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THE DEVELOPMENT OF MORAL CIRCLES

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Systems of morality specify principles that govern which behaviors are valued and permissible in society; in doing so, morality suppresses selfishness and enables a social world in which people cooperate with one another. Moral philosophers (Kant, 1785; Mill, 1854) and moral educators (Kohlberg, 1975; Noddings, 2010) often emphasize morality as *universal*, in the sense that moral principles specify how people should treat one another across contexts and regardless of who is involved. Nevertheless, people exhibit a great deal of differentiation and variability in their moral judgments, behavior, and development (Dahl & Killen, 2018; Killen & Smetana, 2015; Turiel, 2015; Turiel & Dahl, 2019). In the present chapter, we propose that basic features of conceptual development give rise to one important source of variability in early moral judgment and behavior (that often persists across development)—the tendency to view people as particularly morally obligated to members of their own social group.

We first review philosophical descriptions of how group memberships shape morality, as people construct and operate within “moral circles,” along with evidence that moral circles operate to shape adult moral cognition and behavior. We will then turn to evidence from children to discuss moral circles across development. Finally, we address theoretical perspectives on how and why moral circles shape moral psychology across development. Throughout, we consider evidence of multiple facets of morality, including moral judgment and other components of moral cognition, as well as other morally relevant behaviors, emotions, and sociocognitive processes.

What Are Moral Circles?

Philosophers have proposed that people form “moral circles”—boundaries within which we view others as worthy of moral concern (Burke, 1790; Lecky, 1869; Singer, 1981). For example, most parents view themselves as having a particular moral obligation to provide food and shelter for their own children. While many people view providing for a stranger’s child as valuable and praiseworthy, doing so is not usually viewed as *obligatory* to the same extent (Singer, 1981). As a further illustration, many people prefer to give to charitable causes that function in their own communities rather than those that distribute aid to other communities—even those that might have greater need (Casale & Baumann, 2015; Hart & Robson, 2019; Micklewright & Schnepf, 2009). These examples illustrate how people split the world into those who deserve special moral consideration and those to whom they hold fewer obligations.

Philosophical, psychological, and anthropological theories have all expanded upon the idea of the moral circle. For example, Staub (1990) views most human acts of extreme violence, such as torture,

genocide, and mass killing, as the result of people excluding certain others from their moral universe. On this account, the people who commit such violent offenses do so not because they view the acts themselves as praiseworthy but because they simply view protection from those immoral acts as not extending to their victims. Similarly, scholars have discussed a “scope of justice,” outside of which harm and unfair treatment are thought to be more acceptable (Clayton & Opatow, 2003; Opatow, 2012). From a somewhat different perspective, in anthropological and philosophical attempts to characterize the content of moral thought, scholars have described sets of “ethics” (Shweder et al., 1990, 1997), “foundations” (Haidt & Graham, 2007; Haidt & Joseph, 2004, 2007), or “motives” (Rai & Fiske, 2011) that place loyalty to the in-group at the center of the codes of morality. Though the details of these theories differ, common across all of them is the sense that concern for social groups is a central component of human moral cognition.

The idea of moral circles is also supported by evolutionary theories, which propose that morality evolved as a way to coordinate human action in the context of our ancestral tribal environment (Boyd & Richerson, 2009; Gintis et al., 2003; Greene, 2013; Rand & Nowak, 2013; Tomasello, 2020; Trivers, 1971). From this perspective, to maximize their chances of survival in the human evolutionary environment, people needed to cooperate with those around them (for example, to share food when nutritional opportunities were scarce). Yet cooperation with too many others would have led to the depletion of resources necessary for survival. So early humans established tribes—boundaries within which they would cooperate with one another and protect each other from outside threats. On this account, moral emotions evolved as a way to ensure that those tribal boundaries would remain in place by making moral violations—but only those that occur among fellow tribe members—feel wrong.

