels good to get what one wants). This is particularly so for children exposed to violence or who have been diagnosed with behavior disorders (Arsenio, 2014). However, there is a need for more research on how specific social experiences (such as experiencing violence) influence developmental changes in happy victimizer responses and moral judgments more generally.

Sampling low-income ethnic minority adolescents, Arsenio and his colleagues (Arsenio, Adams, & Gold, 2009) demonstrated that reactive aggression reflects social-cognitive deficits, such as failing to read social cues and over-attributing hostile intentions. This is in contrast to proactive aggression, which reflects intentions to victimize and harass others. This distinction is important because the researchers showed that lower moral concerns (but higher verbal abilities) were associated with proactive but not reactive aggression. Further, this line of research reveals connections between children's moral emotion attributions and aggressive behaviors and highlights the need for specificity (e.g., distinguishing among types of aggression) in making connections between moral judgments and behavior.

In addition to including emotion attributions, recent research has also examined whether concepts of harm are considered when children evaluate destruction of the environment. Severson and Kahn (2010) studied 7- and 10-year-old children of U.S. farm workers regarding their conceptions of harm to nature in the form of pesticide exposure. They found that children evaluated exposure to pesticides as wrong using moral criteria, providing an example of how concepts of harm can be applied to broader societal (environmental) issues at a young age.

### Concepts of the Fair Distribution of Resources

One of the most robust developmental findings regarding conceptions of fair resource allocation has been the age-related shift from a focus on strict equality, which

involves relatively straightforward decision-making, to the consideration of merit, need, others' welfare, and other factors (Damon, 1977). As Rawls (1971) theorized, defining justice in terms of fairness implies that the method of allocation is only the means, not the end, to achieving fairness. Thus, researchers have sought to measure when in development children rely on equality to ensure fairness or take other considerations such as merit and need into account. Earlier we described studies that have shown that young children tend to distribute resources equally and that focusing on merit is only minimally understood. By middle childhood, however, children take merit as well as many more factors into account.

In one of the first comprehensive studies to examine children's judgments regarding various claims, Sigelman and Waitzman (1991) analyzed 5-, 9-, and 13-year-olds' evaluations of rules of equity, equality, and need in three contexts (work situations with rewards, voting situations with equality, and charity situations with principles of need). Younger children preferred equality in all three conditions, but with age, children considered both equity and need. Further, children reasoned about fairness to support their decisions. The authors cautioned that the findings did not imply that younger children could not consider merit but that their preference was to focus on equality. Documenting the generalizability of understanding merit, Liénard, Chevallier, Mascaro, Kiura, and Baumard (2013) found that 5-year-olds from a tribal society (the Turkana) in Kenya demonstrated a clear understanding of merit and took individuals' contributions into account when distributing a collectively produced resource. Another way to measure children's understanding of fairness is to document their protests in response to an inequitable allocation. Recent studies have found that 6- to 8-year-olds will discard additional resources provided in a distribution task (that would require inequitable allocation), even at a cost to their own benefit (Blake & McAuliffe, 2011; Shaw & Olson, 2012). Moreover, a recent study has revealed that 3.5- to 6-year-old children use fairness, equality, and others' welfare when evaluating necessary resources as compared to luxuries, suggesting that children take the type of resource to be distributed into account (Rizzo, Elenbaas, Cooley, & Killen, 2014).

Although there are normative developmental trends towards considering merit over strict equality, contextual factors also influence children's allocations. The recent findings also reveal that children display previously undocumented social cognitive sophistication regarding the fair distribution of resources.

Moreover, with age, children consider other social dimensions pertaining to resource allocation decisions, such as the history of the relationships, status, and reputation (Elenbaas, Rizzo, Cooley, & Killen, 2014; Paulus & Moore, 2014). For example, friendship status is related to equal allocation decisions (Olson & Spelke, 2008), along with self-presentational biases, such as whether one's resource decision is known to other members of a group or not (Shaw et al., 2013). Moore (2009) found that children made more equitable decisions with a friend than with a nonfriend peer (see also Paulus & Moore, 2013). They were even less likely to distribute equitably when the peer was a stranger, but they responded in a more prosocial manner with a stranger when the cost was not high. Studying 10- to 19-year-olds' allocation decisions, behavioral economists Almås, Cappelen, Sørensen, and Tungodden (2010) found that, with age, children became focused on merit rather than strict equality when merit was defined as individual achievement. Older children considered merit in some contexts and strict equality in others, indicating that older children used both forms of allocation depending on the specific situation.

Dividing resources is a frequent source of conflict in childhood and beyond, and understanding children's conceptualizations can be useful for effective conflict mediation. Research has shown that moral judgments about resource allocation involve not just the capacity to understand equal allocation or allocation based on merit but also other factors. Research has been conducted from many different theoretical perspectives, and integrating the age-related findings from these various views will provide a more comprehensive understanding of the foundations of distributive justice.

### **Judgments About the Unfair and Prejudicial Treatment of Others**

Research on children's prejudicial attitudes and stereotyping has a long history in developmental science, and over the past two decades, a robust area of research has emerged on children's and adolescents' understanding of unfair and prejudicial treatment of others (Brown & Bigler, 2004). This research examines when children view it as morally wrong or unfair to treat someone differently because of their group membership (e.g., gender, race, ethnicity, culture, and nationality). These judgments are complex because they require the recognition that individuals belong to different groups and that they may be deliberately treated differently because of their group

membership. Research has drawn on theories regarding developmental intergroup attitudes and social identity theory to incorporate the role of group norms for investigating the emergence of prejudice and its association with moral reasoning. Here, we report on how children apply their moral judgments to contexts in which stereotypes and group identity play a role; later, we will discuss the role of peers and intergroup contact.

### ***Moral Judgments in the Context of Stereotypic Expectations***

Even though gender stereotypes regarding boys' and girls' activities are pervasive in early childhood (Ruble, Martin, & Berenbaum, 2006), young children sometimes view social exclusion based on stereotypic expectations (for example, about gender) as wrong and unfair. U.S. 3-, 4-, and 5-year-old children evaluated as unfair a girls' doll-playing group's exclusion of a boy from playing (or a boys' truck-playing group's exclusion of a girl) using moral reasons (Killen, Pisacane, Lee-Kim, & Ardila-Rey, 2001). When asked whom to include (a more complex decision), children were more likely to use conventional reasoning about group identity as well as stereotypic associations with activities. With age, children used both moral and nonmoral social forms of reasoning for a complex decision such as whom to include.

Generally, as children grow older, they take more considerations, such as talent, merit, and previous experience, into account, and these are sometimes given priority when making inclusion decisions involving gender or race (Killen & Stangor, 2001). Furthermore, social-conventional and autonomy reasons for why it is legitimate to exclude others increase from 6 to 12 years of age. In adolescence, moral reasoning both becomes more advanced (e.g., focusing on the wrongfulness of discrimination) and better coordinated with other concerns (Crystal, Killen, & Ruck, 2008). This approach to studying the development of children's evaluations of social exclusion has been applied to gender, race, ethnicity, nationality, and religion, as well as sexual identity (Horn, 2008).

An important new area of research focuses on adolescents' social reasoning about sexual minority youth (Horn, 2008; Poteat, 2007). Research has revealed that sexual prejudice (toward peers who identify as lesbian, gay, bisexual, or transgender [LGBT]) is multifaceted and involves moral, conventional, and personal reasoning, as well as stereotypic expectations. For example, adolescents use more conventional and less moral reasoning to exclude homosexual peers who are depicted as

gender-nonconforming than gender-conforming in appearance (e.g., cross-dressing) and activities (e.g., ballet for boys and football for girls; Horn, 2008). In addition, while half of the youth sampled by Horn (as reported in Horn, 2008) stated that they believed homosexuality was wrong, only 11% condoned exclusion as legitimate, using moral reasons such as unfair treatment. This indicated that their judgments about personal sexual identity differed from judgments of social exclusion based on identity. Further research could determine how adolescents' conceptions of sexual orientations as essential or innate rather than personally chosen bear on the decisions to accept or reject social exclusion and peer harassment of LGBT youth.

### *Moral Judgments in the Context of Group Identity and Group Norms*

With age, group identity factors such as ingroup preference, outgroup bias, and status enter into judgments about exclusion based on group identity and group norms (Abrams, Palmer, Rutland, Cameron, & Van de Vyver, 2013). For example, with age, U.S. ethnic majority children (9 to 15 years old) were more likely than ethnic minority children to view interracial exclusion as legitimate (for conventional reasons) when non-race factors were mentioned (such as parental or peer pressure); in contrast, ethnic minority children were more likely to use moral reasons to reject such exclusion (Crystal et al., 2008; Killen, Henning, Kelly, Crystal, & Ruck, 2007).

Studies conducted in Switzerland, the United Kingdom, and Korea have shown similar findings according to high- and low-status nationality groups. Minority youth are more likely to use moral reasoning to reject intergroup exclusion, whereas majority youth rely on group identity and traditions to condone exclusion (for a review, see Hitti, Mulvey, & Killen, 2011). As an example, Serbian adolescents, who were evaluating a Swiss national peer's decision to exclude a Serbian peer from attending a sporting event (Malti, Killen, & Gasser, 2012), viewed exclusion in this context as more unfair than did Swiss nationals and were more likely to expect that the Swiss national peer would feel proud rather than sad about their decision. With age, children and adolescents take a number of contextual factors into account when evaluating group norms for their ingroup, especially when these norms reflect unequal or exclusionary behavior toward outgroup members (Hitti, Mulvey, Rutland, Abrams, & Killen, 2013; Rutland, Killen, & Abrams, 2010).

By middle childhood and adolescence, children define group identity by group norms rather than just by

group membership (gender, nationality, school affiliation). Thus, with age children recognize that the norms and values of the group are central to their identity (Rutland et al., 2010). Most of the research on group identity examines loyalty to the group without determining whether loyalty is based on norms related to fair treatment of others or to conventions and traditions, concepts that are differentiated at relatively young ages.

When investigating decisions to choose an outgroup member who supports equal allocation of resources over an ingroup member who does not, children 9 to 13 years of age gave priority to fairness over ingroup status (Killen, Rutland, Abrams, Mulvey, & Hitti, 2013). This finding challenges the view that ingroup bias is pervasive across contexts (including moral ones). Yet, prior research has rarely examined ingroup preference in the context of identification with a group that holds negative moral norms. As an example, 9-year-olds supported an ingroup member who voiced explicit concern about their own group's decision to keep more resources than to divide equally (Killen et al., 2013). While 9- to 13-year-olds were more willing to include an outgroup member based on gender who supported fairness norms, they were less willing to do so regarding group membership based on school affiliation, revealing variation by the form of group membership (Mulvey, Hitti, Rutland, Abrams, & Killen, 2014).

In these contexts, children and adolescents recognize that groups are more favorable to ingroup members who are loyal than disloyal, even in the context of fairness considerations. This recognition that groups are likely to exclude members who protest their norms contributes to age-related increases in being reluctant to choose an outgroup member over an ingroup member (Hitti et al., 2013). Thus, concerns about being excluded from a group for appearing disloyal provide a challenge to the application of morality in social contexts. The factors that foster ingroup and outgroup bias and the mechanisms that effectively enable individuals to recognize the unfairness of acting on biased expectations about others are not yet fully understood.

Research on national and cultural identity is a particularly central issue in Europe, with the recent influx of Muslim migrants, the disbanding of Yugoslavia, and long-standing regional conflicts based on religion. Moral judgments regarding exclusion in these cultural contexts have been examined. Verkuyten and his colleagues have conducted an extensive program of research on this topic. For example, Gieling, Thijs, and Verkuyten (2010) found that Dutch adolescents (ages 12 to 17 years old)

were more tolerant of acts committed by Muslim actors when the issue was viewed as personal (e.g., clothes) than when it was seen as moral and involving harm to others. With increasing age, adolescents became less tolerant of Muslim conventional practices, such as separate schools based on religion, which remains a controversial issue. On the one hand, this practice can be interpreted as reflecting an increased focus on the threat to Dutch norms with age; on the other hand, forms of segregation often contribute to inequality of access to resources.

Furthermore, adolescents who were high on multiculturalism, as assessed on a separate scale, were more tolerant of non-harm-related cultural practices than were those who scored low on this scale (Gieling et al., 2010). Issues of prejudice and bias in a moral context raise concerns about rights. In fact, with age, children and adolescents view the denial of individual rights as an issue of unfair treatment. Group migration has existed throughout human history, and yet, developmental scientists have only recently studied the tensions it raises and its moral implications. Further research on the types of cultural conflicts that emerge in societies absorbing large numbers of immigrants from different religious and ethnic traditions would enhance our understanding of conceptions of fairness and rights in contexts that create prejudice and discrimination.

### **Conceptions of Rights**

Until recently, traditional theories of moral development viewed conceptions of rights and civil liberties as emerging primarily during adolescence. Over the past two decades, however, Helwig et al. (2014) have taken a moral developmental viewpoint to study children's and adolescents' conceptions of rights. They have examined how American and Canadian children's and adolescents' conceptions of freedom of speech and religion are viewed as moral or "natural" rights independent of authority and laws and generalized across contexts. While even children as young as 6 years of age support civil liberties by appealing to moral reasons, beginning around 8 years of age children understand the broader societal, cultural, and democratic implications of rights. As an example, children view freedom of speech as important because it can serve as a vehicle for correcting injustices. By adolescence, youth view freedom of religion as a more complex issue, involving multiple considerations such as religion as a matter of personal choice, as a way of being part of a group, and a freedom that should be protected from a moral viewpoint. The novel aspect of

Helwig's findings is that children and adolescents did not evaluate civil liberties as defined by authority or existing laws, but rather by morality, or what is often referred to as "natural law."

In an early study, Helwig (1995) examined Canadian 7th grade (12-year-olds) and 11th grade (16-year-olds) as well as college students' reasoning about the straightforward application of rights (e.g., giving a public speech critical of governmental economic policies), and complex situations involving civil liberties and other social issues (such as a speech that advocates violence). Children and adolescents viewed the straightforward civil liberties as moral (in that a denial would be unfair) and were mixed in their evaluations of the conflicts. For example, younger children were more likely than older adolescents to view it as unacceptable to exercise civil liberties when these were ruled as wrong based on a set of hypothetical laws, indicating that older adolescents used moral criteria to view the denial as wrong more than did younger children. Importantly (and as we discuss later, in the context of civic engagement), Helwig's findings have been replicated in other cultural contexts, particularly in those countries, like China, with economic and political attitudes toward rights and civil liberties that are different from North American countries.

Ruck and his colleagues (Ruck, Abramovitch, & Keating, 1998) have demonstrated that children distinguish two types of rights, nurturance (referring to children's rights to care and protection) and self-determination rights (referring to autonomy and control over their lives), and that these emerge in childhood. Children's justifications for nurturance rights focus on social and familial roles with little reference to rights, while reasoning about self-determination rights focuses on personal freedom and autonomy. By adolescence, 13- and 15-year-olds are more likely than their parents to endorse requests for self-determination rights (e.g., keeping a diary private) and less likely than their parents to favor request for nurturance rights in the home (e.g., talking to a parent when being emotionally upset). Ruck's research has been extended to show that British adolescents endorse same-age asylum-seeking children's nurturance rights over self-determination rights (Ruck, Tenenbaum, & Sines, 2007), demonstrating that the distinctions between these different forms of rights are generalizable to other cultural contexts. The factors that contribute to adolescents' support of nurturance over self-determination rights require further research. This could shed light on the biases that exist when a

majority group (e.g., British adolescents) denies rights to a minority group (e.g., asylum-seeking peers).

