

SOCIAL AND MORAL DEVELOPMENT IN CHILDHOOD AND ADOLESCENCE: MENTAL STATE UNDERSTANDING, INTERGROUP INTERACTIONS, AND THE IMPORTANCE OF CONTEXT FOR CHILDREN'S HEALTH

Jacquelyn Glidden, Kathryn M. Yee, and Melanie Killen

Morality is a fundamental aspect of social existence, providing the basis for individuals to distribute resources fairly, respond to the distress of another, and treat others with mutual respect. The evolutionary heritage for morality in humans is evident in the empathy, altruism, and concern for others' welfare expressed by nonhuman primates (de Waal, 2018). What makes humans unique is the use of moral reasoning, which emerges in childhood and develops throughout the lifespan (Killen & Smetana, 2015). Over the past several decades in child development and developmental science research, theories and conceptualizations of morality have expanded beyond how individuals internalize the values and standards of a given culture and now consider an array of issues that arise at the intersection of morality and the development of other core social competencies.

Children's social and moral development is relevant for health professionals, including developmental-behavioral pediatricians, pediatric psychologists, social workers, and child clinical psychologists. In children's everyday life, conflicts arise around how to share toys and resources as well as whom to include and exclude in group contexts. Children bring multiple forms of reasoning to bear on their decisions for how to conceptualize these conflicts as well as resolve them. These forms of reasoning include moral reasoning regarding fair and equal treatment of others as well as group-based reasoning which refers to decisions that bear on group norms, group identity, and group dynamics. Additionally, children's understanding of mental states of others is fundamentally connected to their ability to judge right and wrong. Knowing that other people might have different perspectives or access

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to information is related to making judgments about acts that have consequences for others. Children's experiences involve many competing and interrelated factors that impact their ability to maintain harmonious and egalitarian relationships with others.

Exclusionary attitudes and a lack of fair distribution of resources are concerning behaviors because children who are recipients of unfair treatment are at risk for a number of negative outcomes, such as depression, anxiety, social withdrawal, and a lack of motivation to succeed (Killen & Rutland, 2022; Rivas-Drake et al., 2014). Further, children who lack mental state knowledge and theory of mind are unable to take their peers' perspectives into account resulting in difficulties related to solutions to conflicts that often involve bargaining, negotiation, turn-taking, and empathy. Children who do not display moral competencies are at risk for negative peer relationships which, in turn, create a cycle of negative interactions from childhood to adulthood. Thus, there is a call for health professionals to receive training in children's social and moral development.

Developmental science has addressed this call by identifying the circumstances in which children's moral cognition is related to other social capacities such as the ability to take others' perspectives or mental state knowledge (Lagattuta & Weller, 2014; Wellman, 2011) and social relationships that contribute to inclusive, tolerant, and just social interactions and relationships (Killen et al., 2022; Killen & Rutland, 2022). Principles of right and wrong are ubiquitous across societies, but the ways children confront moral dilemmas constantly change in development and are shaped by reciprocal social interactions (Smetana et al., 2014; Turiel, 2015). Moreover, extending beyond children's capacity for moral judgments, children recognize inequality and challenge unfair treatment of others. Investigating the development of morality leads to a clearer understanding of how children interpret and interact with the world.

Furthermore, the risk and protective factors for moral development include heightened aggressive

behaviors when the recognition to harm another is not understood (Hart & Ostrov, 2020; Jambon & Smetana, 2018). Moral judgment and other social-cognitive competencies lead to developmental and societal change (Killen & Dahl, 2021) with an implication that moral judgment serves as a protective factor, such as when children resolve conflicts constructively and desire to rectify inequalities and challenge unfair treatment of others (Elenbaas et al., 2020).

Children are not only the victims and the perpetrators of unfair treatment but also the resisters (Elenbaas et al., 2020). Understanding moral development through the lens of how to promote moral reasoning to create positive change in peer interactions provides a basis for interventions (Killen & Rutland, 2022). Children who experience unfair treatment in the form of prejudice and racism are at risk for toxic stress and negative health outcomes (Shonkoff et al., 2021). Thus, focusing on how children understand and apply principles of fairness, justice, rights, and others' welfare to their everyday lives, including peer and adult-child interactions, improves the developmental and behavioral health of children through providing an integrated understanding of the biopsychosocial, educational, and cultural influences on children, youth, and their families (Killen & Rutland, 2022; Rivas-Drake et al., 2014; Shonkoff et al., 2021).

During the 20th century, psychological science debated whether morality was solely a function of imitation and learning from parents or an outcome of cognitive developmental changes (see Killen & Smetana, 2015; Turiel, 1983, 2015). By the beginning of the 21st century, most developmental scientists agreed that morality refers to individuals' treatment of others with respect to fairness, others' welfare, equality, equity, and rights (Killen & Smetana, 2015). Moral judgment in childhood involves understanding others' intentions; morality research focuses on children's judgments about behaviors and beliefs about how individuals ought to treat one another.

This chapter overviews the current state of theory and research on moral development. It reviews key areas of developmental science

research on the role of morality in relation to children's mental state understanding, fair resource distributions, intergroup contexts, and multifaceted contexts. Benchmarks and areas that are relevant for developmental and behavioral pediatrics are discussed. These points pertain to capacities that children display at different points in development that may require focused attention from parents to facilitate healthy child development. The chapter concludes with a discussion of applications and curricula aimed at improving children's moral development and promoting intergroup relationships.

