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## Moral Reasoning Enables Developmental and Societal Change

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### Abstract

Moral reasoning is not only an essential part of how humans *develop*; it is also a fundamental aspect of how human societies *change over time*. On a developmental timescale, reasoning about interpersonal disagreements and dilemmas spurs age-related changes in moral judgments from childhood to adulthood. When asked to distribute resources among others, even young children strive to balance competing concerns with equality, merit, and need. Over the course of development, reasoning and judgments about resource distribution and other moral issues become increasingly sophisticated with individuals not only evaluating acts as right or wrong but taking the extra step to rectify inequalities, protest unfair norms, and resist stereotypic expectations about others. The development of moral reasoning also enables change on a societal timescale. Across centuries and communities, ordinary individuals have called for societal change based on moral concerns with welfare, rights, fairness, and justice. Individuals have effectively employed reasoning to identify and challenge injustices. This paper synthesizes recent insights from developmental science about the roles of moral reasoning in developmental and societal change. In the concluding section, we turn to questions for future research on moral reasoning and change.

### Keywords

Moral reasoning; Culture/Diversity; Development: Child; Development: Adolescent; Thinking/Reasoning/Judgment

## Moral Reasoning Enables Developmental and Societal Change

Moral reasoning about conflicts drives moral change on two timescales. On a developmental timescale, reasoning about interpersonal disagreements and dilemmas spurs age-related changes in moral judgments from childhood to adulthood. When asked to distribute resources among others, even young children strive to balance competing concerns with equality, merit, and need (Rizzo & Killen, 2016; Schmidt, Svetlova, Johe, & Tomasello, 2016; Shaw & Olson, 2012). Over the course of development, reasoning and judgments about resource distribution and other moral issues become increasingly sophisticated.

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Children, adolescents, and adults not only evaluate acts as right or wrong but also take the extra step to rectify inequalities, protest unfair norms, and resist stereotypic expectations about others (Arsenio 2015; Killen, Elenbaas, & Rizzo, 2019; Flanagan, 2013; Mulvey, 2016; Ruck, Mistry, & Flanagan, 2019).

The development of moral reasoning also enables change on a societal timescale. Across centuries and communities, ordinary individuals have called for societal change based on moral concerns with welfare, rights, fairness, and justice (Appiah, 2011; Nussbaum, 1999; Sen, 2009; Turiel, 2002). Often through brave efforts of individuals to challenge the status quo, change comes about by using moral reasoning to highlight unequal treatment of others. As an example, Mary Beth Tinker, a 13-year old student, was suspended from school for wearing a black armband to school to protest the war in Vietnam in 1969. Along with her siblings and family, Tinker appealed the case, which went to the U.S. Supreme Court. Following a four-year court battle, the U.S. Supreme Court's landmark 7 – 2 decision ruled in favor of affirming the right of the students to wear black armbands. Tinker reasoned that, "Without free speech, we can't take our world toward equality and justice" (More, 2015). Justice Abe Fortas, writing for the majority opinion, stated that students are possessed of fundamental rights which include freedom of expression of their views (Tinker v. Des Moines Independent School District, 1969). Tinker's consistent and persistent reasoning about why free speech applied to high school students effected an important societal landmark regarding adolescents' rights.

Theories and research about moral reasoning offer a framework for understanding developmental and societal change (Dahl & Killen, 2018). Over the past several decades, research with children and adults has charted answers to fundamental questions about the origins and developments of morality (Helwig & Turiel, 2014; Killen & Smetana, 2015). Scientific advances have resulted from concerted efforts to understand morality from many disciplines, including anthropology, behavioral economics, and philosophy, as well as comparative, cognitive, developmental, social and evolutionary psychology. Following years of debate about the role of moral reasoning, recent work suggests that moral reasoning guides judgments, emotions, and actions about fairness, justice, rights, and welfare.

Recent research has focused on demonstrating how moral reasoning is not only an essential part of how humans *develop*; it is also a fundamental aspect of how human societies *change over time*. Moral reasoning helps us to recognize when change is needed. This occurs by noticing inconsistencies in principles or unequal treatment to others. To argue for change, one must articulate why unfair or unequal treatment of others is unacceptable. At base, one must understand that it is wrong to inflict pain or treat others unfairly, two core aspects of moral reasoning. This often requires that individuals reject authority support of unfair treatment and understand that past inequalities create an unequal playing field.

Further, to create change, individuals sometimes have to reason about the shortcomings of prevailing attitudes, such as stereotypes. Failing to recognize that individuals within a group hold very different values, interests, and attitudes (e.g., women can be conservative, moderate, or liberal on a range of issues) leads to the fundamental error of attributing traits to an individual based solely on group membership (e.g., all women are liberal).

In social psychology, this tendency has been characterized as “the outgroup homogeneity effect,” which occurs when individuals assume homogeneity of perceived outgroups (Park & Rothbart, 1982). Reasoning about the variability that exists within groups helps to diminish stereotypic attributions. In this and other ways, reasoning enables individuals to combat ingrained prejudices and other attitudes by recognizing their wrongness.

Reasoning about unfairness does not lead individuals to protest unfairness in all situations. The connection between reasoning, judgments, and decisions to act is complex, in part, because it can be very costly to challenge unfair practices. Individuals who challenge others, and particularly within their own group, often experience social exclusion, retribution, or worse (Alford, 2001; Mulvey, 2016; Williams, Forgas, & von Hippel, 2005). Despite the potential costs of protesting, children recognize and challenge unfair group norms by 5 to 6 years of age (Elenbaas & Killen, 2016; Engelmann, Herrmann, Rapp & Tomasello, 2016; Helwig & Jasiobedzka, 2001). Then, from later childhood and throughout the lifespan, individuals continue to protest, resist, and undermine many norms and practices they deem unfair (Turiel, 2003). We argue that the importance of moral reasoning as a means for facilitating positive social change originates in early childhood. Thus, moral reasoning has the power to change society because it is a natural course of human development.