Moral circles have generally been described as changing over evolutionary, historical, and ontogenetic time. In various situations, they can be conceptualized as small (e.g., immediate family members) or large (e.g., all of humanity), and often they differ across individuals. For example, Waytz and colleagues (2019) document that much of the ideological difference between political liberals and conservatives can be ascribed to liberals possessing a more expansive moral circle. Reed and Aquino (2003) use moral circles to explain anti-Arab sentiment in the U.S. following the September 11 attacks, suggesting that the attacks highlighted the out-group status of Arabs among Americans. Laham (2009) demonstrates that the size of the moral circle can even vary based on one’s current mindset, where people with “exclusion mindsets” (establishing the boundaries of the moral circle involves figuring out whom to exclude) have larger moral circles than those with “inclusion mindsets” (establishing boundaries involves figuring out whom to include). Embedded within each of these arguments is the idea that for any one person in any given situation, the moral circle simply cannot include everyone. Thus, from this perspective, an initial step in moral judgment and behavior is to first determine if the person or people of interest fall within the scope of the actor’s moral circle. We describe empirical evidence in support of this possibility in the sections that follow.

Moral Circles Shape Adult Moral Cognition and Behavior

Empirical work in adult social and moral cognition is consistent with the possibility that moral circles underlie human moral thought and behavior. As a starting point, adults rapidly encode group memberships as they navigate the social world and often respond to others based on those group memberships in social interaction. For example, group membership shapes basic cognitive processes, including the ways in which people perceive (Hastorf & Cantril, 1954; Hugenberg et al., 2010; Knobloch-Westerwick et al., 2017; Y. J. Xiao et al., 2016) and remember (Greenstein et al., 2016; Iacozza et al., 2019) other people. People recognize the faces of racial in-group members better than those of racial out-group members (a phenomenon termed the *other-race effect*; Hugenberg et al.,

2010) and have better source memory for words that they learned from in-group members rather than out-group members (Iacozza et al., 2019).

Turning to social behavior, people cooperate more with in-group members than with out-group members across a range of experimental paradigms (Brewer, 2007; Brewer & Kramer, 1986; Burkart et al., 2009; Hackel et al., 2017; Tajfel et al., 1971; Yamagishi & Kiyonari, 2006). People are also more likely to help in-group rather than out-group members following negative events (such as natural disasters and physical violence; Levine et al., 2002, 2005; Levine & Thompson, 2004) and feel more empathy for in-group than out-group members in ways that have real consequences for social behavior (e.g., in pain management and law enforcement; Drwecki et al., 2011; Johnson et al., 2002; Kaseweter et al., 2012). People sometimes even value negativity toward out-group members (Cikara, 2018; Cikara et al., 2011) and endorse acts of aggression directed toward out-group members (Argo, 2009; Bruneau et al., 2017; Ginges & Atran, 2009). Although this work has not directly considered how these behaviors and emotions reflect the ways in which groups shape *moral judgment* in particular, they illustrate phenomena that one would expect to find if people differentiated their sense of moral obligation to others based on whether they are or are not members of the same group.

More direct evidence of the selective prioritization of people within the moral circle comes from recent work on political group identification. In one set of studies, Voelkel and Brandt (2019) demonstrated that people endorse moral statements more strongly if those statements target political in-group members (e.g., “Justice for people who are [liberal/conservative] is an important requirement for a society”). Similarly, Frimer and colleagues (Frimer et al., 2014) showed that both liberals and conservatives value obedience to authority, but only when the authority figure is a member of their own political group. People are also more willing to make trade-offs in trolley problems (e.g., to sacrifice one life in order to save five others) when the people to be saved are in-group members (Cikara et al., 2010; Swann et al., 2010). We next turn to how group memberships shape moral cognition and behavior across development.

Moral Circles Across Development

Moral Circles in Judgments and Evaluations

Group memberships shape a range of social and cognitive processes beginning quite early in life. Within the first few months of life, infants use social groupings—such as race (Bar-Haim et al., 2006) and gender (Quinn et al., 2002)—to distinguish people. By the end of the first year, infants attend to a wider range of social distinctions, including language (Kinzler et al., 2007, 2012) and ethnicity (Singarajah et al., 2017), and also use social categories to predict people’s behavior (Lieberman et al., 2017; Powell & Spelke, 2013; Spokes & Spelke, 2017; Ting, Dawkins et al., 2019).