THE DEVELOPMENT OF MORAL JUDGMENT

Researchers first focused on stage theories of moral development. Piaget (1932) provided an in-depth two-phase theory and analysis of how moral judgment, understanding, and behavior change throughout childhood. In the first phase, children comply with rules set by authority figures. In the second phase, emerging around 8 to 10 years of age, children's morality becomes autonomous from adult rules and reflects concepts of justice and fairness. Current evidence supports the view that children's social judgments are domain-specific, not stage oriented (Helwig & Kim, 1999; Turiel, 2015). Rather than proceeding from a heteronomous stage, children (even infants) make moral judgments about the intrinsic negative consequences of acts (Helwig & Kim, 1999) and do not evaluate acts as right or wrong solely based on authority mandates. Piaget also theorized that the transition from heteronomous authority-oriented morality to autonomous morality is due to peer interactions. Piaget asserted that the equal status present in peer interactions promotes mutual respect and conceptions of equality and fairness. Current research has confirmed that peer relationships (particularly friendships) play an integral role in children's changing understanding and application of fairness.

Kohlberg (1971) extended Piaget's theory to include an underlying logic necessary for children's moral judgment to develop. He developed a

six-stage theory, organized in three levels of moral thinking: preconventional, conventional, and postconventional (Colby & Kohlberg, 1987). However, Kohlberg's framework of the invariance of the sequence of stages has been difficult to validate empirically, and his theory focused on adolescent rather than child development.

THEORIES OF MORAL DEVELOPMENT

Researchers today conceptualize development in terms of different domains of knowledge for cognitive development (Adolph et al., 2006) and for social and moral development (Smetana et al., 2014; Turiel, 1983). Domain-specificity models of development examine age-related changes in a domain of knowledge rather than across all domains of knowledge because children show different rates of development for different types of knowledge and concepts. In the area of moral judgment, children show competency and ability to reason about fairness, equality, equity, and justice early on. Furthermore, young children are capable of reasoning about complex dilemmas and can differentiate moral from nonmoral concepts from a very early age.

Social Domain Theory

Social domain theory asserts that morality is one of three domains of social knowledge, all constructed through social interactions that coexist across development (Nucci, 2001, 2009; Smetana, 2006; Smetana et al., 2014; Turiel, 1983, 2006, 2015). This approach demonstrates that different domains of reasoning coexist throughout development. The three domains are the moral (issues of fairness, rights, and justice), societal (conventions, traditions, and customs), and psychological (personal goals, autonomy, and identity). Children reason in all three domains from very early in development, even as young as 3–4 years old (Helwig et al., 2014; Hitti et al., 2017; Horn & Sinno, 2013; Mulvey et al., 2016; Nucci, 2009; Recchia et al., 2012; Smetana et al., 2014; Wainryb, 2004). In the moral domain, young children can evaluate moral transgressions as wrong even when there is no punishment or

authority mandate, evidence that contrasts with aspects of Piaget's and Kohlberg's stage theories. This is important information for tracking children's healthy development; children who evaluate rule transgressions as wrong solely as a matter of avoiding punishment or violating an adult's rule are at risk for negative interpersonal interactions given that they do not recognize the intrinsic consequences of harming others (Smetana, 1999). Children who are aggressive with peers are at risk for peer rejection that contributes to a host of negative social and emotional outcomes (Rubin et al., 2015).

Children's focus on certain domains varies by context as children reason in the moral domain in some situations but in societal or psychological domains at other times. However, children can weigh multiple considerations in multifaceted contexts when moral (fairness), social-conventional (traditions), and psychological (personal) concerns are all at play and have strong reasoning skills by adolescence. In such situations, children and adolescents give priority to one concern while still considering multiple factors.

Social Reasoning Developmental Model

Expanding social domain theory to incorporate how groups and group identity impact children's moral reasoning, the social reasoning developmental (SRD) model focuses on how children reason about morality in sociocultural contexts when giving priority to traditions over fairness results in prejudicial or biased decisions (Killen & Rutland, 2011). The SRD model examines children's social reasoning in intergroup contexts, namely situations in which group affiliation (e.g., gender, ethnicity, nationality, socioeconomic status) may be salient. Group affiliation has the potential to create in-group preference and outgroup dislike (Dovidio et al., 2003). The larger sociocultural context includes how children consider social groups, group norms, and group dynamics between individual and group attitudes and relationships when making moral judgments (Killen & Rutland, 2011). In many situations, a child may personally want to treat others fairly, but doing so could be seen as being disloyal to

their own group. Children often reason about societal considerations, such as group functioning, identity, and norms, to justify social exclusion based on group membership and reason about morality to reject exclusion (Mulvey, 2016). However, children's prioritization of concerns in the moral, societal, and personal domains depends on the salience of a given identity and their understanding of intra- and intergroup dynamics.