### Neuroscience of Moral and Conventional Judgments

Only recently, and reflecting advances in methods, has it been feasible to extend neuroscience studies of moral judgments to childhood. As described earlier in the chapter, Decety and his colleagues (Decety & Howard, 2014) have investigated the neuroscience of intentional moral judgments in childhood through adulthood. To test distinctions between moral and conventional judgments in adolescents and young adults, Lahat, Helwig, and Zelazo (2013) recorded event-related potentials while participants read scenarios regarding moral violations, conventional violations, or neutral acts. When the acts were described as regulated by a rule, reaction times were faster across ages for moral than conventional violations, but when there was no rule, reaction time differences were found for moral but not conventional violations. Thus, this study identified some of the underlying neurocognitive mechanisms involved in processing and evaluating moral and conventional violations in adolescence.

In a series of experiments, Blair (described in Blair, 2010) has conducted neuroscience research using fMRI techniques to examine differences in brain activation in moral judgments in nonclinical and clinical samples (e.g., with neuropsychiatric patients). Blair (2010) reviewed extensive research, his own and others, with a nonpatient sample of adults, demonstrating that different neurocognitive systems are involved in moral reasoning. Both the amygdala (which is associated with processing emotional responses) and medial orbital frontal cortex (which is involved in reasoning) are activated when making moral decisions. Thus, consistent with Decety and his colleagues (Decety & Howard, 2014), Blair's research demonstrates that moral judgments entail an integrated neural response involving both emotion and cognition.

Furthermore, Blair and his colleagues (White, Leong, Smetana, Nucci, & Blair, 2013) have recently used fMRI techniques to demonstrate both similarities and differences in the brain regions activated when normal, healthy adults made judgments about moral (welfare and harm-based) and conventional transgressions. Blair et al. (2013) observed increased neural activation in the amygdala and ventromedial prefrontal cortex when adults rated harm-based transgressions as compared to conventional transgressions,

but there was also activation in several regions in the frontal cortex when adults processed both types of transgressions. These findings provide interesting new evidence regarding distinctions between morality and social convention, specifically that judgments about morality involve both emotion and cognition. Thus far, however, only Lahat et al. (2013) have pursued this line of inquiry with adolescents, and the developmental trajectory of judgments from childhood to adulthood, as assessed using neuroscience methods, remains to be studied. Early moral neuroscience studies relied on overly simplistic definitions of morality, due to the limitations of neuroimaging assessment methods. Given the fast pace of changes in this field, collaborations between neuroscientists and moral developmental researchers using the most accurate assessments of moral development are essential. Further, connecting brain activation studies that have provided novel insights into the underpinnings of cognitive and affective processes with research on children's moral judgments and behavior is fruitful.

### Summary: Moral Judgments and Moral Reasoning

During childhood and adolescence, moral judgments reflect a wide range of moral issues, including concern for other's welfare (harm), fair distribution of resources, equal treatment of others (exclusion, wrongness of prejudicial attitudes), social inequality, and concepts of rights. The literature demonstrates that as children develop, they begin to take more contextual factors into account. When making moral judgments and decisions, children consider a broader range of concerns, including judgments about the self (e.g., personal goals), social conventions, group identity, and group functioning. These decisions operate in actual situations, as shown in neuroscience studies as well as studies demonstrating associations between hypothetical and actual moral judgments. Furthermore, even when children understand and apply moral concepts, competing nonmoral considerations may be highly salient and important, making moral decisions potentially difficult. The contexts of development also influence whether moral principles are inhibited or facilitated.

Thus far we have reviewed research focused primarily on the cognitive, social, and emotional processes reflected in an understanding of morality in childhood and adolescence. However, moral development occurs in a context, and in the following section, we consider how morality is

facilitated in the family, and in subsequent sections, in the context of peer groups and societal groups, social institutions, and cultures.

### MORAL DEVELOPMENT IN THE CONTEXT OF THE FAMILY

One of the more enduring topics in research on moral development has been the role of the family—and in particular, the influence of parents—on children's developing morality. Parents are seen as central influences because they generally have the primary responsibility for raising children and have the most time and opportunity to influence them. Parents are also fundamental because of the powerful affective bonds they have with their children, which may make children particularly receptive to parental influence. Much of the interest in the role of parents stems from psychoanalytic and behavioral (social learning) theory approaches, which have traditionally emphasized the importance of early experiences in the family on children's moral socialization. According to social learning theory accounts, the internalization of parental values and expectations occurs through interactions with caregivers during early childhood. Thus, research has focused on how parenting practices and particular discipline techniques influence these processes (see Grusec, Chaparro, Johnston, & Sherman, 2014, for a review).

Nativist and comparative approaches are less concerned with these issues, given that morality is seen as innate and emerging out of social cognition and social interaction. Yet, recent research has begun to provide more complex portrayals of the role of family relationships in moral development. Social learning theory approaches have acknowledged the importance of children's acceptance, reflection, and reactions to parents' discipline or attempts to instill morality (Grusec et al., 2000; Kuczynski & Parkin, 2007). Research on moral judgment development has moved to examine how different modes of parent-child interactions (both unilateral and mutual) bear on the construction of notions of justice, fairness, and rights (Dunn, 2014; Smetana, 1997; Walker, Hennig, & Krettenauer, 2000). Family systems theories have focused attention on how different family relationships, such as sibling relationships, interact with parent-child relationships to influence moral development.

Socialization approaches typically have been concerned with the parenting styles and disciplinary practices that most effectively facilitate the internalization of moral

behavior, and particularly, children's compliance with parental directives and responsiveness to parents (but see Grusec & Goodnow, 1994, for a critique). This has been assessed primarily using laboratory tasks that are seen as paradigmatic for measuring successful internalization, including following parental commands not to touch attractive toys (resistance to temptation tasks), heeding parental requests to help with cleanup, or cheating tasks focused on game rules. These tasks emphasize obedience to authority, compliance with parental directives, and the development of self-regulatory (inhibitory) abilities, with little attention to the type of norm to be internalized. As Kochanska and her colleagues (Kochanska, Koenig, Barry, Kim, & Yoon, 2010) recently acknowledged, however, most of the experimental tasks are social-conventional, not moral in nature. This has implications for how conscience is defined and the validity of these assessments as measures of the moral components of conscience. Thus, more research employing tasks that go beyond compliance to assess morally relevant dimensions (harm and welfare) is warranted.

There have been significant advances in considering bidirectional processes in children's development. In some of the current research, this has been considered primarily in terms of how parents adapt their disciplinary practices in response to children's temperamental characteristics. Successful socialization is still conceptualized in terms of children's accommodation to and compliance with parents' expectations and values. While heeding parents' directives is often very important, this focus on accommodating to parents' wishes is limited because parents have other socialization goals beyond compliance, and their diverse goals need to be recognized and studied (Grusec et al., 2000). Furthermore, children do not simply accommodate to parents; children take an active role in making meaning, interpreting and responding to parents and thus may influence parents. Finally, such approaches assume that parents, as agents of society, transmit positive values; they do not explicitly address situations where parents seek to instill immoral, prejudicial, or antisocial goals. Children do not accept parents' values as given; as discussed in this section, they negotiate, contest, and sometimes resist expectations that they deem unfair or illegitimate. In the following sections, we identify and consider different types of family influences (including both parents and siblings) on moral development, as conceptualized and measured from different perspectives. Although the majority of studies focus on mothers, we highlight studies that have also included fathers in their samples.

### Attachment Relationships and a Mutually Responsive Orientation

The quality of children's attachment relationships to parents, formed during the first year of life, is widely considered to be important for moral development (Thompson, 2012), and this has been examined most directly by researchers studying the development of conscience in normative samples. In addition, insecure attachments to caregivers have been implicated, at least theoretically, in the development of conduct disorders and antisocial behavior. That is, insecure attachments are seen as resulting in fragile parent-child bonds and a lack of empathy toward others, predisposing children to trajectories of antisocial behavior (van IJzendoorn, 1997).

Attachment security has been empirically linked with young children's moral development. Denham (1994) found that toddlers who had secure attachment relationships with caregivers had prosocial and sympathetic responses to mothers' simulated displays of anger and sadness. In keeping with the attachment theory notion that attachment security leads to emotionally open and coherent discourse, Laible and Thompson (2000) found that mothers employed a greater frequency of moral evaluations (that behaviors were "good" or "naughty") when children were more securely attached. Furthermore, when children had secure attachment relationships or when dyads shared positive affect, mothers referred to feelings in their conversations about the child's past transgressions. The outcome was that children had the greatest moral internalization, measured in terms of behavioral compliance (Laible & Thompson, 2000).

The role of attachment security (measured retrospectively and across multiple interpersonal relationships) also has been studied in adults' construction of moral identity. Walker and Frimer (2007) found that adult moral exemplars (recipients of Canadian awards for exceptional bravery or caring) reported more secure childhood attachments than did a matched group of adults and that exemplars of caring reported more secure relationships than did exemplars of bravery.

Going beyond attachment, there is agreement across many different approaches that parental warmth and responsiveness facilitate moral development. In discussing moral internalization, Hoffman (1979) noted almost 25 years ago that parental "affection is important because it may make the child more receptive to discipline, more likely to emulate the parent, and emotionally secure enough to be open to the needs of others" (p. 958). Parpal and

Maccoby (1985), and more recently, Kochanska and her colleagues have articulated similar notions. For instance, Kochanska, Forman, Aksan, and Dunbar (2005) have highlighted the importance of a mutually responsive orientation for the internalization of morality. Mutually responsive orientations have their foundations in secure attachment relationships and involve parent-child dyadic relationships that are positive, trusting, cooperative, and reciprocal.

Researchers from the Kohlbergian tradition also have found that warm, supportive interactions facilitate moral judgment development. Whereas research has demonstrated that cognitively challenging and critiquing interactions between peers facilitate the development of more mature moral judgments (Berkowitz & Gibbs, 1983; Walker et al., 2000), similar types of interactions, when employed by mothers and fathers, do not. In fact, they have been found to hinder moral reasoning development, perhaps because adolescents perceive them to be hostile, interfering, or overly critical. Instead, Walker and Taylor (1991) found that mild cognitive challenge in the context of a warm affective climate that involved support and encouragement facilitated adolescents' moral maturity, particularly when discussing real-life dilemmas. Thus, research from diverse perspectives has converged in demonstrating the importance of secure attachments and warm, responsive interactions for facilitating moral development.

### Parenting Styles and Discipline Strategies

Parenting styles and disciplinary practices have been examined as central precursors of moral internalization in studies of young children, perhaps most extensively in Kochanska and her colleagues' programmatic research (reviewed in Kochanska & Aksan, 2004). These researchers found that individual differences in children's biologically based temperament interacted with mothers' socialization in facilitating the development of conscience. The findings reveal that gentle maternal discipline that deemphasized power assertion and stressed inductive discipline as a way of facilitating anxious arousal facilitated conscience development, but only for relatively fearful children. The claim is that an optimal level of anxiety is necessary to help children process parental messages, thereby promoting successful internalization. For fearful children, this is accomplished by gentle parenting, whereas for fearless children, a mutually responsive orientation with their mothers provides the pathway to moral internalization. Although these findings have been very robust in studies with mothers, Kochanska, Aksan, and Joy (2007) did not

replicate the findings for child fearfulness in two different samples of fathers. Thus, more research on fathers' influence on conscience development is clearly needed, as well as the interactive effect of mothers' versus fathers' styles of parenting on moral development.

Furthermore, the interactions between parenting and temperament have not been consistently replicated in other research employing different methods and measures more directly focused on the harmful consequences of acts for others. Dunn, Brown, and Maguire (1995) examined various longitudinal influences on 5- and 6-year-olds' moral responses to moral stories. When children were 33 months old, the researchers examined mothers' observed use of control, mothers' other-oriented responses to managing sibling conflicts, and mother-reported positive sibling interactions. When children reached 40 months of age, the researchers examined children's emotion understanding. At 72 months of age (6 years), shy children demonstrated less internalized moral orientations (reflecting an empathic orientation reflecting feelings or concern for the victim) and fewer reparative story completion responses than other children; none of the variables influenced 5-year-olds' moral reasoning. Although the measures of moral internalization differed somewhat from Kochanska's program of research, these findings contrast with Kochanska's results on temperamental differences.

The definition of conscience has varied in different studies. In Kochanska's research, conscience in early childhood has been defined empirically in terms of two relatively stable factors consisting of moral emotions (children's distress following transgressions involving damage and harm to another) and conduct, or rule-following behavior in the absence of surveillance. However, reflecting the increasing importance of moral cognition in children's conscience development as children grow older, Laible, Eye, and Carlo (2008) found that conscience in middle adolescence consisted of two factors reflecting moral affect (including guilt, shame, sympathy, and empathic anger) and moral cognition (including moral values and prosocial moral reasoning). Furthermore, consistent with the results of Hoffman and Saltzstein's (1967) classic study of the role of parental discipline in moral development, Laible et al. (2008) found that power-assertive parenting was negatively associated with the affective dimension of conscience. Adolescents higher in this dimension engaged in more prosocial behavior, whereas adolescents higher in the cognitive aspect reported both more negative emotionality and parents' greater persistence in discipline. Both aspects of conscience were associated with more moral behavior,

including less encouragement of bullying and greater likelihood of helping a victim of bullying.

The roles of parenting styles and disciplinary strategies have also been examined in older children and adolescents. Patrick and Gibbs (2012) employed Hoffman and Saltzstein's (1967) classification of discipline techniques in their study of moral identity development. They found that parents' use of inductive discipline (but not love withdrawal and power assertion) was associated with a stronger moral identity, but only for middle adolescents and not for younger children. These findings are consistent with the notion that morally salient self-descriptions increase in frequency in mid- to late adolescence, as conceptions of self and moral identity become increasingly integrated (Hart & Fegley, 1995). However, little support for such age-related shifts have been found in recent research employing large samples of adolescents (Hardy, Walker, Olsen, Woodbury, & Hickman, 2013), highlighting the need for more research on the developmental dimensions of moral identity. In addition, Patrick and Gibbs (2012) found that adolescents who rated parents' use of induction as more fair and appropriate also reported stronger moral identities.

Researchers have emphasized the importance of authoritative parenting, where parents are both highly responsive but also relatively demanding in their expectation for mature behavior, and this efficacy has been confirmed in studies of moral development. In the United Kingdom, Leman (2005) found that early adolescents who rated their parents as authoritative rather than authoritarian were more likely to believe that hypothetical adults described in moral scenarios would justify expectations regarding moral misbehavior with references to reciprocity and equality. Pratt, Hunsberger, Pancer, and Alisat (2003) likewise found that more authoritative parenting was associated over a 2-year period with greater value congruence (for both moral and nonmoral values) between late adolescents and their parents.

### **Family Discourse, Conflicts, and Responses to Transgressions**

Parents influence moral development in numerous ways that go beyond discipline encounters. In everyday conversations and discussions, caregivers articulate expectations for their children's behavior, reminisce about past (or future) moral behavior, or negotiate moral topics in the context of conflicts. Therefore, numerous studies have examined morality as it emerges in family discussions, discourse, and narratives, as well as in everyday conflicts.

### *Observations and Family Talk*

Dunn (2014) conducted studies of naturally occurring conversations in the family to examine how children, siblings, and parents discuss moral and other types of issues in the home. Although these studies have focused only on maternal responses, Dunn viewed the parent–child relationship as a context that encourages reciprocity. She has emphasized how family members negotiate conflicts related to sharing and fairness. In addition, family members discuss the role of emotions and mental states in children's reactions to rule violations in the home. Within the context of family social interactions, children's emotional reactions, discourse, and ability to anticipate the intentions of others are viewed as central to the acquisition of morality.