Notably, children’s earliest social category-based expectations appear centered on beliefs about moral behavior. By the end of the second year, infants expect people to allocate scarce resources preferentially in favor of in-group members (Bian et al., 2018) and expect people to help in-group members but not out-group members who are in need (Jin & Baillargeon, 2017). Infants also expect group members to retaliate on behalf of in-group members but not out-group members who have been harmed (Ting, He et al., 2019). These findings suggest that children’s earliest moral concepts are embedded within an intergroup framework.

Clearer evidence for the early development of moral circles comes from our own work with preschoolers (Rhodes & Chalik, 2013). By the preschool years, children’s beliefs about moral obligation are embedded within their representations of social groups, such that they view people as holding particular obligations to members of their own social groups and are particularly sensitive to violations that occur within these moral circles. As evidence for this proposal, we introduced

3- to 9-year-old children to two novel groups of people, marked by shirt color and team name (the blue Flurps and the red Zazzes). We then told children about instances of harmful behaviors being performed, either within (e.g., a Flurp teasing another Flurp) or across (e.g., a Flurp teasing a Zazz) group boundaries. In asking children to evaluate these behaviors, we built on work in social domain theory (Smetana, 1981; Turiel, 1983) to test whether children viewed violations as universally wrong (e.g., saying that teasing is just as wrong no matter the context or who is involved), or whether they considered information about context and group membership when forming their beliefs about the behavior's moral status. To do so, for each behavior, we asked children to give two evaluations. They first evaluated how bad the behavior was before we had given them any additional information (so they should have had a default expectation that these behaviors were prohibited, perhaps based on their own experience with social rules). Then we gave them some additional, possibly surprising information—that the behavior in question was not prohibited by explicit rules in the immediate social context (e.g., “Let’s pretend that in the school these kids go to, teachers say that kids *can* tease other kids”)—and asked them to evaluate how bad the behavior was again.

We predicted that if children viewed the behavior in question as a moral violation, they would express that the behavior was equally bad, regardless of whether there were explicit rules governing that behavior. If, however, children viewed the behavior as a violation outside the scope of morality, they would express that the behavior was less bad if there were no explicit rules prohibiting it. We found that for within-group harm only (e.g., a Flurp harming another Flurp), children stated that the negative behavior was just as bad regardless of whether there were explicit rules against it in the immediate context. This suggests that children did not view it as wrong for a Flurp to harm another Flurp *because* of the assumed presence of an explicit rule but instead because of a more fundamental sense that they are obligated not to harm one another. For intergroup harm (e.g., a Flurp harming a Zazz), on the other hand, children viewed the negative behavior as less bad if there were no explicit rules governing it. These findings suggest that children view people as morally prohibited from harming members of their own group—prohibited against doing so regardless of the context. In contrast, they did not extend this moral prohibition as strongly to members outside the agent’s group—for intergroup interactions, the wrongness of harmful actions depended on context (in this case, whether there were explicit rules prohibiting the specific behavior that caused the harm).

The aforementioned studies involved novel, fictional groups that held no meaning for the child participants who were making judgments about them. This is important for two reasons: First, the children in these studies had no prior knowledge of either group they were reasoning about. Children’s judgments, therefore, could not have been driven by familiarity with either group or any differential expectations they may have had about group-specific characteristics that could have come to bear on these situations (e.g., what values may have driven group members’ actions, how members of either group would respond to the actions that were being performed, or how the victims would feel as a result of those actions). These judgments could also not have been driven by any historical or practical knowledge of how members of these groups tended to interact. Second, the children in these studies were not members of the groups they were reasoning about. Thus, children’s judgments could not have been driven by any personal affective biases that they may have held toward one group or the other. Children’s judgments, then, could only have been driven by their *abstract* understanding of how social groups function in general.