With age, children's understanding of group dynamics becomes increasingly sophisticated, expressing sensitivity to group norms (Killen et al., 2013; McGuire et al., 2017; Nesdale et al., 2005), giving priority to group loyalty (Abrams et al., 2003; Rutland & Killen, 2015), and striving to maintain group functioning (Killen & Rutland, 2011). Although young children also reason about groups and fairness, older children are better able to weigh the competing concerns ingroup loyalty and fairness for the outgroup.

Age-related changes in moral reasoning are often attributed to increasing sophistication of social cognitive abilities, as children come to understand others' perspectives (e.g., theory of mind; Lagattuta & Weller, 2014; Rizzo & Killen, 2018b; Wellman & Liu, 2004) and gain social experiences with peers from different backgrounds (e.g., intergroup contact theory). Theory of mind, children's ability to understand that other individuals have different beliefs, desires, and intentions, from the self, emerges slowly from infancy to adolescence with notable periods of growth around 4 and 10 years of age (Sodian et al., 2020). Knowing that other individuals have different intentions from one's own enables children to recognize diversity among perspectives and challenge stereotypic expectations that often assume homogeneity of outgroups (that individuals in a particular group all think the same way). Experiences with peers from different backgrounds (based on gender, ethnicity, nationality) enable children to form friendships that help them to reject exclusionary attitudes and behaviors (Rutland & Killen, 2015). Under certain conditions, intergroup contact reduces prejudice and bias (Pettigrew & Tropp, 2006; Tropp & Molina, 2012).

RESEARCH IN MORAL DEVELOPMENT

Children's moral development occurs in many contexts and is influenced by both cognitive abilities (theory of mind) and contextual factors (situations where resources have been distributed unfairly or when accidental transgressors have positive intentions). The following discussion focuses on four contributing factors to children's moral development: mental state understanding, understanding resource distributions, and intergroup contexts.

Morality and Mental State Understanding

Children's understanding of others' mental states (theory of mind; ToM) and moral judgments coexist in a bidirectional relation, as understanding intentionality is necessary to form moral judgments, which form in part from interpreting others' intentions (Leslie et al., 2006). As children develop and solidify their skill in understanding mental states, they interact with peers in diverse contexts that require accurate perspective taking (Fu et al., 2014; Killen et al., 2011; Lagattuta et al., 2016; Tsoi & McAuliffe, 2020). ToM develops gradually between 3 and 6 years of age (Wellman & Liu, 2004). During this time, dramatic shifts in children's abilities to infer mental states are often revealed (Shahaeian et al., 2011; Wellman et al., 2001). Children advance from not understanding that others have different mental states than themselves to understanding that others can have different intentions, beliefs, desires, knowledge, emotions, and more. Additionally, individual differences in rates of acquisition of ToM skills are noteworthy (Carlson & Moses, 2001; Hughes & Devine, 2015).

Moral judgments require understanding the intentions of others. A positively intended action with negative outcomes is evaluated differently from a negatively intended action with positive outcomes; the former is viewed as consistent with moral considerations about others' welfare, and the latter is viewed as inconsistent with moral judgments. Not all moral judgments require ToM skills: hitting someone can be viewed as wrong, even in the absence of ToM skills. Yet, many situations that are morally relevant require ToM skills

because one needs to know that another individual may have different intentions from one's own.

Children's understanding of mental states, such as others' intentions, informs their decisions about fairness. Three- to 4-year-olds who understand intentions (i.e., whether someone knocked over a tower of blocks on purpose or by accident) are more likely to give resources to those who need it or who have less than others, indicating that understanding underlying intentions of actions is related to prosocial behavior (Chernyak & Sobel, 2016). Mental state understanding is also important for children's recognition that stereotypical expectations of others are often wrong or unfair. Preschoolers with better ToM skills are more likely to ignore or dismiss stereotypic expectations of others when sharing or allocating resources (Rizzo & Killen, 2018b; Smetana et al., 2012). For example, when children are asked to evaluate rewards for effort when a boy and girl both work hard to make blue monster trucks (a stereotypic boy behavior), children with ToM are more likely to evenly divide the rewards between the boy and girl, but children without ToM give more rewards to the boy, even when both children made the same number of trucks (Rizzo & Killen, 2018b). This finding suggests that children actively use mental state knowledge to inform their moral understanding, evaluations, and decisions. Children who lack ToM have difficulties with peer relationships due to the lack of an ability to recognize that others have different desires and intentions (Lagattuta et al., 2016).

Killen and colleagues (2011) focused on the intersection of morality and mental state understanding by measuring children's morally relevant theory of mind (MoToM). Children witness a change in location of an object and must infer that someone who did not witness the change of location will look in an incorrect location. Specifically, the MoToM task includes assessments of location change and false contents when the object transferred was owned by someone and viewed as special, the owner was out of the room, and the potential transgressor was unaware of the value of the object for the owner. Children without ToM were more likely to assign blame

to an accidental transgressor than were children with ToM abilities. MoToM skills served as better predictors of children's attributions of intentions of the accidental transgressor than did prototypical ToM skills, indicating that children's mental state understanding and moral development inform each other. Similarly, 4- to 7-year-old Chinese children's second-order false belief understanding relates to their moral development (Fu et al., 2014). Second-order ToM skills are abilities to think and reason about mental states embedded in other mental states (e.g., "He thinks that she thinks that . . ."). Possessing second-order ToM skills allows children to understand the positive intentions of an accidental transgressor and not assign blame. In all, mental state understanding plays a critical role in moral reasoning and understanding, allowing children to differentiate between intentional and unintentional harm.