These studies revealed that, from the second year of life onwards, children talk with their parents and their siblings about what is allowed and what is not and, specifically, about matters pertaining to fairness, property rights, and conventional rules. Mothers increasingly refer to social rules and use more sophisticated justifications as their children move through the second and third years of life. As Dunn (2014) noted, young children attempt to alleviate others' distress, show concern for others, and draw mothers' attention to siblings' misbehavior well before they are able to clearly verbalize these concerns in interviews. Dunn's observations also make clear that a much broader set of emotional reactions than guilt, fear, and anxiety, which are stressed by Hoffman (2000) and others as central to moral internalization, are at play in family moral interactions. Children also express positive emotions—pleasure, excitement, amusement, and glee—in violating rules, conspiring with siblings to subvert parental rules, and teasing and having conflicts with siblings.

According to Dunn (2014), all of these aspects of family interaction provide important motivations for acquiring moral understanding and highlight children's active agency in these processes. Mothers' concerns with harm, welfare, and rights in their interactions also help to emphasize the salience of moral concerns for their children. For instance, observations of mothers' and peers' responses to 2- and 3-year-olds' transgressions in the home (Smetana, 1989) show that moral transgressions occur primarily when target children interact with peers, with mothers mostly providing third-party interventions in peer disputes. Mothers made statements regarding rights, requested that children take the other's perspective, redirected children's attention to the harm or injustice that was done, and commanded children

to stop their misbehavior. Thus, these findings suggest that parents may scaffold the moral understanding children construct from their moral interactions with peers.

Parents' (and victims') emotional reactions to young children's moral transgressions also provide important information about the nature of the event. For instance, Dahl and Campos (2013) found that mothers of 11-, 13-, 15-, and 17-month-olds reported more anger in response to moral than to other transgressions. Reasoning and explanations for moral transgressions have been found among mothers of older children as well. That is, mothers of 6- to 10-year-olds have been shown to employ explanations for moral transgressions, in contrast to verbal force (yelling and threats) for conventional transgressions (Chilamkurti & Milner, 1993).

As Dunn's (2014) research has demonstrated, sibling relationships are an important context for moral development, and increasingly so with age. When mothers intervened in 33- to 37-month-olds' sibling conflicts, they consistently endorsed sharing and prohibiting property damage (Piotrowski, 1997). Ross and her colleagues (Ross, 1996; Ross, Tesla, Canyon, & Lollis, 1990), however, reported that when mothers intervened in peer and sibling property disputes, they were inconsistent in supporting owners over possessors when ownership claims were in conflict; mothers were more concerned with restoring harmony. Thus, Ross (1996) concluded that children do not simply internalize their parents' disciplinary messages, but rather construct notions of rights from sibling and peer interactions, drawing from the parts of parental messages that seem fair.

Children's other-oriented responses, such as statements focusing on others' rights and welfare, emerge between the third and fourth year of life and occur more frequently during arguments with peers than with mothers or siblings (Dunn et al., 1995; Smetana, 1989). Adult intervention in moral conflicts regarding object disputes decreases from the preschool years to middle childhood. Those interventions also differ according to setting, as children become more actively involved in negotiating and resolving moral disputes regarding more complex issues such as social exclusion and rights. Such evidence challenges the view of young children as passive recipients of adult moral values. This is also clearly evident in research on parental differential treatment of siblings.

Parents typically treat their children differently because they have different personal characteristics, needs, or interests. Children often view parental differential treatment as fair and appropriate in meeting a sibling's needs (Kowal

& Kramer, 1997; McHale, Updegraff, Jackson-Newsom, Tucker, & Crouter, 2000), but it becomes problematic for children's adjustment and family relationships when it is seen as unfair or not legitimate. This occurs more among second-born than first-borns, particularly in mother–son and father–daughter relationships. It also increases in adolescence, perhaps because, as adolescents grow older, they became more reactive to the unfairness of parental differential treatment (McHale et al., 2000) or, as we have shown earlier, become better able to weigh and consider different types of concerns. Parental differential treatment is particularly deleterious when it pertains to warmth as compared to perceived parental involvement or expectations regarding household chores (McHale et al., 2000).

With age, children view parental assignment of gender-associated household chores to girls or boys (e.g., asking only the daughter to sew curtains or the son to change the oil in the car) as legitimate (for a review, see Sinno, Schuette, & Killen, 2014). Younger children (5- to 8-year-olds) viewed this form of differential division of chores as unfair, but older children (9- to 10-year-olds) viewed it as conventional and therefore legitimate, and more so for male- than for female-stereotyped activities. Regarding the larger context of parental roles in the family (working outside the home or staying at home to take care of children), early adolescents view second-shift arrangements (when one parent is both working and caretaking) as more unfair for fathers than for mothers. Adolescents use stereotypic reasoning, such as references to prior experience (mothers are more used to doing both) or stereotypic expectations about effort and work (fathers work harder, to explain why fathers as compared to mothers should not be responsible for doing double duty) (Sinno et al., 2014). An interesting next step for this research would be to examine how growing up in different family arrangements influences children's judgments about the fair division of caretaking, work, and chores in the home.

Recent research also has focused on the specific challenges that minority parents face in socializing their children and, more specifically, the complex burden ethnic minority parents in the United States bear regarding moral development. For instance, most African American parents stress the importance of egalitarianism, yet they also must prepare their children for potential discrimination and unfair treatment (Hughes et al., 2006). How minority parents balance these competing, morally salient goals is an important area of inquiry that is not typically conceptualized in terms of children's moral development but could make a significant contribution to the literature if considered in this light (see Killen & Cooley, 2014).

African American parents in the United States often socialize their adolescents to cope with discrimination and unequal treatment (Hughes et al., 2006), teaching them about racial bias in the broader society and providing them with strategies to cope with prejudice. Indeed, research has shown that when ethnic minority parents in the United States talk to their children about potential discrimination and unfair treatment, this form of discourse promotes resilience in the context of exclusion and victimization (Neblett, Terizan, & Harriott, 2010) and leads to more proactive coping and better mental health outcomes (Hughes et al., 2006). Furthermore, a longitudinal study with African American families demonstrated that hearing parents' egalitarian messages led to better psychological adjustment among adolescents (Neblett et al., 2008). These forms of parental socialization reflect issues of unfair treatment that children must face every day.

*Narratives and Discourse.* Narrative methods also have illuminated the emergence and development of moral understanding in parent–child contexts. These studies have shown that when mothers use a more elaborative style in their reminiscences about their preschool children's previous moral behavior and misdeeds, their children display more behavioral internalization (as measured on a resistance to temptation task) and higher levels of emotional understanding (Laible, 2004). Mother–child conversations also differ when they focus on helping versus harming. Recchia, Wainryb, Bourne, and Pasupathi (2014) found that when European American mothers had conversations with their 7-, 11-, and 16-year-olds about instances where they helped (as compared to hurt) a friend, they focused more on others' needs and encouraging children to see themselves as prosocial moral agents. In comparison, conversations about hurting a friend were more elaborated and complex, involving more challenges and conflicting viewpoints, which may facilitate moral development. Children focused both on others' needs and their own internal states, thus integrating their understanding of others' needs with their motivations and feelings about harming others. Mothers highlighted children's wrongdoing but also helped their children to reconcile their negative behavior with a sense of themselves as moral agents. With age, children became more active in the conversations; children offered more psychological insights and were less reliant on their mothers to scaffold their moral reasoning.

In their recent monograph, Miller, Fung, Lin, Chen, and Boldt (2012) suggested that the types of maternal strategies described by Recchia et al. (2013), particularly those that bolster children's self-esteem, are culturally specific and reflective of Western cultural values. Miller et al. (2012)

employed ethnographic, longitudinal home observations and analyses of everyday conversations to study moral socialization in European American families of 2.5- to 4-year-olds in the United States and in Chinese families in Taiwan. They found that conversations in the two contexts occurred at similar rates and showed similar age-related increases in frequency and child participation, but they also observed culturally specific differences in moral socialization. In Taiwan, conversations were more didactic; caregivers focused on elaborating, narrating, and correcting children's misdeeds and privileged the roles of the bystander and narrator. In the United States, conversations were more affirming of the children, and downplayed children's rule violations to emphasize children's strengths and preferences.

These analyses highlight the dynamic, constructive nature of moral meaning-making. Although contextual differences were observed, this does not mean that children necessarily view all of their parents' discipline methods in a positive light. Children reflect on parents' behavior, and as they grow older, their evaluations of whether parental behavior is fair, right, or legitimate have a substantial effect on their moral development and adjustment. As Recchia et al.'s (2013) analyses suggest children increasingly exert agency in their moral development. In a recent study, Helwig, To, Wang, Liu, and Yang (2014) compared 7- to 14-year-old rural and urban Chinese and Canadian children's evaluations of different disciplinary practices, particularly those involving psychological control and shaming in response to moral transgressions. They found that shaming and love withdrawal were more common in China than in Canada. But, regardless of setting, children preferred induction and, with age, became increasingly critical of shaming and love withdrawal. They viewed these disciplinary practices as having negative effects on self-worth and psychological well-being.

Research has also shown that cultural variations in whether children view parental discipline as fair and reasonable moderates its effects on children's adjustment. Lansford and her colleagues (Lansford et al., 2005) have studied mothers and children across a broad age range and in different cultures that vary widely in the normative status of physical discipline (spanking or slapping, grabbing or shaking, and beating) and in mothers' use of those practices. Regardless of the cultural context, frequent physical discipline had adverse effects on children's adjustment. Harsh forms of discipline have been shown to be associated with maladjustment in childhood. When children interpret physical punishment as administered out of love and concern, however, its negative effects are mitigated.

Although physical punishment is still deleterious, it is less so. Further research needs to determine how this form of discipline is justified by parents as well as how it is interpreted by children.

### Summary

The family provides the first set of sustained social relationships that children encounter and is a rich context for the development of morality, whether conceptualized as identity, moral emotions, behavior, or moral judgments. Studies demonstrate that from early ages onward, secure attachment relationships, authoritative parenting, and inductive discipline facilitate children's moral development, as do parent-child conversations, reminiscences about children's past and expected behavior, and conflict negotiations. These offer children opportunities to reflect on and interpret their experiences, consider and integrate an awareness of others' internal states with their concepts of right and wrong, and challenge others' (including parents') interpretations of moral events. The current research described here details how parenting varies in different contexts and depends on the nature of the transgression. As children grow older, they increasingly reflect on parental treatment (of them and in comparison to their siblings) and evaluate whether it is fair, legitimate, and appropriate. With age, new sources of social influence, such as the peer group, become important, as we consider next.

### MORAL DEVELOPMENT IN THE CONTEXT OF PEER AND INTERGROUP RELATIONSHIPS

Researchers have examined different types of peer interactions (from friendships to groups to crowds) and relationships of varying quality to determine how peer interactions bear on moral development (Rubin, Bukowski, & Parker, 2006). Peer interactions have the potential to facilitate moral development through opportunities to cooperate, negotiate, and compromise (Piaget, 1932). Positive peer interactions can lead to the conceptualization of others as equals and help children form concepts about the fair treatment of others.

Peer interactions are seen as differing from adult-child relationships, which Piaget (1932) originally characterized as unilateral, hierarchical, and authority oriented. Peer relationships may also be hierarchical, however, just as parent-child relationships can reflect mutuality and reciprocity. The hierarchical quality of peer groups has been studied in terms of bullying and victimization as well as

in terms of status, prejudice, and group identity, which are related to intergroup attitudes (identification with ingroups and outgroups). Group identity can play a positive role as a form of affiliation or a negative role as a factor in social exclusion and prejudice. We discuss each of these areas of research, highlighting key findings.

### **Peer Interactions Promoting Morality**

From early ages on, peer interactions play a positive role in enabling children to consider other points of view and in understanding why it is wrong to hit someone or deny toys and resources. Children's interpersonal conflicts provide a context in which children learn about the connections between acts and consequences (e.g., that hitting causes pain). Children's recollection of these experiences, as well as their own observations of other children being hit and crying in response—can enable the inference that hitting is wrong, particularly when the child identifies with the victim. In early childhood, object disputes—sharing toys and taking turns—are the most frequent source of interpersonal conflict, but this changes with age, as conflicts and negotiations over social interactions and relationships become more frequent.

Dunn (2014) proposed that friendships provide a context for the development and growth of moral sensibilities. The results of studies further suggest that the interpersonal bonds of friendships may facilitate children's thinking about the mitigating circumstances in which transgressions may occur (an issue we discussed earlier when considering links between morality and theory of mind). For example, one study found that although moral transgressions were viewed as wrong, preschool children were more forgiving of hypothetical moral transgressions and treated them as more permissible when they involved a friend rather than a nonfriend (Slomkowski & Killen, 1992).

Research by Dunn et al. (2000) has shown that young children who were observed to have high quality friendships (marked by low levels of conflict and high levels of shared imaginative play) were more likely to respond to hypothetical moral transgressions with justifications that focused on others' welfare, feelings, and interpersonal relationships. Furthermore, few associations between the quality of play and children's judgments of the permissibility of moral transgressions were found, pointing to the importance of going beyond simple quantitative measures (of permissibility, severity, or goodness) to consider qualitative differences in children's reasoning about events. Age-related changes demonstrate that young children's

ability to negotiate fairness begins in dyadic interactions and moves to triadic and group contexts. Children often have conversations and discuss issues of others' welfare, fairness, and rights. Further, as discussed earlier, young children negotiate resource allocation using moral reasons, often in the absence of adults.

Friendships typically have been defined as mutually reciprocal relationships in which both individuals identify the other as a friend (Bukowski, Motzoi, & Meyer, 2009). Research has revealed that such reciprocal relationships involve responsiveness, cooperation, and coordination. Much like high quality parenting, high quality friendships supply social support that provides the basis for the development of concepts such as fairness, empathy, and equality. For instance, McDonald and colleagues (McDonald, Malti, Killen, & Rubin, 2014) found that, when resolving conflicts about hypothetical social dilemmas, adolescent best-friend dyads with high-quality conflict resolution exchanges used more constructive discourse strategies and more moral reasoning than best friends who had poor conflict resolution exchanges. Research also has shown that adolescents' prosocial orientation toward peers is related to moral reasoning (Carlo, 2014). A noteworthy finding is that children who have friends are less at risk for peer victimization than those who do not, leading researchers to assert that friendship provides a buffer against the risk of bullying (Hodges, Boivin, Vitaro, & Bukowski, 1999). More systematic research focusing on the role of friendship and the processes involved in enhancing moral development is warranted.

As has been well documented, peer interactions during adolescence become more complex and more embedded in social groups and cliques, as we describe below. Through childhood and adolescence, peer interaction continues to play a unique role, expanding in multiple ways in terms of dyadic friendships, group affiliation, and group identity.

### **Hierarchies and Inequalities in Interpersonal Peer Relationships**

Peer relationships have the potential to be mutual and foster equalitarian principles, but many peer relationships also reflect unequal, unilateral relationships that undermine or create obstacles for moral development. Exchanges involving bullying and victimization are moral violations in that they cause harm to others and involve treating others unfairly and disrespectfully. Further, children who experience high levels of victimization are at risk for a host of

negative outcomes, including poor school and academic achievement (Graham, Bellmore, Nishina, & Juvonen, 2009; Juvonen & Graham, 2001).