An important question stemming from this issue regards how children’s judgments in these studies might extend to the experiences they have with groups that children encounter in their daily lives, such as race, gender, and ethnicity. A limited amount of work (Chalik & Dunham, in preparation; Shutts et al., 2013) suggests that children often do use real-world groups to shape their expectations of social and moral behavior in ways similar to how they use novel groups in the studies documented here. Yet whether children apply the abstract understandings documented here to the specific groups that they see around them depends on the input they have received about and their experiences with

those specific groups. Furthermore, children update and revise their abstract expectations in response to the experiences that they have in the world, which may or may not line up with their initial expectations. The exact processes by which children integrate their abstract understanding of social groups with the specific groups in their social environment, as well as how children's expectations change in response to their experiences with different types of group distinctions, are beyond the scope of this chapter but remain important and fruitful questions.

As further evidence that children view moral obligations as applying more strongly within social group boundaries, in a more recent set of studies (Chalik & Dunham, 2020), 4- to 6-year-old children were introduced to novel behaviors that were described as being moral or nonmoral. For example, in the moral conditions, children were told that the novel behavior—"wugging"—was objectively good or objectively bad, regardless of what rules exist in the immediate social context (e.g., "It's bad for kids to wug each other. And even if the teachers say that you can wug somebody, you still shouldn't no matter what"). In contrast, in the nonmoral conditions, children were told that the goodness or badness of wugging was dependent on rules in the immediate social context (e.g., "It's bad for kids to wug each other. But if the teachers say that you can wug somebody, you can if you want"). Critically, no form of group membership was mentioned when the behaviors were introduced. Next, however, children predicted whether these novel behaviors were more likely to occur within (e.g., "Did the Flurp wug another Flurp?") or across (e.g., "Did the Flurp wug a Zazz?") social group boundaries. Children's predictions depended on whether or not the behavior had been introduced in a moral context: If wugging had been described as moral and good, children predicted that people would wug fellow group members over members of the other group. If wugging had been described as moral and bad, children predicted that people would wug members of the other group over fellow group members. If, on the other hand, wugging was introduced outside the moral context, children did not have systematic expectations about how the behavior would play out, regardless of whether it had been described as good or bad. These findings once again show that when children conceptualize moral obligations, they spontaneously assume that those obligations only apply (or at least, apply the most strongly) within the moral circle.

Moral Circles in Children's Expectations of the World

That moral circles shape early moral cognition has a range of consequences for how children interact with the world. Given that children generally expect people to act in line with their obligations (Kalish & Shiverick, 2004), children form predictions of how people will interact with one another on the basis of whether those people are in the same moral circle. For example, by age 3 and across childhood (until at least age 10), children predict that people are more likely to harm out-group members than in-group members (Chalik et al., 2014; Chalik & Dunham, in preparation; Chalik & Rhodes, 2014, 2018; Rhodes, 2012). By age 4, children predict that people will save in-group members rather than out-group members from harmful events (Chalik & Rhodes, 2018). By age 5, they predict that people will preferentially direct aid to kinship-based group members (Spokes & Spelke, 2016), and by age 6, children predict that people will direct prosocial behaviors toward in-group members rather than out-group members (Chalik & Dunham, in preparation; Dejesus et al., 2014; Rhodes, 2012).

Children also use moral circles to explain the events that they see. Four- and 5-year-old children invoke social groups to explain why someone might harm an out-group member (e.g., "The Flurp hit that kid because the kid was a Zazz") and why someone might help an in-group member (e.g., "He gave him some because they are in the same group") but do not use social groups to explain the reverse patterns of interactions (Chalik & Rhodes, 2015; Rhodes, 2014). Also, by middle childhood, children expect people to selectively share secrets with members of their social circle (Anagnostaki et al., 2013) and expect social relationships to constrain who will keep another's secret (i.e., friends are more likely to keep each other's secrets than non-friends; Liberman, 2020). Children also, by middle childhood, evaluate people who fail to help their friends more negatively than they evaluate

people who fail to help strangers (Marshall et al., 2020) and condone negative actions toward out-group members when those actions are construed as essential to maintain group functioning (e.g., social exclusion; Killen & Stangor, 2001). All of these findings are consistent with the possibility that children view moral obligations as applying most strongly within particular circles of moral concern.