Children struggle to avoid making accusations of wrong intentions in situations that involve competition, but ToM reasoning helps alleviate this difficulty. ToM is relevant for determining whether it is fair or unfair to make accusations (understanding that another individual is making an accusation without enough information). Children ages 4 to 10 years of age were assigned to a team to compete in a pumpkin-growing contest (D'Esterre et al., 2019). In one situation, a member of the team unintentionally fed the pumpkins more than the rules stipulated because they were acting on a false belief that the pumpkins had not been fed; that team won the contest. In another situation, a member of the team intentionally fed the pumpkins extra plant food (violating the rules), knowing that the pumpkins had already been fed; that team also won the contest. Overall, children who identified with the team in which the ingroup team member acted unintentionally recognized the difference between the unintentional cheater and the intentional cheater, whereas children who identified with the team in which the outgroup member acted unintentionally did not differentiate between the two contexts. Moreover, when asked whether they thought that the cheater should be punished or excluded from the team, children were more

likely to endorse punishment and exclusion when reasoning about an opponent than a teammate. However, these differences were not found when ingroup and outgroup members reasoned about punishment for a character who intentionally violated the rules of the competition. With increasing age, children were less likely to endorse exclusion of an unintentional transgressor. Group identity and age both influence children's recognition of the importance of intentions that underlie actions.

In a related study, children were assessed for their ToM using a false belief task that was relevant for the cheating context (Glidden et al., 2021). This assessment measured children who recognized that the character in the story acted on a false belief (that the pumpkins had already been fed). Children who recognized the false belief did not view the act as warranting exclusion or punishment in contrast to their view about the character who intentionally violated the rule and should be punished. These findings demonstrate that group identity influences children's attributions of positive or negative intentions of others and that understanding ToM diminishes the role of ingroup bias and increases children's priority for fairness. The implication for children's healthy development is that promoting opportunities to diminish ingroup bias and to facilitate mental state knowledge are important for reducing biases as well as for promoting positive relationships.

Children's mental state understanding is also accessed more for complex social and moral encounters than for straightforward transgressions. Preschool-aged children display a better understanding of intentions and motivations for intentional rather than accidental transgressions (Loureiro & Souza, 2013). Children's intergroup experiences shape their application of mental state understanding to others. Belief emotion ToM skills refer to understanding that someone's emotions will reflect their beliefs. When 3- to 7-year-olds were placed in groups based on their gender and then found their team disadvantaged due to factors outside of their control (e.g., denied resources because their team was all girls or boys), they were better at accurately identifying the

mental states of others via false belief and belief emotion ToM skills (Rizzo & Killen, 2018a). Thus, mental state understanding can be motivational in nature; children who were disadvantaged because of their gender were more likely to read the social context carefully, particularly considering the false beliefs and belief emotions held by others in the same situation. This work is consistent with evidence that social context and experience play important roles in children's ToM abilities.

In brief, children's understanding of mental states plays an important role in their abilities to judge and reason about right and wrong. A fundamental part of determining whether an action is right or wrong involves understanding the intentions of the actor and the mental states and consequences for the victim. As young children do not command a fully developed understanding of mental states, it is difficult for them to determine whether a behavior is fair or unfair, especially when intentions are ambiguous or outcomes are ambivalent. A longitudinal study of 2½- to 4-year-old children's ToM skills and moral judgments confirmed that children's developing ToM skills are associated with their moral judgments (Smetana et al., 2012). Furthermore, children's moral understanding also predicted their ToM competence, suggesting that children's moral judgments and mental state understanding are bidirectional processes, with improvements in one area associated with improvements in the other.

Morality and the Fair Distribution of Resources

One indicator of children's moral development is their understanding of fairness regarding resource allocation (Baumard et al., 2012; Chernyak et al., 2019; Rutland & Killen, 2017). Understanding fairness is essential for developing a sense of the just and equal treatment of others. Children's moral evaluations shift from prioritizing strict equality to incorporating contextual factors, such as merit or need, into their thinking (Rizzo et al., 2016). Younger children typically allocate resources equally regardless of the recipients' initial advantages or disadvantages, but older

children systematically allocate resources equitably, taking need or disadvantaged state into account (Elenbaas, 2019; Killen & Smetana, 2015; Rizzo et al., 2016). Several factors contribute to fair resource distribution decisions including age, group processes, and types of resource (necessary vs. luxury; Rizzo et al., 2016). The following brief review highlights the nuanced ways in which children evaluate and distribute resources as well as contextual factors that impact those decisions, evaluations, and reasoning.

Children ages 3 to 6 years evaluate ingroup members who allocated more resources to their group more negatively than ingroup members who allocated evenly to their group and to an outgroup (Cooley & Killen, 2015). This early distinction between fair and unfair resource distributions sheds light on children's moral development, showing that very young children provide different types of justification when they judge resource distributions as fair or unfair.