Extensive research has focused on peer rejection and its consequences. Researchers have identified children who are neglected, rejected, popular, or “average” on the basis of peer nominations of friendships (Rubin et al., 2006). Rejected children, who identify other peers as friends but who do not receive reciprocated nominations, are often victimized by peers, and, in turn, react aggressively using bullying tactics. Thus, these relationships reflect negative moral intentions on the part of the victimizers and negative outcomes for the victims. Intention to harm others is a moral issue, and research that has focused on the moral dimensions of bullying includes studies of relational aggression (Crick & Grotpeter, 1995), the intersection of developmental psychopathology and moral judgments (Arsenio et al., 2009; Malti, Gasser, & Buchmann, 2009), and moral disengagement (Hymel, Rocke Henderson, & Bonanno, 2005).

Crick and colleagues (Murray-Close, Crick, & Galotti, 2006) were instrumental in identifying social cognitive factors as well as moral reasoning associated with relational aggression. Relational aggression was defined as the negative intention to harm another through psychological means, such as damaging the victim’s relationships and status through social exclusion. Children engaging in relational aggression often lack self-control and self-regulatory abilities, are less skilled at reading social cues, and interpret others as having hostile intentions in ambiguous encounters (Crick & Dodge, 1994). These deficits include an inability to coordinate victims’ and perpetrators’ intentions, as reflected in their expectations that victimizers will feel happy. Lacking these skills, children are at risk for bullying behavior toward others or being victims themselves. Thus, this research helps identify children at risk for committing moral transgressions such as harming others. Arsenio (2014) and others have also examined how information-processing deficits are related to moral judgments. These deficits, which reflect individual differences, contribute to becoming chronic bullies or victims, and to the negative consequences of interpersonal rejection.

Children also experience exclusion based on their cultural group membership, and this has been shown to be detrimental from a moral developmental viewpoint. Huynh and Fuligni (2010) found that Asian American and Latin American adolescents reported more adult and peer discrimination than did their European American peers, and

Latin American youth reported more adult discrimination than their Asian peers. Discrimination reflects unfair treatment based on group membership, and these types of experiences are related to various negative outcomes. For example, the frequency of discrimination predicts lower academic performance and self-esteem and more depressive symptoms, distress, and even somatic complaints. School composition, teachers, and classroom climates are central to children’s and adolescents’ experiences of safety, freedom from victimization, and social exclusion. Rejection and exclusion due to group membership factors differ qualitatively from rejection due to personality deficits, however.

Studies that have directly compared how early adolescents (11- to 15-year-olds) evaluate peer rejection based on personality traits (aggressive and shy) in contrast to group membership (gender, ethnicity, nationality) reveal that early adolescents use personal choice reasoning to explain why interpersonal peer rejection is justified, and use moral reasoning to explain why intergroup social exclusion is unfair (Malti et al., 2012; Park & Killen, 2010). An important direction for further research would be to examine the intersection of these variables. For example, studies could test whether children use moral reasoning to explain peer rejection of an aggressive ingroup peer or personal choice reasoning to explain rejection of a nonaggressive outgroup peer. Analyses of social and moral reasoning help to elucidate the developmental processes contributing to patterns of inclusion and exclusion as well as prejudice, as we discuss next.

### Interpersonal and Intergroup Aspects of Peer Relationships

In contrast to interpersonal rejection experiences, intergroup peer exclusion occurs when a member of a group excludes someone based solely on group membership, such as gender, race, ethnicity, culture, or sexuality (Killen, Mulvey, & Hitti, 2013). Intergroup approaches focus on the normative, societal expectations that foster group identity (and group affiliation) and often, at the same time, create ingroup bias and outgroup dislike. In turn, these attitudes have the potential to lead to prejudice, discrimination, and bias, both explicit and implicit (Abrams & Rutland, 2008; Killen et al., 2013; Nesdale, 2004).

Intergroup relationships are those in which ingroup and outgroup categories interact, and they contribute to both positive and negative aspects of moral development. On the one hand, forming a strong group identity provides

an affiliation that enhances self-esteem and bolsters confidence. On the other hand, ingroup identity often creates ingroup preference, which can result in outgroup dislike. Within the intergroup attitudes literature, there is debate about whether ingroup preference is necessarily linked to outgroup derogation (Nesdale, 2004). When outgroup derogation exists, however, the results are often in the form of negative and unfair treatment of others, including prejudice, discrimination, and exclusion.

Whereas the intervention goals in the case of interpersonal peer rejection are to train children who lack social skills to better read social cues, the aim of intergroup exclusion interventions are to train the majority group to be aware of both explicit and implicit biases in order to reduce prejudice and discrimination, which occur throughout development. Recent research applying this issue to moral reasoning has proposed that a central aim of intervention is to increase the understanding that prejudicial exclusion is a moral transgression because it reflects the unfair treatment of others. Children are both the perpetrators and recipients of negative intergroup attitudes, which create harm, injustice, and unequal treatment. Contrary to popular belief, children's prejudice is not a direct outcome of parental attitudes (Aboud & Amato, 2001). Instead, children form ingroup and outgroup categories early in life, which contribute to their evaluation of peer encounters including those that are morally relevant.

### **Intergroup Contact Facilitating Moral Judgments**

Relying on Allport's (1954) intergroup contact hypothesis, which identifies the conditions under which intergroup contact can reduce prejudice, developmental researchers have examined when contact with members of outgroups increases moral reasoning, empathy, perspective-taking, and prosocial behavior toward others (Tropp & Prenovost, 2008). Studies examining which conditions for contact are most effective have yielded conflicting findings. A meta-analysis of developmental studies on the connections between intergroup contact and reduction in prejudicial attitudes (Tropp & Prenovost, 2008) revealed that the most significant factor for prejudice reduction was cross-group friendships. This is important because friendships and peer relationships play such a central role in moral development. Thus, having a friend from an "outgroup" was related to a reduction in negative attitudes toward the group as a whole. Aboud and Spears Brown (2013) report that discrimination emerges as early as 4 years of age,

and thus interventions focused on cross-group friendships are particularly important early in development.

Recent findings support the expectation that intergroup contact increases more positive moral judgment and moral reasoning regarding intergroup social exclusion (Brenick & Killen, 2014; Crystal et al., 2008; Feddes, Noack, & Rutland, 2009). As an example, a longitudinal study conducted by Feddes et al. (2009) cross-group friendships experienced by German children predicted positive attitudes about Turkish children, as well as positive attitudes about peers and peer relationships. Thus, cross-group friendships provide an important form of social experience that reduces negative moral treatment of others. Turner, Voci, and Hewstone (2007) investigated self-disclosure (sharing intimate details with another person) in children's cross-ethnic friendships and found that it led to more positive attitudes toward outgroups, with increased levels of empathy and intergroup trust, two forms of moral responses by peers. When U.S. ethnic majority children and adolescents attend ethnically heterogeneous schools and report cross-group friendships, they use fewer stereotypes and more moral reasoning when discussing interracial relationships and social exclusion than majority youth attending ethnically homogeneous schools (Killen, Kelly, Richardson, Crystal, & Ruck, 2010).

In another study, Aboud, Mendelson, and Purdy (2003) studied 6- to 12-year-old White Canadian and Black Caribbean children's friendships and found that children with less biased attitudes had more cross-race companions and more positive perceptions of their friends. These studies identify aspects of peer interactions and social experience that enable children to recognize why prejudice is wrong and unfair.

### **Peer Groups, Prejudice, and Classroom Expectations**

The roles of teachers and classroom interactions in prejudice and bias have been investigated from many different viewpoints. Here we consider classroom variables that contribute to hierarchies and discrimination, as well as students' perceptions of unfair classroom or teacher practices that contribute to negative peer relationships. For instance, in investigating patterns of ethnic segregation among 8- to 11-year-old African American and European American children, Wilson and Rodkin (2011) found that when African American students were in the numeric minority, they were more likely to be friends only with same-ethnicity peers and disliked by ethnic majority peers.

However, this was not true when European American students were in the numeric minority in a classroom, revealing a status hierarchy that may contribute to prejudicial behavior.

In a series of studies by Verkuyten and colleagues, social exclusion among 10- to 12-year-old Dutch, Turkish-Dutch, Moroccan-Dutch and Surinamese-Dutch preadolescents was associated with school segregation (or desegregation) and multicultural education (Verkuyten & Thijs, 2002). Children experienced less exclusion if they believed they could tell teachers about unfair behavior toward them and that the teachers would take action. This demonstrates that children who could report on the unfairness of exclusion were less likely to be victimized. Dutch children also reported more awareness of ethnic exclusion when they came from classes that spent more time discussing multicultural issues, such as the need to be fair to others from different countries and recognize different cultures within the class and society.

Verkuyten's findings also indicate that youth are aware of the role of power imbalances between victims and perpetrators and that this awareness influences judgments regarding the wrongfulness of exclusion. When the perpetrator was from the majority-status group, exclusion reflected societal-level patterns and an asymmetrical power balance, in contrast to when the perpetrator was from the minority-status group (Verkuyten, Weesie & Eijberts, 2011). This supports the view that school climate is related to perceptions of safety and experiences of prejudicial attitudes. These studies reveal the challenges and obstacles for applying principles of impartiality and fairness to contexts in which stereotypic expectations are pervasive.

Møller and Tenenbaum (2011) examined 8- to 12-year-old majority (Danish) children's reasoning about peer and teacher exclusion stemming from increasingly overt discrimination against Muslims in Denmark. Danish majority children found it less acceptable for teachers to exclude children than for peers to exclude other peers. Children were sensitive to the roles of authority as well as of group status in such moral transgressions. They judged it less acceptable to exclude a less powerful group member, but they did not extend this judgment to peer encounters. The legitimacy of peer exclusion based on cultural membership raises concerns about the existence of underlying biases. Thus, teachers and school climates have significant impacts on children's moral development regarding issues of fair treatment of others based on group identity. Identifying measures of classroom climate that could

be used across studies would help promote comparison studies and enable a more systematic way of testing the effectiveness of different ways to promote fair treatment of others in classroom contexts.

### Summary

Research on the roles of peers and social groups has expanded greatly over the past decade. Research demonstrates that friendships and peer interactions can be important—indeed central—contexts for moral development, as they afford opportunities for cooperation, reflection, and reciprocity among equals. New studies examining the specific characteristics of friends and friendships at different ages and their direct contributions to moral development will provide a more complete picture of the role of peer relationships in moral development.

Peer relationships that are unequal can cause moral harm through bullying, coercion, and harassment. Further, intergroup relationships, which are reflected in peer groups defined by group identity, may have both positive and negative influences on moral development. Cross-group (e.g., cross-race) friendships can reduce prejudice and increase moral reasoning about the wrongfulness of group-based exclusion. Yet, group identity can also contribute to prejudice and discrimination when children and adolescents prefer the ingroup and dislike the outgroup. Developmental science research has not fully analyzed the role of teachers and the larger school environment on the factors and specific mechanisms that provide obstacles or catalysts to promoting fairness and justice. Curricula that foster cross-group friendships may also help to reduce inequalities and facilitate moral development. These issues need to be examined systematically.

### MORALITY IN THE CONTEXT OF CIVIC ENGAGEMENT, SOCIETY, AND POLITICAL INSTITUTIONS

Beyond family and peer groups, youth also engage in and are influenced by the larger societal and political context. Interest in how youth become engaged citizens of their societies has long been the province of political scientists, who have focused on associations between demographic variables and political behaviors such as voting (see Helwig et al., 2014). Increasingly, however, developmental scientists have addressed these issues by

studying the moral dimensions of civic life. Thus, we consider recent research on civic engagement, moral attitudes, moral identity, political reasoning, and social inequality.

### **Civic Engagement**

A great deal of research has examined adolescents' civic behavior, including volunteer activities and political activities like voting or protesting for a cause, with an eye towards determining the factors that predict involvement (and with a concern about how to instill these values in childhood and adolescence so as to enhance civic engagement in adulthood). One of the central areas of research in this field concerns the connections between civic engagement, moral attitudes, and moral identity. These studies have focused primarily on community service and have been guided by the assumption that greater involvement facilitates moral identity. As Hart, Atkins, and Donnelly (2006) noted, youth who engage in voluntary community service often are motivated by altruistic intent; indeed, a survey of a large representative sample of U.S. teens demonstrated that stronger endorsement of moral attitudes (e.g., that it is important to help others in the community) is associated with more involvement in community service 2 years later. Similar findings have been obtained in a large survey of youth in seven countries (Flanagan, Bowes, Jonsson, Csapo, & Shlebanova, 1998). Further, in her studies conducted in 28 countries, Torney-Purta (2002) documented the school's role in promoting civic engagement, demonstrating the generality of this issue across the globe. Even when schools mandated teens' involvement in community service, engagement in these activities led to further interest in community service and civic participation (Hart et al., 2006).

Research on civic engagement has employed behavioral measures of these constructs (for instance, community service, voting in an election, protesting for a cause, joining a civic organization), but very little research has examined adolescents' conceptions of these different activities and their moral relevance. Metzger and Smetana (2009) showed that middle-income U.S. ethnic majority 17-year-old students judged community service involvement and volunteering (like helping to feed the homeless) as morally obligatory and praiseworthy activities. Moreover, adolescents who were more involved in these activities were more likely to reason morally and have a moral orientation to these activities. In contrast, political activities like voting in an election were seen as obligatory, but in a conventional sense (because they facilitate the

effective functioning of society). Further, engaging in community activities (like joining a neighborhood social club) was judged to be a personal issue. With age, adolescents viewed community service less as an obligation and more as a worthwhile activity (Metzger & Ferris, 2013). These studies demonstrate that adolescents have complex and differentiated conceptions of different types of civic engagement and suggest that the type of activity researchers operationalize as measuring civic engagement may influence the findings they obtain.

Hart and Fegley (1995) examined concepts of self and identity among poor, urban, primarily African American youth who were heavily involved in community service (and thus were designated as "moral exemplars"). They found greater congruence between morally exemplary youths' actual and ideal selves, their past and future selves, and their images of their parents than among a comparison group of youth, who were matched demographically but were not heavily involved in community service. These researchers suggested that personal ideals, parental models, and youths' sense of personal identity facilitated their commitment to community service, although, as they also noted, the cross-sectional design of the study makes the causal direction of the findings unclear.

### **Evaluations of Democratic and Other Forms of Governments**

Numerous studies have examined children's and adolescents' moral evaluations of different political systems. For instance, Helwig (1998) compared Canadian children and adolescents' conceptions of the fairness of different governmental systems, including different forms of democracy (consensual, direct, and representative), oligarchy (rule based on wealth), and meritocracy (where decisions are made by the most intelligent and knowledgeable individuals). All participants evaluated democratic systems as more fair than nondemocratic systems, but by early adolescence, direct democracy was evaluated as fairer than other democratic systems, based on appeals to majority rule and representation. These responses did not mimic what adolescents learned in school, nor did they reflect their own political system (representative democracy).

To extend the research to children living in non-democratic political systems of government, Helwig and colleagues (Helwig, Arnold, Tan, & Boyd, 2007) replicated this study, comparing Mainland Chinese and Canadian adolescents. The participants included urban, middle class teens in Canada and Nanjing, China. All youth

asserted that democratic systems were better and fairer than the nondemocratic systems; they reasoned that people should have a voice and that they should allow for various segments of society to be represented in governance. Moreover, Chinese youth viewed representative democracy as better than democracy by consensus, based on concerns with practicality and utility. Thus, these findings suggest that adolescents in different cultures consider the features of political organizations independent of official cultural ideologies and connect them to judgments of political fairness.