Furthermore, young children use moral circles to dictate how they think people ought to act, even for relatively innocuous behaviors. For example, when children are introduced to novel groups, they disapprove of group members who deviate from group norms, such as eating a certain type of food or listening to a certain kind of music (Roberts et al., 2017, 2018). Additionally, children evaluate morally negative acts *even more negatively* than they otherwise would when those acts include nonconformity to group norms (e.g., it is worse for someone to be mean in contrast with their group than it is for them to be mean in line with their group; Roberts et al., 2019). By middle childhood, children disapprove of people who deviate from their group's opinions and ideologies (Roberts et al., 2020). Also, for both novel (Kalish & Lawson, 2008) and familiar real-world (Foster-Hanson & Rhodes, 2019) social groups, children track obligations as a way of determining group boundaries (assuming that those who share obligations are members of the same group, rather than those who share other behaviors or preferences). These findings suggest that children view moral circles as setting the boundaries within which normative obligations apply.

Moral Circles in Children's Own Social Interactions

Children's understanding of obligation in the context of moral circles also has consequences for how they themselves behave toward others. Group memberships shape a range of social processes beginning in early childhood. For example, by the preschool years, children prefer in-group members over out-group members across a wide range of social distinctions, including gender (Cvencek et al., 2011; Halim et al., 2017; Hilliard & Liben, 2010), race (Aboud, 1988; Renno & Shutts, 2015; Rutland et al., 2005), religion (Heiphetz et al., 2013), language (Kinzler et al., 2009), and nationality (Barrett, 2007), as well as minimal groups that serve no functional purpose (Dunham, 2018; Dunham et al., 2011; Dunham & Emory, 2014). Some of these biases are explicit, and some operate even outside of children's awareness. For example, across early childhood, children hold implicit biases in favor of in-group members and against out-group members for racial (Baron & Banaji, 2006; Dunham et al., 2006), gender (Dunham et al., 2016), and religious (Heiphetz et al., 2013) groups.

More directly relevant to morality, even within the first two years of life, infants and toddlers form preferences for in-group members over out-group members and direct moral behaviors toward in-group members more than toward out-group members (Hamlin et al., 2013; Kinzler et al., 2012; Mahajan & Wynn, 2012; Pun et al., 2018; N. G. Xiao et al., 2018). Young children also dehumanize real-world out-group members more than in-group members (McLoughlin et al., 2018; McLoughlin & Over, 2017) and show loyalty to members of novel in-groups across a number of experimental paradigms (Misch et al., 2014, 2016, 2018). Children share resources with in-group members over out-group members (for both novel groups, Dunham et al., 2011; and familiar categories, Kinzler et al., 2009, 2012; Renno & Shutts, 2015), even when it is costly to them (Benozio & Diesendruck, 2015; Fehr et al., 2008). Children also sometimes direct negative behaviors toward out-group members, even in cases where they have the option not to (Buttelmann & Böhm, 2014). Thus, across a wide range of contexts and settings, moral circles appear to shape children's morally relevant attitudes and behaviors.

Why Do Moral Circles Shape Moral Cognition and Behavior Across Development?

Given that much moral education emphasizes principles of universality (Kohlberg, 1975; Noddings, 2010), it might seem surprising that children show such early and persistent boundaries on their

moral beliefs and behavior. Understanding more about why this is the case could help guide efforts to facilitate the broadening of children's circles of moral concern.

We propose that domain-general mechanisms that underlie conceptual development shape representations of moral circles across development. In particular, young children, beginning at least by age 3 (Schmidt et al., 2012) and extending through childhood (Roberts et al., 2017), have a broad tendency to think that categories shape what their members are *supposed* to do. Therefore, children expect obligations—including but not limited to moral ones—to hold within categories and differentiate categories from one another.