Although age impacts children's evaluations and decisions surrounding resource distributions, type of resource is also a significant factor, such as luxury resources (items that are just for enjoyment, such as candies, stickers, or erasers) versus necessary resources (items that are required for well-being or help to avoid harm, such as medical supplies, water, or school supplies). Children 3 to 5 years of age do not differentiate between distributing luxury and necessary resources, whereas children 6 to 8 years of age make this distinction. Children typically prioritize others' welfare when allocating necessary resources, suggesting that children recognize the necessity of these resources and that equal distribution of resources for individual welfare is a moral concern. Thus, not only are children able to identify that the fair distribution of resources is a moral concern, but they are also able to differentiate between type of resource and use moral reasoning to allocate resources. In a similar study, 3- to 5-year-olds differentiated necessary and luxury resources and simultaneously considered the needs of the recipient (Essler et al., 2020). When considering necessary resources, these preschoolers are just as likely to give equitably

(e.g., giving more resources to a poor recipient) as they were to give equally (e.g., giving the same number of resources to the wealthy and poor recipients); however, when considering luxury resources, these preschoolers were far more likely to give resources equally. This differentiation between type of resource and characteristics of the recipient demonstrates children's ability to weigh multiple contextual concerns when making moral decisions.

Children's preference for fairness and recognition that fair resource distributions are moral concerns can lead them to avoid inequity in resources altogether (Blake et al., 2015). In one study, 3- to 8-year-olds were willing to allow an experimenter to throw away a luxury resource (highly desirable eraser) to avoid distributing the resources unequally (Shaw & Olson, 2012). This set of studies included children in both the United States and South Africa and showed that children in both countries were also willing to throw away a full-sized Hershey chocolate bar to distribute resources equally. However, when merit was introduced into the paradigm by saying that some recipients worked harder than other recipients, children then chose to distribute the resources unevenly in favor of the hard-working recipient. Children's desires for fair, equal distribution of resources are generally robust and often found across cultural settings.

In addition to contextual factors (such as type of resource and recipient characteristics) individual, child-level contextual factors also affect children's resource allocation evaluations and decisions. Personal need can impact both sharing behavior and concerns for fairness in children ages 4 to 9 years (Huppert et al., 2020). In this study, children were tested during lunch time and self-reported their own hunger levels. Children then participated in a game where they could share their food resources with an anonymous other child. Hungrier children chose to keep more food resources for themselves compared with nonhungry children. However, children expected others to share equally, even if the other child was hungry. Generally, children's own experiences and needs, such as hunger, can impact their resource

distribution decisions, especially when sustenance depends on those resources.

Young children show strict preferences for equality, but older children consider other factors, such as type of resource, needs of recipients, and even the power and status of the participants. Contextual and individual factors, such as whether a child is hungry, can impact how they distribute resources, such as giving fewer food resources to others. Children's decisions and evaluations of resource distributions are complex and reveal that children consider multiple factors when deciding what is fair and not fair in the context of resource distributions. One such factor is the intergroup context, that is interacting in groups that vary by gender, ethnicity, religion, and wealth, among other group identity categories, which are discussed next.

Morality in Intergroup Contexts

Humans identify with multiple social groups, which vary in salience depending on the context (Brown & Gaertner, 2008). For instance, identity based on hair color is less significant for individuals than skin color or gender (Brown & Gaertner, 2008). The salience of a group depends on its history as well as the context in which it occurs and its characteristics, such as status, social hierarchies, and prestige. Because these social categories also form the basis for exclusion and discrimination, moral norms about fair and just treatment of others serve as an important process for maintaining harmony and positive intergroup interactions (Rutland & Killen, 2015).

Intergroup contexts offer significant opportunities for children to meet others from different perspectives and backgrounds, which exposes them to the range of individuals that they will ultimately encounter as members of society and the workforce. Prejudice and bias based on group identity can lead to exclusionary situations in childhood (Griffiths & Nesdale, 2006; Verkuyten, 2007). Ingroup biases are reflected in tendencies to favor, prefer, like, or positively evaluate individuals with whom children share group membership (ingroup members) compared with those with whom they do not share membership

(outgroup members). Ingroup preference is often a precursor for outgroup dislike, but one does not always lead to the other (Dovidio et al., 2003; Nesdale & Lawson, 2011). Patterns of ingroup liking and outgroup dislike have been found across many studies, with children of many ages, and with many types of outcome measures (resource allocation, inclusion/exclusion).

Ingroup biases can impact children's moral judgments and reasoning about others' mental states. For example, 5- to 6-year-old children spontaneously use more mental state words, referencing desires (liking, knowing, wanting), emotions (angry, upset), and intentions (to be naughty), when talking about ingroup members compared with outgroup members (McLoughlin & Over, 2017). Six-year-old children use more mental state words when reasoning about ingroup members. Differentiating between mental states of ingroup and outgroup members is a sign of emerging ingroup bias. In more ambiguous scenarios, group identity impacts children's ability to attribute intentions to others. McGlothlin and Killen (2006, 2010) investigated racial biases in 6- to 10-year-old children by showing them illustrations which could be interpreted such that a character was either being helpful or hurtful (either pushing someone down or helping them up). The researchers used two versions of a vignette, one in which the potential transgressor was European American and the victim was African American and a second one in which it was reverse. European American children attending racially homogenous schools were more likely to assume helpful intentions when the potential transgressor was a racial ingroup member than when the potential transgressor was a racial outgroup member, whereas European American children attending diverse schools and reporting cross-race friendships did not reveal any biases. Moreover, African American children attending diverse schools did not display any biases. Thus, the role of school diversity and intergroup contact appeared directly related to children's use of race to infer negative intentions.