### Social Trust Beliefs

In a series of studies, Flanagan and her colleagues have examined social trust, or the belief that people are trustworthy and treat others fairly rather than maximize their own gain. These positive beliefs about humanity accord well with philosophical perspectives on morality (Nussbaum, 1999). Flanagan (2003) argues that individuals develop these beliefs from interacting with people who are different from them and in families that value equality, empathy, and tolerance. To test these hypotheses, Wray-Lake and Flanagan (2012) examined the development of social trust in a large sample of U.S. 11- to 18-year-olds that were followed longitudinally over 2 years. They found that adolescents' social trust beliefs were higher in early than in middle and late adolescence and that they declined over time. However, mothers' beliefs did not differ according to adolescents' age, nor did they change over time.

Wray-Lake and Flanagan (2012) found that democratic parenting, which involves respect for adolescents' autonomy, led to increased social trust for early and middle adolescents, whereas parental messages regarding compassion increased social trust for middle and late adolescents. Flanagan and Stout (2010) further found that beliefs about social trust became increasingly differentiated from interpersonal trust during adolescence. In addition, classroom climate (being in more open classrooms where student opinions were valued and students were respected) led to greater social trust over time, but these effects were mediated by feelings of school solidarity. Thus, these studies provide important insights into how the fair and respectful treatment of adolescents in different social contexts (families and schools) can facilitate positive moral views of others. Research discussed next examines adolescents' beliefs about other morally relevant aspects of society and political life.

### Reasoning About the Sources of Social Inequalities in Society

Researchers also have examined children's and adolescents' conceptions of the sources of various social problems and economic inequalities (Olson, Shutts, Kinzler, & Weisman, 2012). For instance, Flanagan and Tucker (1999) examined adolescents' explanations for unemployment, poverty, and homelessness. Distinctions were drawn between explanations that situated causes in the individual and their dispositions versus those that focused on situational, societal, and structural reasons. Youth from lower as compared to higher socioeconomic status families were more likely to believe that individuals were personally responsible for their misfortunes, to endorse the belief that the United States provided equal opportunities for all, and to report that their family valued self-reliance more than compassion and social responsibility. In contrast, adolescents from higher socioeconomic status families were more likely to focus on structural and situational reasons for these social problems. Flanagan and her colleagues have asserted that differential access to societal opportunities (as reflected in social class) led to differences in their understanding of the social contract and the extent to which it offered opportunities for changing economic circumstances.

In a related study, Flanagan, Cumsille, Gill, and Galloway (2007) examined U.S. majority and minority (European, African, Latino, and Arab American) adolescents' beliefs that the United States is a just society, as measured using beliefs about equal opportunity. They found that regardless of ethnic origin, gender, or age, adolescents had stronger beliefs in the United States as a just society when they had a stronger sense of connectedness to their community, and particularly if they believed that their teachers employed democratic practices in their classrooms. The importance of social connectedness has been implicated in other studies of civic commitment as well. However, adolescents' beliefs in the United States as an equal opportunity society were also negatively associated with their experiences of ethnic and racial discrimination (Flanagan, Syvertsen, Gill, Galloway, & Cumsille, 2009). That is, the more discrimination African, Latino-, and Arab-American teenagers reported, the less they believed that society offers individuals a fair chance and equal opportunity to succeed. African American teenagers were least likely to believe that the U.S. government is responsive to individuals "like them" and that the police mete out justice fairly. These findings call for more research on connections between experiences of unfair treatment by authorities and judgments about trust

and confidence in governmental institutions. Such studies need to be conducted in different groups to determine the factors that contribute to adolescents' negative perceptions.

These findings are important, because they show the intersections between adolescents' interpersonal experiences with peers and their beliefs about the fairness and opportunities available in the broader society. The latter, in turn, has implications for ethnic minority youths' willingness to be involved in civic life and the broader society, which is important not just for citizenship but for developing a fair and just society.

### **CONCLUSIONS, IMPLICATIONS, AND FUTURE DIRECTIONS**

As the research reviewed in this chapter indicates, morality is a central topic of inquiry in the developmental sciences, and in the past decade, research on the emergence and development of morality has flourished. Morality is being investigated across multiple disciplines, including economics, anthropology, social psychology, comparative psychology, biology, and the neurosciences. Questions and perspectives from these disciplines have enriched the developmental study of morality, which reciprocally, has raised challenges and questions for scholars in other disciplines. New areas of inquiry have emerged, theoretical approaches have become more integrated, and innovative methods have been applied to broaden and deepen our understanding of moral development.

Thus, for instance, and as we have shown in this chapter, research has demonstrated that the foundations of moral awareness are present in infancy and toddlerhood, as well as in nonhuman primates. Theory of mind competence has been demonstrated to be related to moral judgment. Neuroscience research has explored the biological bases of morality. Children's concepts of harm, resource allocation, fair and nonprejudicial treatment of others, social inequalities, and rights develop from a very focused and narrow form in early childhood to their application in different situational and cultural contexts. Thus, with age, moral judgments require the ability to weigh contextual variables. As well, moral judgments become more comprehensive and generalizable with age.

As this review of research findings suggests, morality cannot be characterized as developing along a linear path. Morality is embedded in cultural contexts and in social relationships; it is neither biologically predetermined nor entirely socialized. As with biological and

cognitive development, moral development is multiply determined; many processes help to ensure that children become morally competent adults. Moral cognition, emotion and behavior all interact and are woven together as children develop.

We have also seen that healthy family and peer relationships facilitate individuals' abilities to live together within societies and treat one another with justice, fairness, equality, and compassion. Secure attachment relationships with caregivers provide a strong basis for the development of trusting, compassionate, and just relationships with others (Cassidy, 2008), but this is only the beginning. Parenting that is responsive, respects the child as an autonomous individual, helps the child to understand his or her own and others' emotions, and scaffolds an understanding of justice, fairness, and others' welfare through reasoning all contribute to healthy moral development. Children reflect on and evaluate parental messages, which may facilitate moral growth, but also, when messages that are not understood or are seen as unfair or illegitimate, may be resisted or rejected.

Children's conflicts and negotiations with siblings and in the context of high quality friendships are central to moral development as well. Social interactions with equals and near equals provide children with opportunities to learn about cooperation, loyalty, respect, and fair treatment. Mirroring the types of interactions with caregivers that facilitate moral understanding and empathy, having teachers and classrooms that employ democratic practices also facilitate a sense of connectedness to their community. We have also seen that these developmental contexts can pose many challenges. Parenting that is harsh and punitive undermines moral development, as do peer relationships that are coercive or involve rejection, harassment, or are prejudicial. Furthermore, schools and societal practices that perpetuate inequalities and unfair hierarchies lead to challenges in children's moral development.

Where to go from here? Despite the considerable progress of research, much remains to be done; there are many new avenues for moral development research to pursue. The family, peer, and community contexts for development reviewed in this chapter rarely have been central to philosophical treatises of morality or its origins (Nussbaum, 1999; Okin, 1989). For example, Okin (1989), a political scientist and philosopher, observed that, despite the centrality of the family in foundational philosophical theories of morality (e.g., such as the view that morality originates in the family context), family arrangements have historically been one of inequality and inequity with

respect to women's roles, as well as to children's status as rational beings deserving of fair and just treatment. This is still the case today, and future research needs to more directly link the quality of parent-child relationships with moral concepts of equality and equity. This would also illuminate how family relationships and conventional norms about status, power, and hierarchies contribute to moral development.

More research also is needed to better conceptualize the role of children's and adolescents' interactions with family members, peers, and friends and their implications for moral emotions, cognitions and decision making. As we have seen, recent research has gone beyond a focus on parent-child relationships to more broadly consider how different relationships within the family contribute to moral growth. Much research has shown the importance of sibling relationships for morality, but research needs to consider broader definitions of families. For instance, in some groups and cultures, extended families, including grandparents and other relatives, are the norm, and stepparent, reconstituted, and single-parent families are increasingly common. Fathers play a crucial role, and too many developmental science studies continue to ignore the role of the father despite extensive evidence that children thrive when both mothers and fathers are involved in children's development (Lamb, 2010); this role applies to moral development as well. Further, we are in the midst of historic legal changes regarding same-sex marriage, and there will surely be a rise in families with children raised by lesbian, gay, bisexual, and transgendered couples. Studying the role of different family arrangements and roles is essential for our science and for public policy and could help illuminate moral developmental processes.

Although positive peer interactions and relationships contribute to moral development, we have seen that negative peer relationships—being the recipient of negative bias and expectations from one's peers based solely on skin color, ethnicity, gender, and sexual orientation—can have wide ranging detrimental effects for children's moral development. Some children, both from ethnic minority or majority backgrounds, are clearly aware of the unfairness of differential treatment and social inequalities, but others are not, and we need to better understand why this is. Furthermore, research needs to include children who are potential targets of unfair treatment and those who are potential perpetrators (from all backgrounds). Moreover, we have shown the importance of considering children's awareness of unfair treatment of others based on group membership and intergroup attitudes;

this research should be extended to other areas of moral development. Finally, while social inequality at a societal level is pervasive, we know little about whether and how this is perceived and evaluated by children and adolescents.

The current global landscape is filled with moral issues that bear on children's healthy development. Violence continues in many parts of the globe; children continue to experience crippling poverty, life in refugee camps, recruitment as child soldiers, and even slavery. Research on moral development can help us understand these many and overwhelming challenges that too many of today's children experience. Research on resilience has shown that children can survive and even thrive in the face of overwhelming odds, but we know very little about moral development in such catastrophic situations, which offer opportunities to understand healthy moral development, development gone awry, and the factors that tip the balance in either direction. Just as importantly, studying such situations can make an important contribution by helping to cast light on the inequalities and perpetuation of injustice around the world.

Moreover, many social issues worthy of study do not pertain only to children's status and well-being but also to the context of the family, schools, and social institutions. For example, recent protests regarding women's rights in India have implications for children's lives in the family context, and U.S. discussions on racial profiling of minority males as reflecting unfair and prejudicial treatment affect minority children's aspirations and motivations. Negative school climates create unsafe environments for children that bear on children's welfare as well as their rights to an education, and to become productive members of the workforce.

As children around the world are living in new communities and growing up in cultures that are more heterogeneous than in the past, parents, teachers, and educators are struggling to determine how best to teach children about fairness and inclusiveness, especially in contexts in which negative messages about individuals based on group membership are pervasive. The data reviewed in this chapter, however, reveal that children are neither passive recipients of information, nor are they ruled by selfish and aggressive instincts. Concepts of morality emerge very early, and for the most part, young children have an awareness of equality, fairness, and rights, which becomes much more fully formed by adolescence. In this chapter, we have demonstrated that what develops is not the ability to appreciate morality but rather the social

cognitive competence, knowledge, and experience required to apply morality to increasingly complex social situations. We do not yet fully understand why children feel, think, and apply moral understanding in some circumstances but not in others, and this remains an important issue for further research, as identified throughout this chapter. Parents and educators have to help children disentangle the complex considerations present in situations that call for moral judgments; they also have to foster positive social relationships that motivate children to choose the moral course of action.

Children everywhere experience discrimination and unfair treatment as a result of their age, gender, sexual orientation, race, ethnicity, religion, nationality, indigenous background and other categories. At the same time, and as research reviewed here indicates, children are also the perpetrators of exclusion and discrimination. Adults also play both roles, teaching children to respect others but communicating negative messages about outgroups, which contributes to unfair treatment of others. Legal frameworks are essential for providing the foundations for equity and justice in childhood and throughout development. However, this is only the first step toward securing a course of healthy moral development. Social and psychological attitudes and the types of relationships that form in development also need to change. Thus, understanding the psychological developmental underpinnings of the origins and development of morality is essential for creating effective intervention programs.

Moral development research has expanded exponentially across the globe in recent years. While much of the research reported in this chapter has been conducted by North American and Western European researchers, studies have included ethnic, religious, and racial minority subgroups, in addition to majority groups. This has been an important contribution to our knowledge. Nonetheless, more research in different contexts and across wide age ranges are required to more fully understand moral development.

There are ongoing debates more generally about the virtues of studying “within-culture” versus cross-cultural studies. Both types of studies are needed to build a comprehensive picture of moral development. However, studying moral development in another culture should not mandate a “comparison” sample from the United States. Conceptualizing the role of culture requires going beyond broad templates and overgeneralizations and towards acknowledgment of the diversity of perspectives present within all cultures. In an age of ever-increasing global

connectedness, immigration, and international political and economic collaboration, detailed investigations of how individuals in diverse cultures develop, evaluate, and apply morality in their everyday lives and interactions will help researchers to answer fundamental questions about the culturally specific and universal aspects of morality.

As we noted earlier, morality is being widely studied in other disciplines, and statements are being made about the nature of morality without adequate connection to developmental processes. Therefore, we encourage researchers to engage with scholars in other fields so that the types of innovative findings reviewed here can be better integrated across disciplines. The research described in this chapter reflects high-quality scholarship and science, providing examples of innovative theory and methodology that are driving new avenues of research. The developmental science of morality provides theories, evidence, and data for making a difference in children’s lives, and for promoting justice, fairness, and equality.