The tendency for children (ages 3–10) to view categories as *prescribing* and not only *describing* what their members are like is very general. For instance, these prescriptive expectations shape children's expectations of categories outside of the social domain—extending even to their beliefs about animal species categories. That is, when 5- to 8-year-old children reason about animal categories—both when they learn about new animal categories and think about ones with which they are very familiar—they expect that all members of the category are *supposed* to eat the same foods, sleep in the same way, and make the same sounds, and they think there is something *wrong* and even impermissible about those who do not (Foster-Hanson et al., 2020; Haward et al., 2018). In the social domain, 4- to 5-year-old children expect that category members share the same obligations more than the same preferences or abilities (Foster-Hanson & Rhodes, in press; Kalish & Lawson, 2008). And as reviewed earlier, 4- to 6-year-old children are quick to assume that categories prescribe how people are supposed to behave, including when they have very limited information about the groups (Chalik & Dunham, 2020; Roberts et al., 2017), as well as when they are more familiar with them (Levy et al., 1995).

With this general expectation that categories prescribe behavior in mind, children are then on the lookout for cues regarding both which categories are relevant and which behaviors reflect obligations. Cues that morally relevant behaviors are obligatory (to either perform or avoid) come from a variety of sources, including explicit messages, more subtle features of language, and experiences and observations of consequences. Scholars have long argued that both parents and educators play an important role in communicating to children what behaviors are morally obligated (e.g., Kohlberg, 1978); for example, parents frequently talk to their children about the importance of fairness, communicating not only that fairness is an important moral obligation but also expressing their beliefs about the circumstances in which the obligation to be fair applies (Chalik & Rhodes, 2015). Adults might also use certain linguistic forms to convey to children that some actions should be performed or avoided; the generic “you,” for example, is often used to imply that the topic being discussed is normative in scope (Orvell et al., 2017, 2019). Finally, children's own observations of behaviors and their consequences include messages about what falls into the domain of moral obligation. Across early childhood, children learn that certain behaviors are either praiseworthy or blameworthy by observing what behaviors are typically punished (Salali et al., 2015), by subtle features of how behaviors and prohibitions are explained (Chalik & Rhodes, 2015), by tracking what behaviors tend to occur in what contexts (Chalik & Rhodes, 2018; Roberts et al., 2017), and perhaps also by observing how behaviors evoke different responses from their victims and others in the environment (Hepach et al., 2013; Vaish et al., 2011). From this perspective, children bring to the task of conceptual development (including in the moral domain) an abstract expectation that norms and obligations apply within category boundaries. Cultural cues then point them both to which behaviors are considered *obligatory* (and thus fit within the bounds of these expectations) and which *categories* serve to mark these boundaries in children's communities (see Rhodes & Mandalaywala, 2017).

By focusing on the role of domain-general mechanisms underlying conceptual development in shaping moral development (see Rhodes & Wellman, 2017), the perspective on moral circles that we suggest here differs from those that emphasize the role of groups in some kind of innate moral core (e.g., Baillargeon et al., 2015). In particular, our view does not require that moral content (e.g., beliefs about harm and justice) is innate—rather, we consider the abundant subtle and explicit cues to obligatory and prohibited behaviors

available in children's environments. Our view is also somewhat different from those that describe morality as one of many considerations, along with concerns about fairness, equality, group identity, group norms, and group functioning, that children consider evaluating intergroup contexts (Killen & Rutland, 2011). We view notions of morality and obligation as embedded *within* representations of social groups; in other words, moral obligations are assumed to apply particularly within group boundaries. From this perspective, how groups shape children's moral thought depends on the salience of a relevant category and the extent to which the behavior in question is viewed as obligatory in the child's mind.

Moving Beyond the Moral Circle

The idea that children use moral circles to make sense of the world may (and should) raise alarm bells for those who recognize that in today's multicultural world, children constantly come in contact with people of different groups (e.g., groups that differ in race, ethnicity, religion, and so on). Recently, many researchers have started to look for ways to reduce children's reliance on social groups as they navigate the world.