Children's ingroup biases may lead them to evaluate neutral or ambiguous acts as more

negative or intentionally harmful, but only for outgroup members who are dissimilar from the children themselves (Lieberman et al., 2018). This kind of thinking can negatively affect the child in multiple environments (i.e., in the neighborhood, at school, in sports groups, or academic groups), and repeated instances of ingroup favoritism and outgroup dislike can potentially become habitual and more ingrained in children's views of the world and expectations of those around them. Furthermore, children growing up in racially homogenous environments or in situations with little outgroup contact are more susceptible to these biases and consequential negative outcomes can persist in development (Brown et al., 2007; McGlothlin & Killen, 2006). In fact, European American majority children attending racially heterogenous schools do not display any bias when attributing intentions in the same ambiguous situations presented to European American majority children attending racially homogeneous schools (McGlothlin & Killen, 2010). Children's own group identity and group biases impact their moral judgments, such as assigning blame in a situation in which intent is not clearly identified.

Children's language biases also impact their reasoning about moral and social-conventional violations. Children ages 3 to 8 years were native English speakers and heard vignettes where English-speaking or French-speaking characters performed positive or negative actions (Lieberman et al., 2018). Older children (ages 7 to 11 years) were more likely to expect a French-speaking outgroup member to behave negatively and commit a moral transgression than an English-speaking ingroup member. Ultimately, children use multiple indicators to have ingroup/outgroup biases about others' moral actions.

Children likewise consider group membership when reasoning about moral issues, even when they do not exhibit ingroup biases. For example, Saudi Arabian children (8 to 10 years old) differentially evaluate the acceptability of peers and fathers excluding another child based on religion (Alsamir & Tenenbaum, 2018). Children believed it was more acceptable for fathers than peers to exclude based on religion and were more likely

to use social conventional reasoning to justify their position.

In some contexts, adolescents deem it morally unacceptable to exclude based on group identity. One study investigated exclusion evaluations of Jewish-American and a non-Jewish American comparison group. Both Jewish and non-Jewish adolescents (14- and 17-year-olds) overwhelmingly rejected exclusion based on cultural membership across contexts: friendship group, family gathering, or community event (Brenick & Killen, 2014). Adolescents in Nepal who were interviewed about the potential for a cross-SES friendship (a high- and low-SES peer dyad becoming friends) rejected parental messages that disapproved of this type of friendship (particularly from high-SES parents) using moral reasons (Grütter et al., 2021); this was the case for adolescents from both high- and low-SES backgrounds. Furthermore, Nepalese adolescents attending diverse SES schools were more likely to be inclusive toward a low-SES peer than were adolescents attending high-SES schools (Grütter et al., 2022). Thus, adolescents rejected exclusion based on group membership, even when the excluded individual was a cultural outgroup member. Although children and adolescents consider group identity when making moral evaluations and can be impacted by their own-group biases, they do not necessarily find group-based exclusion acceptable.

Social interactions and moral development occur in intergroup contexts from very early in development. Young children often give priority to fairness, equity, and rights in the context of intergroup interactions, yet children also demonstrate group biases for preferring ingroup members over outgroup members. Age, group identity, context, intergroup contact experiences, and social-cognitive capacities moderate moral decision making. The next section describes research on social exclusion and the social-cognitive factors that influence social inclusion and exclusion decisions by peers.

Group identity and social exclusion. Social exclusion based on group memberships presents another multifaceted context in which to consider

children's moral development. As children's moral understanding develops, they gain more experience interacting and identifying with different social groups. Children's understanding of social groups and group memberships impacts their moral decisions and reasoning. Preschool children are aware of group memberships, but often have had little direct experience with groups, therefore limiting the ways that group membership impacts their decisions about social exclusion. For example, over 95% of 3- to 6-year-olds view race-based exclusion as wrong (Guerrero et al., 2017). Children cited moral concerns about fairness when justifying the unacceptability of race-based exclusion. Only 60–70% of preschool children viewed gender-based exclusion as wrong (Theimer et al., 2001). Children who thought gender-based exclusion was acceptable were more likely to cite social conventions (e.g., “boys don't play with dolls”) rather than moral concerns (e.g., “it wouldn't be fair”). Young children typically reject exclusion based on group memberships such as ethnicity and gender but also consider conventions associated with different groups.

During early childhood children affiliate with multiple peer groups (Killen et al., 2017). Danish children (8, 10, and 12 years old) express social judgments and reasoning that depend on the identities of the perpetrator and victim of exclusion (Møller & Tenenbaum, 2011). Specifically, children view exclusion based on ethnicity as less acceptable than exclusion based on gender. Children also differ in their reasoning, using more moral reasoning when rejecting ethnicity-based exclusion and social-conventional reasoning when accepting gender-based exclusion. Children also evaluate exclusion perpetrated by a teacher as worse than when exclusion is perpetrated by children. As they age, children increasingly perceive exclusion based on ethnicity and gender as worse (Møller & Tenenbaum, 2011). Children are complexly thinking about social exclusion, varying their reasoning based on perpetrator of social exclusion (teacher vs. peer), type of exclusion (gender vs. ethnicity), and age.