## REFERENCES

- Aboud, F. E., & Amato, M. (2001). Developmental and socialization influences on intergroup bias. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup relations* (pp. 65–85). Oxford, England: Blackwell.
- Aboud, F. E., Mendelson, M. J., & Purdy, K. T. (2003). Cross-race peer relations and friendship quality. *International Journal of Behavioral Development, 27*, 165–173. doi:10.1080/01650250244000164
- Aboud, F. E., & Spears Brown, C. (2013). Positive and negative intergroup contact among children and its effect on attitudes. In G. Hodson & M. Hewstone (Eds.), *Advances in intergroup contact* (pp. 176–199). New York, NY: Psychology Press.
- Abrams, D., Palmer, S. B., Rutland, A., Cameron, L., & Van de Vyver, J. (2013). Evaluations of and reasoning about normative and deviant ingroup and outgroup members: Development of the black sheep effect. *Developmental Psychology*. doi:10.1037/a0032461
- Abrams, D., & Rutland, A. (2008). The development of subjective group dynamics. In S. R. Levy & M. Killen (Eds.), *Intergroup relations and attitudes in childhood through adulthood* (pp. 47–65). Oxford, England: Oxford University Press.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison Wesley.
- Almås, I., Cappelen, A. W., Sørensen, E. Ø., & Tungodden, B. (2010). Fairness and the development of inequality acceptance. *Science, 328*, 1176–1178. doi:10.1126/science.1187300
- Appiah, K. A. (2005). *The ethics of identity*. Princeton, NJ: Princeton University Press.
- Ardila-Rey, A., & Killen, M. (2001). Middle class Colombian children’s evaluations of personal, moral, and social-conventional interactions in the classroom. *International Journal of Behavioral Development, 25*, 246–255. doi:10.1080/01650250042000221
- Ardila-Rey, A., Killen, M., & Brenick, A. (2009). Moral reasoning in violent contexts: Displaced and non-displaced Colombian children’s evaluations of moral transgressions, retaliation, and reconciliation. *Social Development, 18*, 181–209. doi:10.1111/j.1467-9507.2008.00483.x

- Arsenio, W. F. (2014). Moral attributions and aggression. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 235–255). New York, NY: Psychology Press.
- Arsenio, W. F., Adams, E., & Gold, J. (2009). Social information processing, moral reasoning, and emotion attributions: Relations with adolescents' reactive and proactive aggression. *Child Development, 80*, 1739–1755. doi:10.1111/j.1467-8624.2009.01365.x
- Astor, R. A. (1994). Children's moral reasoning about family and peer violence: The role of provocation and retribution. *Child Development, 65*, 1054–1067. doi:10.2307/1131304
- Bandura, A., & McDonald, F. J. (1963). The influence of social reinforcement and the behavior of models in shaping children's moral judgments. *Journal of Abnormal and Social Psychology, 67*, 274–281. doi:10.1037/h0044714
- Baumard, N., Mascaro, O., & Chevallier, C. (2012). Preschoolers are able to take merit into account when distributing goods. *Developmental Psychology, 48*, 492–498. doi:10.1037/a0026598
- Berkowitz, M. W., & Gibbs, J. C. (1983). Measuring the developmental features of moral discussion. *Merrill-Palmer Quarterly, 29*, 399–410.
- Blair, R. J. R. (2010). Contributions of neuroscience to the understanding of moral reasoning and its development. In P. D. Zelazo, M. Chandler, & E. Crone (Eds.), *Developmental social cognitive neuroscience* (pp. 269–288). New York, NY: Psychology Press.
- Blake, P. R., Ganea, P. A., & Harris, P. L. (2012). Possession is not always the law: With age, preschoolers increasingly use verbal information to identify who owns what. *Journal of Experimental Child Psychology, 113*, 259–272. doi:10.1016/j.jecp.2012.06.008
- Blake, P. R., & McAuliffe, K. (2011). "I had so much it didn't seem fair": Eight-year-olds reject two forms of inequity. *Cognition, 120*, 215–224. doi:10.1016/j.cognition.2011.04.006
- Blake, P. R., & Rand, D. G. (2010). Currency value moderates equity preference among young children. *Evolution and Human Behavior, 3*, 210–218. doi:10.1016/j.evolhumbehav.2009.06.012
- Bowlby, J. (1969). *Attachment*. New York, NY: Basic Books.
- Brenick, A., & Killen, M. (2014). Moral judgments about Jewish-Arab intergroup exclusion: The role of cultural identity and contact. *Developmental Psychology, 50*, 86–99. doi: 10.1037/a0034702
- Brosnan, S. F., & de Waal, F. B. M. (2003). Monkeys reject unequal pay. *Nature, 425*, 297–299. doi:10.1038/nature01963
- Brosnan, S. F., & de Waal, F. B. M. (2012). Fairness in animals: Where to from here? *Social Justice Research, 25*, 336–351. doi:10.1007/s11211-012-0165-8
- Brown, C. S., & Bigler, R. S. (2004). Children's perceptions of gender discrimination. *Developmental Psychology, 40*, 714–726. doi:10.1037/0012-1649.40.5.714
- Brownell, C. A. (2013). Early development of prosocial behavior: Current perspectives. *Infancy, 18*, 1–9. doi:10.1111/inf.12004
- Brownell, C. A., Ramani, G. B., & Zerwas, S. (2006). Becoming a social partner with peers: Cooperation and social understanding in one- and two-year-olds. *Child Development, 77*, 803–821. doi:10.1111/j.1467-8624.2006.00904.x
- Bukowski, W. M., Motzoi, C., & Meyer, F. (2009). Friendship as process, function, and outcome. In K. Rubin, W. M. Bukowski & B. Laursen (Eds.), *Handbook of peer relationships, interactions, and groups* (pp. 217–231). New York, NY: Guilford Press.
- Carlo, G. (2014). The development and correlates of prosocial moral behaviors. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 208–234). New York, NY: Psychology Press.
- Cassidy, J. (2008). The nature of the child's ties. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (2nd ed., pp. 3–22). New York, NY: Guilford Press.
- Chandler, M., & Lalonde, C. (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.), *The five to seven year shift: The age of reason and responsibility* (pp. 111–139). Chicago, IL: University of Chicago Press.
- Chilamkurti, C., & Milner, J. S. (1993). Perceptions and evaluations of child transgressions and disciplinary techniques in high- and low-risk mothers and their children. *Child Development, 64*, 1801–1814. doi:10.2307/1131470
- Colby, A., & Kohlberg, L. (1987). *The measurement of moral judgment: Vol. 1. Theoretical foundations and research validation*. New York, NY: Cambridge University Press.
- Cooley, S., & Killen, M. (in press). Children's evaluations of resource allocation in the context of group dynamics. *Developmental Psychology*.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*, 74–101. doi:10.1037/0033-2909.115.1.74
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development, 66*, 710–722. doi:10.2307/1131945
- Crystal, D. S., Killen, M., & Ruck, M. (2008). It is who you know that counts: Intergroup contact and judgments about race-based exclusion. *British Journal of Developmental Psychology, 26*, 51–70. doi:10.1348/026151007x198910
- Dahl, A., & Campos, J. J. (2013). Domain differences in early social interactions. *Child Development, 84*, 817–825. doi:10.1111/cdev.12002
- Damon, W. (1977). *The social world of the child*. San Francisco, CA: Jossey-Bass.
- Darwin, C. (1871/2004). *The descent of man*. London, England: Penguin Classics.
- Davidov, M., Zahn-Waxler, C., Roth-Hanania, R., & Knafo, A. (2013). Concern for others in the first year of life: Theory, evidence, and avenues for research. *Child Development Perspectives, 7*, 126–131. doi:10.1111/cdep.12028
- Decety, J., & Howard, L. H. (2014). A neurodevelopmental perspective on morality. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 454–474). New York, NY: Psychology Press.
- Decety, J., Michalska, K. J., & Kinzler, K. D. (2012). The contribution of emotion and cognition to moral sensitivity: A neurodevelopmental study. *Cerebral Cortex, 22*, 209–220. doi:10.1093/cercor/bhr111
- Denham, S. A. (1994). Mother-child emotional communication and preschoolers' security of attachment and dependency. *The Journal of Genetic Psychology: Research and Theory on Human Development, 155*, 119–121. doi:10.1080/00221325.1994.9914765
- de Waal, F. B. M. (2006). *Primates and philosophers: How morality evolved*. Princeton, NJ: Princeton University Press.
- de Waal, F. B. M. (2014). Natural normativity: The "is" and "ought" of animal behavior. *Behaviour, 151*, 185–204.
- Dondi, M., Simion, F., & Caltran, G. (1999). Can newborns discriminate between their own cry and the cry of another newborn infant? *Developmental Psychology, 35*, 418–426. doi: 10.1037/0012-1649.35.2.418
- Dunn, J. (2014). Moral development in early childhood, and social interaction in the family. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 135–159). New York, NY: Psychology Press.
- Dunn, J., Brown, J. R., & Maguire, M. (1995). The development of children's moral sensibility: Individual differences and emotion understanding. *Developmental Psychology, 31*, 649–659. doi:10.1037/0012-1649.31.4.649

- 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. doi:10.1348/026151000165625
- Durkheim, E. (1925/1973). *Moral education*. New York, NY: MacMillan.
- Eisenberg, N., Spinrad, T., & Morris, A. (2014). Empathy-related responding in children. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 184–207). New York, NY: Psychology Press.
- Elenbaas, L., Rizzo, M., Cooley, S., & Killen, M. (2014). *Fairness and resource allocation: Rectifying social inequalities based on race*. Unpublished manuscript, University of Maryland.
- Evans, A. D., Xu, F., & Lee, K. (2011). When all signs point to you: Lies told in the face of evidence. *Developmental Psychology, 47*, 39–49. doi:10.1037/a0020787
- Fang, F.-X., Wellman, H. M., Liu, Y.-J., Liu, G.-X., & Kang, R. (2009). Longitudinal perspectives: The sequences of theory-of-mind development in Chinese preschoolers. *Acta Psychologica Sinica, 41*, 706–714. doi:10.3724/sp.j.1041.2009.00706
- Feddes, A. R., Noack, P., & Rutland, A. (2009). Direct and extended friendship effects on minority and majority children's interethnic attitudes: A longitudinal study. *Child Development, 80*, 377–390. doi:10.1111/j.1467-8624.2009.01266.x
- Fehr, E., Bernhard, H., & Rockenbach, B. (2008). Egalitarianism in young children. *Nature, 454*, 1079–1083. doi:10.1038/nature07155
- Flanagan, C. (2003). Trust, identity, and civic hope. *Applied Developmental Science, 7*, 165–171. doi:10.1207/s1532480xads0703\_7
- Flanagan, C. A., Bowes, J. M., Jonsson, B., Csapo, B., & Sheblanova, E. (1998). Ties that bind: Correlates of adolescents' civic commitments in seven countries. *Journal of Social Issues, 54*, 457–475. doi:10.1111/0022-4537.771998077
- Flanagan, C. A., Cumsille, P., Gill, S., & Gallay, L. S. (2007). School and community climates and civic commitments: Patterns for ethnic minority and majority students. *Journal of Educational Psychology, 99*, 421–431. doi:10.1037/0022-0663.99.2.421
- Flanagan, C. A., & Stout, M. (2010). Developmental patterns of social trust between early and late adolescence: Age and school climate effects. *Journal of Research on Adolescence, 20*, 748–773. doi:10.1111/j.1532-7795.2010.00658.x
- Flanagan, C. A., Syvertsen, A. K., Gill, S., Gallay, L. S., & Cumsille, P. (2009). Ethnic awareness, prejudice, and civic commitments in four ethnic groups of American adolescents. *Journal of Youth and Adolescence, 38*, 500–518. doi:10.1007/s10964-009-9394-z
- Flanagan, C. A., & Tucker, C. J. (1999). Adolescents' explanations for political issues: Concordance with their views of self and society. *Developmental Psychology, 35*, 1198–1209. doi:10.1037/0012-1649.35.5.1198
- Flavell, J. H., Mumme, D. L., Green, F. L., & Flavell, E. R. (1992). Young children's understanding of different types of beliefs. *Child Development, 63*, 960–977. doi:10.2307/1131247
- Fox, N. A., Nicholas, K., E., Henderson, H., A., Rubin, K., Schmidt, L., Hamer, D., . . . Pine, D. S. (2005). Evidence for gene-environment interaction in predicting behavioral inhibition in middle childhood. *Psychological Science, 16*, 921–926. doi:10.1111/j.1467-9280.2005.01637.x
- Freud, S. (1930/1961). *Civilization and its discontents*. New York, NY: W. W. Norton.
- Fu, G., Evans, A. D., Xu, F., & Lee, K. (2012). Young children can tell strategic lies after committing a transgression. *Journal of Experimental Child Psychology*. doi:10.1016/j.jecp.2012.04.003
- Fu, G., Xiao, W. S., Killen, M., & Lee, K. (2014). Moral judgment and connections to second-order theory of mind understanding. *Developmental Psychology, 50*, 2085–2092. doi:10.1037/a0037077
- Gasser, L., Malti, T., & Gutzwiller-Helfenfinger, E. (2012). Aggressive and nonaggressive children's moral judgments and moral emotion attributions in situations involving retaliation and unprovoked aggression. *Journal of Genetic Psychology: Research and Theory on Human Development, 173*, 417–439. doi:10.1080/00221325.2011.614650
- Gieling, M., Thijs, J., & Verkuyten, M. (2010). Tolerance of practices by Muslim actors: An integrative social-developmental perspective. *Child Development, 81*, 1384–1399. doi:10.1111/j.1467-8624.2010.01480.x
- Geraci, A., & Surian, L. (2011). The developmental roots of fairness: Infants' reactions to equal and unequal distributions of resources. *Developmental Science, 14*, 1012–1020. doi:10.1111/j.1467-7687.2011.01048.x
- Gewirth, A. (1978). *Reason and morality*. Chicago, IL: University of Chicago Press.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Graham, S., Bellmore, A., Nishina, A., & Juvonen, J. (2009). "It must be me": Ethnic diversity and attributions for peer victimization in middle school. *Journal of Youth and Adolescence, 38*, 487–499. doi:10.1007/s10964-008-9386-4
- Grusec, J., Chaparro, M. P., Johnston, M., & Sherman, A. (2014). The development of moral behavior from a socialization perspective. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 113–134). New York, NY: Psychology Press.
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current point of view. *Developmental Psychology, 30*, 4–19. doi:10.1037/0012-1649.30.1.4
- Grusec, J. E., Goodnow, J. J., & Kuczynski, L. (2000). New directions in analyses of parenting contributions to children's acquisition of values. *Child Development, 71*, 205–211. doi:10.1111/1467-8624.00135
- Gummerum, M., Hanoch, Y., Keller, M., Parsons, K., & Hummel, A. (2010). Preschoolers' allocations in the dictator game: The role of moral emotions. *Journal of Economic Psychology, 31*, 25–34. doi:10.1016/j.joep.2009.09.002
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108*, 814–834. doi:10.1037/0033-295X.108.4.814
- Haidt, J. (2007). The new synthesis in moral psychology. *Science, 316*, 998–1002. doi:10.1126/science.1137651
- Hamlin, J. K. (2013). Moral judgment and action in preverbal infants and toddlers: Evidence for an innate moral core. *Current Directions in Psychological Science*. doi:10.1177/0963721412470687
- Hamlin, J. K., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature, 450*, 557–560. doi:10.1038/nature06288
- Hardy, S. A., Walker, L. J., Olsen, J. A., Woodbury, R. D., & Hickman, J. R. (2013). Moral identity as moral ideal self: Links to adolescent outcomes. *Developmental Psychology, 50*, 45–57. doi:10.1037/a0033598
- Hart, D., Atkins, R., & Donnelly, T. M. (2006). Community service and moral development. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 633–656). Mahwah, NJ: Erlbaum.
- Hart, D., & Fegley, S. (1995). Prosocial behavior and caring in adolescence: Relations to self-understanding and social judgment. *Child Development, 66*, 1346–1359. doi:10.2307/1131651
- Hastings, P. D., Miller, J., Kahle, S., & Zahn-Waxler, C. (2014). The neurobiological bases of empathic concern for others. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 411–434). New York, NY: Psychology Press.
- Hay, D. F. (2006). Yours and mine: Toddlers' talk about possessions with familiar peers. *British Journal of Developmental Psychology, 24*, 39–52. doi:10.1348/026151005X68880