There are a number of promising strategies for increasing children's positive feelings toward out-group members. For example, training people to focus on the individual identities of out-group faces (e.g., those of another race) can reduce both children's (Qian et al., 2017, 2019; Xiao et al., 2015) and adults' (Lebrecht et al., 2009) implicit biases against out-group members. Additionally, increasing children's empathy toward out-group members makes children more likely to help those out-group members across early childhood (Abrams et al., 2015; Sierksma et al., 2014, 2015), and imagining instances of helping others (episodic simulation; Gaesser et al., 2019) increases children's willingness to help members of other groups. Finally, intergroup contact—high-quality interactions between members of different groups—has been shown across a range of settings to reduce bias and discrimination (Binder et al., 2009; McGlothlin & Killen, 2010; Rutland et al., 2005), even if the contact is indirect (e.g., a child reads a story about a member of their social group interacting with an out-group member; Cameron et al., 2007, 2007; Cameron & Rutland, 2006; Gaias et al., 2018). The success of all of these strategies suggests that targeted interventions can reduce the extent to which children use moral circles to shape their moral judgments and behaviors.

Another potential strategy for changing the role of moral circles in children's judgment and behavior is to change the nature of children's moral circles themselves. For example, instead of encouraging children to act positively toward out-group members, we might encourage children to stop seeing those around them as out-group members at all. In other words, we might expand the boundaries of children's moral circles to include a wider range of people. This is a daunting task, given that children may simultaneously view themselves as part of any number of moral circles, depending on the circumstances—so the circles that we seek to expand will inevitably vary from context to context. Still, one particularly fruitful way of accomplishing this task could be to introduce common in-group identities (Levine et al., 2005; Nier et al., 2001) in settings where children might naturally view a distinction between themselves and those around them. For example, in the aftermath of a natural disaster in Italy, Italian and immigrant elementary school children who perceived themselves as one group (Italians and immigrants combined) were more likely to show positive attitudes toward their respective out-group (Vezzali et al., 2015). Interventions to introduce a common in-group identity could thus expand the boundary of children's moral circle across a range of intergroup contexts.

Furthermore, the framework that we present here provides an additional starting point for testing new strategies to reduce children's reliance on moral circles. We have suggested that children learn from others both the boundaries of particular categories and which behaviors are morally obligated within those categories. In doing so, we highlight the role of input and experience in shaping children's developing beliefs about morality. From this perspective, changing children's experiences can lead to changes in the moral beliefs that they develop. For example, subtle features of language lead young children to believe that the boundaries of certain social categories are fixed and discrete (Foster-Hanson et al.,

2019; Rhodes et al., 2012, 2018); changes to these subtle features could encourage children to develop a more expansive view of their moral circles. Further, expanding the use of normative language to discuss valued social interactions among members of different groups (targeting the processes documented by Chalik & Rhodes, 2015) could help counter the idea that engaging in prosocial behaviors and avoiding harmful ones are more strongly obligated among members of the same group.

Conclusion

Morality consists of a variety of processes—including judgments, reasoning, emotions, and behaviors—that suppress selfishness and enable social life. We think that all of these components of cognition and behavior (e.g., how children explicitly evaluate and explain moral violations, their intuitive reactions, and how they feel and behave) can inform our understanding of morality and can advance theory-building across fields. For the issue of moral circles, we see convergent evidence, including in early development, across different dimensions of cognition, affect, and behavior. As reviewed earlier, category boundaries shape how children evaluate and explain moral transgressions (Rhodes, 2014; Rhodes & Chalik, 2013), how they predict and learn about morally relevant behaviors (Chalik & Dunham, 2020; Chalik & Rhodes, 2018; Rhodes, 2012), and how they feel and behave toward in-group and out-group members in morally relevant situations (Dunham et al., 2011; Fehr et al., 2008). Scholars should continue to seek further evidence for these processes in more diverse samples, both within the Western communities where most of this research has historically been conducted and in other communities around the world. By pursuing these goals, the field can continue to advance as research examines in more detail how the various components of moral cognition, emotion, and behavior relate to one another across development.

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