Older 8- to 11-year-olds vary their judgments of social exclusion based on economic status and geographic location, authority of the perpetrator (peer vs. principal), and context of the exclusion (in the school vs. outside of the school with peers; Tenenbaum et al., 2018). Generally, children believe exclusion is less acceptable in peer contexts (compared with school contexts) and when children (compared with principals) were perpetrators of exclusion. The 11-year-olds generally thought exclusion was worse than 8-year-olds. Also, 8-year-olds rated exclusion based on economic status as worse than exclusion based on geographic locations, but 11-year-olds rated the two contexts similarly. Children evaluate social exclusion by considering the group basis of exclusion, the perpetrator, and the context (school or peer).

Taken together, social exclusion based on group identity is a multifaceted issue for children. In some situations, children recognize that exclusion is unfair and wrong; in other situations, children view it as legitimate and even necessary to make groups function well (McGuire et al., 2017). Furthermore, children evaluate exclusion based on certain group identities, such as ethnicity, as more wrong than other groups, such as gender.

Understanding the development of morality in children must consider a number of cognitive and contextual factors. The following section focuses on risk and protective factors for equity and inclusion and recounts an intervention program designed to address the issue of prejudice and exclusion in childhood by facilitating children's moral development.

RISK AND PROTECTIVE FACTORS FOR EQUITY AND INCLUSION

Moral judgment, ToM capacities, and positive experiences with diverse peers provide protective factors against unfair treatment, exclusion, and discrimination. Children who understand fairness and equity are more likely to rectify inequalities when given the opportunity. Examples include distributing more educational supplies to schools associated with ethnic minority than ethnic majority students (Elenbaas & Killen, 2016).

Furthermore, children with ToM capacities are more likely to consider disadvantaged status (Rizzo & Killen, 2018a). Lacking these capacities, children may become the perpetrators of unfair treatment and fail to recognize the wrongfulness of exclusionary behavior based on stereotypic expectations. Unfortunately, children are exposed to many negative stereotypic messages about ethnic and racial minority peers as well as those about gender stereotypes and other marginalized groups. One way to address negative interactions is to promote intergroup friendships, foster ToM capacities, and encourage children to use moral reasoning (Killen & Dahl, 2021).

Furthermore, maltreated and neglected children are capable of making straightforward moral judgments but often experience difficulties in complex situations involving ambiguity about intentions and situations that involve group identity (Smetana, 1999; Smetana, Jambon, et al., 2014). Thus, public health care workers such as developmental-behavioral pediatricians and pediatric psychologists could incorporate assessments of moral judgments, ToM, and attributions of intentions in assessments for children who have been victimized to determine how best to facilitate their return to healthy development. In some contexts, disadvantaged status poses a clear threat to positive intergroup relations such as has been documented with children exposed to violence. In a study in Colombia, children with an increased exposure to violence (shanty towns outside of Bogota in contrast to middle-income Cartagena neighborhoods) at ages 6, 9, and 12 years were assessed for their moral judgment responses to a range of contexts including retribution, retaliation, and reconciliation (Ardila-Rey et al., 2009). Children in both contexts viewed an act of hitting as wrong. With high exposure to violence, however, children viewed retaliation and retribution as legitimate ("you have to survive") in contrast to children with low exposure to violence ("it's not right to hit someone back because they will feel the pain, too"). Exposure to violence was related to beliefs that it is legitimate to inflict physical and psychological harm on others as a method for achieving retribution.

A hopeful sign was that children with high exposure to violence also viewed reconciliation as necessary (“we have to live together”). Thus, fostering moral reasoning helps children to recognize what makes retribution and retaliation as wrong.

APPLICATIONS AND INTERVENTION PROGRAMS

Applications and curricula programs in childhood have been developed to reduce prejudice and bias by enabling children to identify unfair and unequal treatment of others and to diminish forms of ingroup bias that trigger outgroup distrust. One line of research aimed at reducing prejudice and bias among children has focused on the positive impact of intergroup contact (Brown et al., 2007; Dovidio et al., 2003; Pettigrew & Tropp, 2006; Tropp & Molina, 2012). Optimal conditions for reducing prejudice occur when the following conditions are met: Equal status exists between groups, groups hold common goals, and authority figures support intergroup contact. Under these circumstances, cross-group friendships can be formed (Pettigrew & Tropp, 2006; Tropp & Molina, 2012).

Cross-group friendships reduce prejudice and bias from childhood to adulthood (Tropp et al., 2014; Tropp & Prenovost, 2008) and improve moral outcomes in childhood (Killen et al., 2022). Two types of cross-group friendships are indirect and direct (Rutland et al., 2005; Turner & Cameron, 2016). Indirect friendships (indirect contact) refer to children hearing, reading, or learning about peers from different groups who become friends. Direct friendships (direct contact) involve the child personally participating in a cross-group friendship (Baron, 2015). Both types of experiences help children to combat stereotypes and recognize the harm of prejudice or excluding others based on group memberships (Rutland & Killen, 2015). Contact-based interventions are a promising method for reducing prejudice and bias among children and promoting intergroup friendships.