- Helwig, C. C. (1995). Adolescents' and young adults' conceptions of civil liberties: Freedom of speech and religion. *Child Development, 66*, 152–166.
- Helwig, C. C. (1998). Children's conceptions of fair government and freedom of speech. *Child Development, 69*, 518–531. doi:10.2307/1132181
- Helwig, C. C., Arnold, M. L., Tan, D., & Boyd, D. (2007). Mainland Chinese and Canadian adolescents' judgments and reasoning about the fairness of democratic and other forms of government. *Cognitive Development, 22*, 96–109. doi:10.1016/j.cogdev.2006.07.002
- Helwig, C. C., Ruck, M. D., & Peterson-Badali, M. (2014). Rights, civil liberties, and democracy. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 46–69). New York, NY: Psychology Press.
- Helwig, C. C., To, S., Wang, Q., Liu, C., & Yang, S. (2014). Judgments and reasoning about parental discipline involving induction and psychological control in China and Canada. *Child Development, 85*, 1150–1167. doi:10.1111/cdev.12183
- Helwig, C. C., Zelazo, P. D., & Wilson, M. (2001). Children's judgments of psychological harm in normal and noncanonical situations. *Child Development, 72*, 66–81. doi:10.1111/1467-8624.00266
- Hinde, R. A. (1982). *Ethology: Its nature and relations with other sciences*. Oxford, England: Oxford University Press.
- Hitti, A., Mulvey, K. L., & Killen, M. (2011). Social exclusion and culture: The role of group norms, group identity and fairness. *Anales de Psicologia, 27*, 587–599.
- Hitti, A., Mulvey, K. L., Rutland, A., Abrams, D., & Killen, M. (2013). When is it okay to exclude a member of the ingroup?: Children's and adolescents' social reasoning. *Social Development, 22*, 120–135. doi:10.1111/sode.12047
- Hodges, E. V., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*, 94–101. doi:10.1037/0012-1649.35.1.94
- Hoffman, M. L. (1979). Development of moral thought, feeling, and behavior. *American Psychologist, 34*, 958–966. doi:10.1037/0003-066x.34.10.958
- Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge, England: Cambridge University Press.
- Hoffman, M. L., & Saltzstein, H. D. (1967). Parent discipline and the child's moral development. *Journal of Personality and Social Psychology, 5*, 45–57. doi:10.1037/h0024189
- Horn, S. S. (2008). The multifaceted nature of sexual prejudice: How adolescents reason about sexual orientation and sexual prejudice. In S. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 173–190). Oxford, England: Oxford University Press.
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology, 42*, 747–770. doi:10.1037/0012-1649.42.5.747
- Hume, D. (1739/1969). *A treatise of human nature*. Harmondsworth, England: Penguin Press.
- Huynh, V. W., & Fuligni, A. J. (2010). Discrimination hurts: The academic, psychological, and physical well-being of adolescents. *Journal of Research on Adolescence, 20*, 916–941. doi:10.1111/j.1532-7795.2010.00670.x
- Hymel, S., Rocke Henderson, N., & Bonanno, R. A. (2005). Moral disengagement: A framework for understanding bullying among adolescents. *Journal of Social Sciences, 8*, 1–11.
- Jambon, M., & Smetana, J. G. (2014). Moral complexity in middle childhood: Children's evaluations of necessary harm. *Developmental Psychology, 50*, 22–33. doi:10.1037/a0032992
- Juvonen, J., & Graham, S. (Eds.). (2001). *Peer harassment in school*. New York, NY: Guilford Press.
- Kant, I. (1785/1959). *Foundations of the metaphysics of morals*. New York, NY: Bobbs-Merrill.
- Killen, M., & Cooley, S. (2014). Morality and intergroup relations regarding race and ethnicity. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 340–360). New York, NY: Psychology Press.
- Killen, M., Henning, A., Kelly, M. C., Crystal, D., & Ruck, M. (2007). Evaluations of interracial peer encounters by majority and minority U.S. children and adolescents. *International Journal of Behavioral Development, 31*, 491–500. doi:10.1177/0165025407081478
- Killen, M., Kelly, M. C., Richardson, C., Crystal, D., & Ruck, M. (2010). European American children's and adolescents' evaluations of interracial exclusion. *Group Processes & Intergroup Relations, 13*, 283–300. doi:10.1177/1368430209346700
- Killen, M., Mulvey, K. L., & Hitti, A. (2013). Social exclusion in childhood: A developmental intergroup perspective. *Child Development, 84*, 772–790. doi:10.1111/cdev.12012
- Killen, M., Mulvey, K. L., Richardson, C., Jampol, N., & Woodward, A. (2011). The accidental transgressor: Morally-relevant theory of mind. *Cognition, 119*, 197–215. doi:10.1016/j.cognition.2011.01.006
- Killen, M., Pisacane, K., Lee-Kim, J., & Ardila-Rey, A. (2001). Fairness or stereotypes? Young children's priorities when evaluating group exclusion and inclusion. *Developmental Psychology, 37*, 587–596. doi:10.1037/0012-1649.37.5.587
- Killen, M., & Rutland, A. (2011). *Children and social exclusion: Morality, prejudice, and group identity*. New York, NY: Wiley/Blackwell.
- Killen, M., Rutland, A., Abrams, D., Mulvey, K. L., & Hitti, A. (2013). Development of intra- and intergroup judgments in the context of moral and social-conventional norms. *Child Development, 84*, 1063–1080. doi:10.1111/cdev.12011
- Killen, M., & Smetana, J. G. (2014). *Handbook of moral development* (2nd ed.). New York, NY: Psychology Press.
- Killen, M., & Stangor, C. (2001). Children's social reasoning about inclusion and exclusion in gender and race peer group contexts. *Child Development, 72*, 174–186. doi:10.1111/1467-8624.00272
- Killen, M., & Turiel, E. (1991). Conflict resolution in preschool social interactions. *Early Education and Development, 2*, 240–255.
- Knobe, J. (2005). Theory of mind and moral cognition: Exploring the connections. *Trends in Cognitive Sciences, 9*, 357–359. doi:10.1016/j.tics.2005.06.011
- Kochanska, G., & Aksan, N. (2004). Conscience in childhood: Past, present, and future. *Merrill-Palmer Quarterly, 50*, 299–310. doi:10.1353/mpq.2004.0020
- Kochanska, G., & Aksan, N. (2006). Children's conscience and self-regulation. *Journal of Personality, 74*, 1587–1617. doi:10.1111/j.1467-6494.2006.00421.x
- Kochanska, G., Aksan, N., & Joy, M. E. (2007). Children's fearfulness as a moderator of parenting in early socialization: Two longitudinal studies. *Developmental Psychology, 43*, 222–237. doi:10.1037/0012-1649.43.1.222
- Kochanska, G., Forman, D. R., Aksan, N., & Dunbar, S. B. (2005). Pathways to conscience: Early mother-child mutually responsive orientation and children's moral emotion, conduct, and cognition. *Journal of Child Psychology and Psychiatry, 46*, 19–34. doi:10.1111/j.1469-7610.2004.00348.x
- Kochanska, G., Koenig, J. L., Barry, R. A., Kim, S., & Yoon, J. E. (2010). Children's conscience during toddler and preschool years, moral self, and a competent, adaptive developmental trajectory. *Developmental Psychology, 46*, 1320–1332. doi:10.1037/a0020381
- 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, IL: Rand McNally.

- Kowal, A., & Kramer, L. (1997). Children's understanding of parental differential treatment. *Child Development, 68*, 113–126. doi:10.2307/1131929
- Kuczynski, L., & Parkin, C. M. (2007). Agency and bidirectionality in socialization: Interactions, transactions, and relational dialectics. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 259–283). New York, NY: Guilford Press.
- 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. doi:10.1111/j.1467-8624.2005.00873.x
- Lahat, A., Helwig, C. C., & Zelazo, P. D. (2013). An event-related potential study of adolescents' and young adults' judgments of moral and social conventional violations. *Child Development, 84*, 955–969. doi:10.1111/cdev.12001
- Laible, D. (2004). Mother-child discourse in two contexts: Links with child temperament, attachment security, and socioemotional competence. *Developmental Psychology, 40*, 979–992. doi:10.1037/0012-1649.40.6.979
- Laible, D., Eye, J., & Carlo, G. (2008). Dimensions of conscience in mid-adolescence: Links with social behavior, parenting, and temperament. *Journal of Youth and Adolescence, 37*, 875–887. doi:10.1007/s10964-008-9277-8
- Laible, D. J., & Thompson, R. A. (2000). Mother-child discourse, attachment security, shared positive affect, and early conscience development. *Child Development, 71*, 1424–1440. doi:10.1111/1467-8624.00237
- Lamb, M. E. (2010). *The role of the father in child development*. Hoboken, NJ: Wiley.
- Lansford, J. E., Chang, L., Dodge, K. A., Malone, P. S., Oburu, P., Palmérus, K., . . . Quinn, N. (2005). Physical discipline and children's adjustment: Cultural normativeness as a moderator. *Child Development, 76*, 1234–1246. doi:10.1111/j.1467-8624.2005.00847.x
- Lapsley, D. K. (2006). Moral stage theory. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 37–66). Mahwah, NJ: Erlbaum.
- Lee, K. (2013). Little liars: Development of verbal deception in children. *Child Development Perspectives, 7*, 91–96.
- Leman, P. J. (2005). Authority and moral reasons: Parenting style and children's perceptions of adult rule justifications. *International Journal of Behavioral Development, 29*, 265–270. doi:10.1080/01650250544000044
- Leslie, A., Knobe, J., & Cohen, A. (2006). Acting intentionally and the side-effect effect: Theory of mind and moral judgment. *Psychological Science, 17*, 421–427. doi:10.1111/j.1467-9280.2006.01722.x
- Liénard, P., Chevallier, C., Mascaro, O., Kiura, P., & Baumard, N. (2013). Early understanding of merit in Turkana children. *Journal of Cognition and Culture, 13*, 57–66. doi:10.1163/15685373-12342084
- MacIntyre, A. (1981). *After virtue*. Notre Dame, IN: University of Notre Dame Press.
- Malti, T., Gasser, L., & Buchmann, M. (2009). Aggressive and prosocial children's emotion attributions and moral reasoning. *Aggressive Behavior, 35*, 90–102. doi:10.1002/ab.20289
- Malti, T., Killen, M., & Gasser, L. (2012). Social judgments and emotion attributions about exclusion in Switzerland. *Child Development, 83*, 697–711. doi:10.1111/j.1467-8624.2011.01705.x
- McDonald, K., Malti, T., Killen, M., & Rubin, K. (2014). Best friends' discussion of social dilemmas. *Journal of Youth and Adolescence, 43*, 233–244. doi:10.1007/s10964-01309961-1
- McHale, S. M., Updegraff, K. A., Jackson-Newsom, J., Tucker, C. J., & Crouter, A. C. (2000). When does parents' differential treatment have negative implications for siblings? *Social Development, 9*, 149–172. doi:10.1111/1467-9507.00117
- Metzger, A., & Ferris, K. (2013). Adolescents' domain-specific judgments about different forms of civic involvement: Variations by age and children. *Journal of Adolescence, 36*, 529–538.
- Metzger, A., & Smetana, J. G. (2009). Adolescent civic and political engagement: Associations between domain-specific judgments and behavior. *Child Development, 80*, 433–441. doi:10.1111/j.1467-8624.2009.01270.x
- Miller, P. J., Fung, H., Lin, S., Chen, E. C.-H., & Boldt, B. R. (2012). How socialization happens on the ground: Narrative practices as alternate socializing pathways in Taiwanese and European-American families. *Monographs of the Society for Research in Child Development, 77*, 1–140. doi:10.1111/j.1540-5834.2011.00641.x
- Møller, S. J., & Tenenbaum, H. R. (2011). Danish majority children's reasoning about exclusion based on gender and ethnicity. *Child Development, 82*, 520–532. doi:10.1111/j.1467-8624.2010.01568.x
- Moore, C. (2009). Fairness in children's resource allocation depends on the recipient. *Psychological Science, 20*, 944–948. doi:10.1111/j.1467-9280.2009.02378.x
- Mulvey, K. L., Hitti, A., Rutland, A., Abrams, D., & Killen, M. (2014). Context differences in ingroup preferences. *Developmental Psychology, 50*, 1507–1519.
- Murray-Close, D., Crick, N. R., & Galotti, K. M. (2006). Children's moral reasoning regarding physical and relational aggression. *Social Development, 15*, 345–372. doi:10.1111/j.1467-9507.2006.00346.x
- Neblett, E. W., Jr., Terzian, M., & Harriott, V. (2010). From racial discrimination to substance use: The buffering effects of racial socialization. *Child Development Perspectives, 4*, 131–137. doi:10.1111/j.1750-8606.2010.00131.x
- Neblett, E. W., Jr., White, R. L., Ford, K. R., Philip, C. L., Nguyễn, H. X., & Sellers, R. M. (2008). Patterns of racial socialization and psychological adjustment: Can parental communications about race reduce the impact of racial discrimination? *Journal of Research on Adolescence, 18*, 477–515. doi:10.1111/j.1532-7795.2008.00568.x
- Nesdale, D. (2004). Social identity processes and children's ethnic prejudice. In M. Bennett & F. Sani (Eds.), *The development of the social self* (pp. 219–245). New York, NY: Psychology Press.
- Nobes, G., Panagiotaki, G., & Pawson, C. (2009). The influence of negligence, intention, and outcome on children's moral judgments. *Journal of Experimental Child Psychology, 104*, 382–397. doi:10.1016/j.jecp.2009.08.001
- Nucci, L. P. (2001). *Education in the moral domain*. Cambridge, England: Cambridge University Press.
- Nucci, L. P., & Nucci, M. S. (1982). Children's responses to moral and social-conventional transgressions in free-play settings. *Child Development, 53*, 1337–1342. doi:10.2307/1129024
- Nunner-Winkler, G., & Sodian, B. (1988). Children's understanding of moral emotions. *Child Development, 59*, 1323–1338. doi:10.2307/1130495
- Nussbaum, M. (1999). *Sex and social justice*. Oxford, England: University of Oxford Press.
- Okin, S. M. (1989). *Justice, gender, and the family*. New York, NY: Basic Books.
- Olson, K. R., Shutts, K., Kinzler, K. D., & Weisman, K. G. (2012). Children associate racial groups with wealth: Evidence from South Africa. *Child Development, 83*, 1884–1899. doi:10.1111/j.1467-8624.2012.01819.x
- Olson, K. R., & Spelke, E. S. (2008). Foundations of cooperation in young children. *Cognition, 108*, 222–231. doi:10.1016/j.cognition.2007.12.003
- Oyserman, D., Coon, H., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3072. doi:10.1037/0033-2909.128.1.3

- Park, Y., & Killen, M. (2010). When is peer rejection justifiable?: Children's understanding across two cultures. *Cognitive Development, 25*, 290–301. doi:10.1016/j.cogdev.2009.10.004
- Parpal, M., & Maccoby, E. E. (1985). Maternal responsiveness and subsequent child compliance. *Child Development, 56*, 1326–1334. doi:10.2307/1130247
- Patrick, R. B., & Gibbs, J. C. (2012). Inductive discipline, parental expression of disappointed expectations, and moral identity in adolescence. *Journal of Youth and Adolescence, 41*, 973–983. doi:10.1007/s10964-011-9698-7
- Paulus, M., & Moore, C. (2014). The development of recipient-sharing behavior and sharing expectations in children. *Developmental Psychology, 50*, 914–921. doi:10.1037/a0034169
- Pellizzoni, S., Siegal, M., & Surian, L. (2009). Foreknowledge, caring, and the side-effect effect in young children. *Developmental Psychology, 45*, 289–295. doi:10.1037/a0014165
- Piaget, J. (1932). *The moral judgment of the child*. New York, NY: Free Press.
- Piaget, J. (1952). *The origins of intelligence in children*. New York, NY: International Universities Press.
- Piaget, J. (1970). *The principles of genetic epistemology* (W. Mays, Trans.). London, England: Routledge & Kegan Paul.
- Piotrowski, C. (1997). Rules of everyday family life: The development of social rules in mother-child and sibling relationships. *International Journal of Behavioral Development, 21*, 571–598. doi:10.1080/016502597384794
- Posada, R., & Wainryb, C. (2008). Moral development in a violent society: Colombian children's judgments in the context of survival and revenge. *Child Development, 79*, 882–898. doi:10.1111/j.1467-8624.2008.01165.x
- Poteat, V. P. (2007). Peer group socialization of homophobic attitudes and behavior during adolescence. *Child Development, 78*, 1830–1842. doi:10.1111/j.1467-8624.2007.01101.x
- Pratt, M. W., Hunsberger, B., Pancer, S. M., & Alisat, S. (2003). A longitudinal analysis of personal values socialization: Correlates of a moral self-ideal in late adolescence. *Social Development, 12*, 563–585. doi:10.1111/1467-9507.00249
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Recchia, H. E., Wainryb, C., Bourne, S., & Pasupathi, M. (2014). The construction of moral agency in mother-child conversations about helping and hurting across childhood and adolescence. *Developmental Psychology, 50*, 34–44. doi:10.1037/a0033492
- Rizzo, M., Elenbaas, L., Cooley, S., & Killen, M. (2014). *Children's conceptions of fairness regarding resource allocation*. Unpublished manuscript, University of Maryland.
- Ross, H. (1996). Negotiating principles of entitlement in sibling property disputes. *Developmental Psychology, 32*, 90–101. doi:10.1037/0012-1649.32.1.90
- Ross, H., & Conant, C. (1992). The social structure of early conflict: Interactions, relationships and alliances. In C. Shantz & W. Hartup (Eds.), *Conflict in child and adolescent development* (pp. 153–185). Cambridge, England: Cambridge University Press.
- Ross, H., Tesla, C., Kenyon, B., & Lollis, S. (1990). Maternal intervention in toddler peer conflict: The socialization of principles of justice. *Developmental Psychology, 26*, 994–1003. doi:10.1037/0012-1649.26.6.994
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer relationships, interactions, and groups. In N. Eisenberg (Ed.), *Social, emotional, and personality development*. Volume 6 of the *Handbook of child psychology* (6th ed., pp. 571–645). Editors-in-Chief: W. Damon & R. M. Lerner. Hoboken, NJ: Wiley.
- Ruble, D. N., Martin, C. L., & Berenbaum, S. (2006). Gender development. In N. Eisenberg (Ed.), *Social, emotional, and personality development*. Volume 6 of the *Handbook of child psychology* (6th ed., pp. 858–932). Editors-in-Chief: W. Damon & R. M. Lerner. Hoboken, NJ: Wiley.
- Ruck, M. D., Abramovitch, R., & Keating, D. P. (1998). Children's and adolescents' understanding of rights: Balancing nurturance and self-determination. *Child Development, 69*, 404–417. doi:10.2307/1132174
- Ruck, M. D., Tenenbaum, H., & Sines, J. (2007). British adolescents' views about the rights of asylum-seeker children. *Journal of Adolescence, 30*, 687–693. doi:10.1016/j.adolescence.2007.04.001
- Rutland, A., Killen, M., & Abrams, D. (2010). A new social-cognitive developmental perspective on prejudice: The interplay between morality and group identity. *Perspectives on Psychological Science, 5*, 279–291. doi:10.1177/1745691610369468
- Saxe, R. (2009). Theory of mind (neural basis). In P. B. Williams (Ed.), *Encyclopedia of consciousness* (p. 401–409). Oxford, England: Academic Press.
- Schult, C. A. (2002). Children's understanding of the distinction between intentions and desires. *Child Development, 73*, 1727–1747. doi:10.1111/1467-8624.t01-1-00502
- Sen, A. K. (2009). *The idea of justice*. Cambridge, MA: Harvard University Press.
- Severson, R. L., & Kahn, P. H., Jr. (2010). In the orchard: Farm worker children's moral and environmental reasoning. *Journal of Applied Developmental Psychology, 31*, 249–256. doi:10.1016/j.appdev.2010.02.003
- Shaw, A., Montinari, N., Piovesan, M., Olson, K. R., Gino, F., & Norton, M. I. (2013). Children develop a veil of fairness. *Journal of Experimental Psychology: General, 143*, 363–375. doi:10.1037/a0031247
- Shaw, A., & Olson, K. R. (2012). Children discard a resource to avoid inequity. *Journal of Experimental Psychology: General, 141*, 382–395. doi:10.1037/a0025907
- Shweder, R. A., Goodnow, J. J., Hatano, G., LeVine, R. A., Markus, H. R., & Miller, P. J. (2006). The cultural psychology of development: One mind, many mentalities. In R. M. Lerner (Ed.), *Theoretical models of human development*. Volume 1 of the *Handbook of child psychology* (6th ed., pp. 716–792). Editors-in-Chief: W. Damon & R. M. Lerner. Hoboken, NJ: Wiley.
- Sigelman, C. K., & Waitzman, K. A. (1991). The development of distributive justice orientations: Contextual influences on children's resource allocations. *Child Development, 62*, 1367–1378. doi:10.2307/1130812
- Sinno, S., Schuette, C., & Killen, M. (2014). Developmental social cognition about gender roles in the family and societal contexts. In H. Tenenbaum & P. J. Leman (Eds.), *Gender and development (Current issues in developmental psychology)* (pp. 133–154). London, England: Psychology Press/ Taylor & Francis Group.
- Skinner, B. F. (1950). Are theories of learning necessary? *Psychological Review, 57*, 193–216. doi:10.1037/h0054367
- Skinner, B. F. (1971). *Beyond freedom and dignity*. New York, NY: Knopf.
- Slomkowski, C. L., & Killen, M. (1992). Young children's conceptions of transgressions with friends and nonfriends. *International Journal of Behavioral Development, 15*, 247–258.
- Smetana, J. G. (1984). Toddlers' social interactions regarding moral and social transgressions. *Child Development, 55*, 1767–1776. doi:10.2307/1129924
- Smetana, J. G. (1985). Preschool children's conceptions of transgressions: The effects of varying moral and conventional domain-related attributes. *Developmental Psychology, 21*, 18–29. doi:10.1037/0012-1649.21.1.18
- Smetana, J. G. (1989). Toddlers' social interactions in the context of moral and conventional transgressions in the home. *Developmental Psychology, 25*, 499–508. doi:10.1037/0012-1649.25.4.499

- Smetana, J. G. (1997). Parenting and the development of social knowledge reconceptualized: A social domain analysis. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 162–192). New York, NY: Wiley.
- Smetana, J. G. (2006). Social-cognitive domain theory: Consistencies and variations in children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 119–154). Mahwah, NJ: Erlbaum.
- Smetana, J. G. (2011). *Adolescents, families and social development: How children construct their worlds*. West Sussex, England: Wiley.
- Smetana, J. G. (2013). Moral development: The social domain theory view. In P. Zelazo (Ed.), *Oxford handbook of developmental psychology* (Vol. 1, pp. 832–866). New York, NY: Oxford University Press.
- Smetana, J. G., Campione-Barr, N., & Yell, N. (2003). Children's moral and affective judgments regarding provocation and retaliation. *Merrill-Palmer Quarterly*, *49*, 209–236. doi:10.1353/mpq.2003.0010
- Smetana, J. G., Jambon, M., & Ball, C. (2014). The social domain approach to children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 23–45). New York, NY: Psychology Press.
- Smetana, J. G., Jambon, M., Conry-Murray, C., & Sturge-Apple, M. L. (2012). Reciprocal associations between young children's moral judgments and their developing theory of mind. *Developmental Psychology*, *48*, 1144–1155. doi:10.1037/a0025891
- Smetana, J. G., Rote, W. M., Jambon, M., Tasopoulos-Chan, M., Villalobos, M., & Comer, J. (2012). Developmental changes and individual differences in young children's moral judgments. *Child Development*, *83*, 683–696. doi:10.1111/j.1467-8624.2011.01714.x
- Smetana, J. G., Toth, S. L., Cicchetti, D., Bruce, J., Kane, P., & Daddis, C. (1999). Maltreated and nonmaltreated preschoolers' conceptions of hypothetical and actual moral transgressions. *Developmental Psychology*, *35*, 259–281. doi:10.1037/0012-1649.35.1.269
- Spiro, M. E. (1987). *Culture and human nature*. Chicago, IL: University of Chicago Press.
- Takagishi, H., Kameshima, S., Schug, J., Koizumi, M., & Yamagishi, T. (2010). Theory of mind enhances preference for fairness. *Journal of Experimental Child Psychology*, *105*, 130–137. doi:10.1016/j.jecp.2009.09.005
- Thompson, R. A. (2012). Whither the pre-conventional child? Toward a life-span moral development theory. *Child Development Perspectives*, *6*, 423–429.
- Thompson, R. A. (2014). Conscience development in early childhood. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 73–92). New York, NY: Psychology Press.
- Tisak, M. S. (1993). Preschool children's judgments of moral and personal events involving physical harm and property damage. *Merrill-Palmer Quarterly*, *39*, 375–390.
- Torney-Purta, J. (2002). The school's role in developing civic engagement: A study of adolescents in twenty-eight countries. *Applied Developmental Science*, *6*, 202–211.
- Tropp, L. R., & Prenovost, M. A. (2008). The role of intergroup contact in predicting children's inter-ethnic attitudes: Evidence from meta-analytic and field studies. In S. R. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 236–248). Oxford, England: Oxford University Press.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, England: Cambridge University Press.
- Turiel, E. (2006). The development of morality. In N. Eisenberg (Ed.), *Social, emotional, and personality development*. Volume 3 of the *Handbook of child psychology* (6th ed., pp. 789–857). Editors-in-Chief: W. Damon & R. M. Lerner. Hoboken, NJ: Wiley.
- Turiel, E. (2008). Thought about actions in social domains: Morality, social conventions, and social interactions. *Cognitive Development*, *23*, 136–154. doi:10.1016/j.cogdev.2007.04.001
- Turiel, E. (2014). Morality, epistemology, development, and social opposition. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 3–22). New York, NY: Psychology Press.
- Turiel, E., & Killen, M. (2010). Taking emotions seriously: The role of emotions in moral development. In W. Arsenio & E. Lemerise (Eds.), *Emotions in aggression and moral development* (pp. 33–52). Washington, DC: APA.
- Turner, R. N., Voci, A., & Hewstone, M. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, *93*, 369–388. doi:10.1037/0022-3514.93.3.369
- Vaish, A., Carpenter, M., & Tomasello, M. (2010). Young children selectively avoid helping people with harmful intentions. *Child Development*, *81*, 1661–1669. doi:10.1111/j.1467-8624.2010.01500.x
- Vaish, A., Missana, M., & Tomasello, M. (2011). Three-year-old children intervene in third-party moral transgressions. *British Journal of Developmental Psychology*, *29*, 124–130. doi:10.1348/026151010x532888
- van IJzendoorn, M. H. (1997). Attachment, emergent morality, and aggression: Toward a developmental socioemotional model of antisocial behaviour. *International Journal of Behavioral Development*, *21*, 703–727. doi:10.1080/016502597384631
- Verkuyten, M., & Thijs, J. (2002). Racist victimization among children in the Netherlands: The effect of ethnic group and school. *Ethnic and Racial Studies*, *25*, 310–331. doi:10.1080/01419870120109502
- Verkuyten, M., Weesie, J., & Eijberts, M. (2011). The evaluation of perpetrators and victims of peer victimization: An extended crossed-categorization approach. *European Journal of Social Psychology*, *41*, 324–334. doi:10.1002/ejsp.777
- Wainryb, C., & Brehl, B. A. (2006). I thought she knew that would hurt my feelings: Developing psychological knowledge and moral thinking. In R. V. Kail (Ed.), *Advances in child development and behavior* (Vol. 34, pp. 131–171). San Diego, CA: Academic Press.
- Wainryb, C., Brehl, B. A., & 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*, *70*. doi:10.1111/j.1540-5834.2005.00350.x
- 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., & Recchia, H. (2014). Moral lives across cultures: Heterogeneity and conflict. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 259–278). New York, NY: Psychology Press.
- Wainryb, C., Shaw, L. A., & Maianu, C. (1998). Tolerance and intolerance: Children's and adolescents' judgments of dissenting beliefs, speech, persons, and conduct. *Child Development*, *69*, 1541–1555. doi:10.2307/1132131
- Walker, L. J. (2006). Gender and morality. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 93–115). Mahwah, NJ: Erlbaum.
- Walker, L. J., & Frimer, J. A. (2007). Moral personality of brave and caring exemplars. *Journal of Personality and Social Psychology*, *93*, 845–860. doi:10.1037/0022-3514.93.5.845
- Walker, L. J., Hennig, K. H., & Krettenauer, T. (2000). Parent and peer contexts for children's moral reasoning development. *Child Development*, *71*, 1033–1048. doi:10.1111/1467-8624.00207

- Walker, L. J., & Taylor, J. H. (1991). Family interactions and the development of moral reasoning. *Child Development, 62*, 264–283. doi:10.2307/1131002
- Warneken, F., Chen, F., & Tomasello, M. (2006). Cooperative activities in young children and chimpanzees. *Child Development, 77*, 640–663. doi:10.1111/j.1467-8624.2006.00895.x
- Warneken, F., Lohse, K., Melis, A. P., & Tomasello, M. (2011). Young children share the spoils after collaboration. *Psychological Science, 22*, 267–273. doi:10.1177/0956797610395392
- Warneken, F., & Tomasello, M. (2007). Helping and cooperation at 14 months of age. *Infancy, 11*, 271–294. doi:10.1111/j.1532-7078.2007.tb00227.x
- Warneken, F., & Tomasello, M. (2009). The roots of human altruism. *British Journal of Psychology, 100*, 455–471. doi:10.1348/000712608x379061
- Watson, J. B. (1930). *Behaviorism* (Rev. ed.). New York, NY: W. W. Norton.
- Wellman, H. M. (1990). *The child's theory of mind*. Cambridge, MA: MIT Press.
- Wellman, H. M., & Liu, D. (2004). Scaling of theory-of-mind tasks. *Child Development, 75*, 502–517. doi:10.1111/j.1467-8624.2004.00691.x
- Wellman, H. M., & Miller, J. G. (2008). Including deontic reasoning as fundamental to theory of mind. *Human Development, 51*, 105–135. doi:10.1159/000115958
- White, S. F., Leong, K. K., Smetana, J. G., Nucci, L. P., & Blair, R. J. R. (2013). Neural correlates of conventional and harm/welfare based moral decision-making. Unpublished manuscript, National Institute of Mental Health.
- Wilson, T., & Rodkin, P. C. (2011). African American and European American children in diverse elementary classrooms: Social integration, social status, and social behavior. *Child Development, 82*, 1454–1469. doi:10.1111/j.1467-8624.2011.01634.x
- Woodward, A. L. (2009). Infants' grasp of others' intentions. *Current Directions in Psychological Science, 18*, 53–57. doi:10.1111/j.1467-8721.2009.01605.x
- Wray-Lake, L., & Flanagan, C. A. (2012). Parenting practices and the development of adolescents' social trust. *Journal of Adolescence, 35*, 549–560. doi:10.1016/j.adolescence.2011.09.006
- Wynn, K., & Bloom, P. (2014). The moral baby. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 435–453). New York, NY: Psychology Press.
- Yau, J., & Smetana, J. G. (2003). Conceptions of moral, social-conventional, and personal events among Chinese preschoolers in Hong Kong. *Child Development, 74*, 647–658. doi:10.1111/1467-8624.00560
- Young, L., & Saxe, R. (2011). When ignorance is no excuse: Different roles for intent across moral domains. *Cognition, 120*, 202–214. doi:10.1016/j.cognition.2011.04.005
- Yuill, N., Perner, J., Pearson, A., Peerbhoy, D., & Ende, J. (1996). Children's changing understanding of wicked desires: From objective to subjective and moral. *British Journal of Developmental Psychology, 14*, 457–475. doi:10.1111/j.2044-835X.1996.tb00718.x
- Zelazo, P. D., Helwig, C. C., & Lau, A. (1996). Intention, act, and outcome in behavioral prediction and moral judgment. *Child Development, 67*, 2478–2492. doi:10.2307/1131635