Some interventions target prejudice directly, focusing on a specific type of prejudice (e.g., racial,

gender). Berger and colleagues (2016) created a contact-based intervention program to reduce prejudice and bias and increase intergroup friendships via an Arab-Jewish class exchange program in Jaffa, Israel. Arab and Jewish 10-year-olds exchanging classes and participating in activities to promote positive intergroup contact. Students in this experimental program expressed more positive thoughts about ethnic outgroups and had less emotional prejudice toward them (Berger et al., 2016). Contact-based interventions can reduce prejudice and increase intergroup friendships in the real world.

Media-based interventions also reduce prejudice. Cole and colleagues (2003) conducted a media-based intervention developed by Sesame Street Workshop in the Middle-East with preschool-aged children. Children had more positive expectations about intergroup friendship following episodes which modeled intergroup contact. This example of a digitally presented indirect contact intervention shows that merely observing positive intergroup interactions can positively impact children’s own expectations and understanding of intergroup contact and cross-group friendships.

Brief interventions of indirect contact can also have a positive impact on children’s intergroup expectations. Johnson and Aboud (2017) found that an indirect contact intervention during two laboratory sessions, 5 days apart, was effective in improving European American 8-year-olds’ attitudes about African American peers. In instances where long-term or large-scale contact interventions are not possible, indirect contact interventions can be similarly effective. This has important implications for teachers and educators, who could potentially improve cross-group friendships and attitudes in their classrooms by incorporating books and lessons that demonstrate and support cross-group friendships.

Indirect contact research has been applied to many different social groups, not just racial and ethnic groups. Work by Cameron and Rutland (2006) showed that 5- to 10-year-old children reduced prejudice toward disabled children after participating a 6-week storybook intervention. This exposure to indirect contact between able-bodied

and disabled children led to increased positive attitudes toward the disabled, highlighting how children can have exclusionary and prejudiced attitudes toward many groups, but indirect contact can reduce this prejudice.

One 8-week intervention program, *Developing Inclusive Youth*, focuses on improving children's cross-group friendships by showing children the benefits of cross-group inclusion and the potential negative consequences of cross-group exclusion, across multiple group memberships (e.g., ethnicity, gender, wealth status, and immigrant status) in one comprehensive program (Killen et al., 2022). This multisite randomized control trial with 983 children from the 3rd, 4th, and 5th grades (8 to 10 years old) showed significant outcomes: Children in the program were more likely to view interracial and same-race peer exclusion as wrong, associate positive traits with peers of different ethnic and gender backgrounds, attribute more positive math and science competency beliefs to diverse peers, and express a desire for intergroup contact with peers. Researchers can tackle reducing prejudice and improving intergroup friendships across multiple groups simultaneously showing how basic research has broader implications for changing children's attitudes in the school context.

Although mental state understanding and ToM skills are known to be important contributors to children's moral development and selection of intergroup friends, less is known about the role of cross-group mental state knowledge in reducing prejudice and increasing cross-group friendships. Intervention work that improves ToM skills shows promising results. For example, a discussion-based training intervention for 9- to 10-year-olds (children participated in four ToM training discussions which encouraged them to consider mental states of fictional characters) found that those who participated in ToM training improved in ToM independent of any changes in their executive function skills (Lecce et al., 2014). The follow-up ToM test took place 2 months after completion of the ToM training and showed that improvements in ToM were still present.

Children are less likely to spontaneously attribute mental states to outgroup members (McLoughlin & Over, 2017), which may negatively impact their desire for cross-group friendships or limit their understanding of the harm associated with group-based social exclusion. Future work should consider the potential benefits of promoting mental state understanding across social groups as a possible mechanism for decreasing prejudice and increasing the likelihood of cross-group friendships.

CONCLUSION

As this chapter demonstrates, children's morality is a central focus among developmental scientists and their work focuses on an array of issues that reflect the intersections and overlap of morality with other core social competencies. This chapter recounts key areas of developmental research, such as the role of morality in relation to children's mental state understanding, fair resource distributions, intergroup contexts, and multifaceted contexts, that have significant relevance for healthy child development. Understanding how morality unfolds and which factors can promote moral decisions and reasoning requires knowing the ways that moral development interacts with other factors such as children's mental state awareness and the extent to which group biases impact social and moral decisions. These areas of research provide evidence for risk and protective factors for developmental-behavioral pediatricians, pediatric psychologists, clinicians, and other health care professionals who are concerned with the safe, just, and healthy development of children.

RESOURCES

■ Learning for Justice

<https://www.learningforjustice.org/>

■ Embrace Race. An organization advocating for racial inclusion via antiracist training, community dialogue, and resources for parents and educators.

<https://www.embracerace.org>

- **Cool School Where Peace Rules: An Educational Game**
<https://creducation.net/catalog/cat-item-350/>
- **Anti-Racism and Race Literacy: A Primer and Toolkit for Medical Educators**
<https://ucsf.app.box.com/s/27h19kd597ii66473parki15u0cgochd>
- **Social and Moral Development Laboratory at the University of Maryland**
<https://www.killenlab.umd.edu>
- **American Psychological Association's Office of Equity, Diversity, and Inclusion**
<https://www.apa.org/about/apa/equity-diversity-inclusion>

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