This paper synthesizes recent insights from developmental science about the roles of moral reasoning in developmental and societal change. We begin the paper by defining morality and moral reasoning, contrasting our view with alternative views that assign limited roles to moral reasoning. We review research supporting how morality emerges and then how children and adolescents use moral reasoning in three areas of morality: others’ welfare, fairness, and social equality. In so doing we provide contrasts to other approaches to morality such as those stemming from intuitionism, which do not provide a basis for motivating change regarding enhancing the welfare of others or fostering social equality. A key point of this section is that, from an early age, children reason about distinct moral and non-moral concerns that sometimes conflict, as when an authority requests that children act unfairly. Next, we discuss how reasoning about moral and non-moral concerns enable youth and adults to reject and challenge unfair societal arrangements. We propose that individuals rely on moral reasoning both in identifying unfair arrangements and in articulating arguments for why the arrangements should change. This process is one necessary for developmental change, from the child to the adult, and for societal change, from conditions of inequality to equality. In the concluding section, we turn to questions for future research on moral reasoning and change.

## Defining Moral Reasoning

Before delving into our thesis about moral reasoning, it is necessary to provide a definition. The term “moral reasoning” has been used in many divergent ways, in large part because it has been studied in so many different fields (within and outside of psychology) and from childhood to adulthood (Dahl & Killen, 2018; Helwig, Ruck, & Peterson-Badali, 2014; Nucci & Gingo, 2011; Turiel, 2002). We define moral reasoning as transitions in thought in accordance with endorsed moral principles (Adler, 2008; Harman 1986). In turn, we define moral principles as prescriptive principles concerning others’ welfare, rights,

equality, fairness, and justice. This definition stems from work in moral philosophy (Appiah, 2005; Gewirth, 1978, 1981; Nussbaum, 1999; Rawls, 1971; Sen, 2009) and is validated by extensive psychological and empirical data (Blake et al., 2015; Helwig, et al., 2014; Turiel, 2015; Wainryb & Recchia, 2014). An example of moral reasoning is the following statement: “When two people are equally deserving of resources then it would be unfair to give more to one person than the other simply because of the way a person looks.” Principles may be logically derived from other principles, as when the prohibition against unfair distribution of resources is derived from more abstract principles that reflect obligations about human rights and dignity (Dahl, Gingo, Uttich, & Turiel, 2018).

There are multiple ways to validate that individuals use moral reasoning empirically. The first piece of evidence for moral reasoning is that individuals articulate a moral reason for their judgment (“It’s unfair to do X because Y”). A second—and complementary—piece of evidence is that the stated reason explains the individuals’ pattern of judgment. For instance, imagine that a person says that Mary should be paid more than Martin because Mary worked harder. Later, upon learning that Mary and Martin worked equally hard, the person now said they should be paid the same. In this situation, the person articulated a principle of merit (harder workers should be paid more) that explained a pattern of judgments about pay. (Mary should be paid more if she works harder than Martin but not if they work the same.)

It is important to point out, however, that individuals do not necessarily articulate their complete chain of reasoning each time they make a moral judgment. Over time, people’s reasoning may become rehearsed over repeated encounters with resource distributions, to the point where they do not need to articulate their complete reasoning every time (Melnikoff & Bargh, 2018). Hence, by our definition, reasoning can happen both slowly and quickly: An individual who has developed a moral principle of merit may reason that person A should not get more resources than person B, even if the individual does not explicitly spell out their reasoning each time (Pizarro & Bloom, 2003). Still, that individual’s reasoning can be demonstrated empirically, for instance through structured interviews or experiments. Careful empirical assessment is particularly important with children, who do not easily express their reasoning in the same terms as adults; their knowledge is changing and developing overtime (Helwig, et al., 2014; Rizzo & Killen, 2016; Turiel, 2015).

Our definition distinguishes moral reasoning from other mental processes, such as associations (“When I see the ocean, I want to go swimming”) or spontaneous thoughts (“I like music”). While these events are transitions in thought, these transitions do not follow endorsed principles for how to think or act (Harman, 1986). We also distinguish moral reasoning from other forms of evaluative reasoning, such as reasoning about social conventions (“The first person in line gets to go in the movie before everyone else”) or personal safety (“Do not put a fork into an electrical outlet”). For instance, people view social conventions, but not moral rules, as context-specific and alterable (see Smetana, et al., 2014). More generally, individuals think that social conventions are alterable—the dress codes may vary from one context or society to another—whereas individuals judge that moral goals of justice fairness, and others’ welfare should be adopted in all contexts by all societies.

Although most people view moral goals as universal, the specific method of achieving these goals can change across developmental and historical time periods. These changes can occur due to changes in understandings about what counts as harm, who counts as having full personhood, and how unfairness manifests (see Turiel, Killen, & Helwig, 1987, pp. 186–187). As children learn about the intentional basis of inflicting harm on others, for example, they develop a more substantial understanding of when the infliction of harm on others is wrong (unprovoked acts of violence) or legitimate (such as necessary harm committed to prevent a more dangerous harmful outcome) (Jambon & Smetana, 2014).

In analogous fashion, human societies have changed in response to internal contradictions among its moral principles and practices. Since its birth, the United States has grappled with contradictions between the “self-evident” truth, stated in the Declaration of Independence, that “all men are created equal” and endowed with “unalienable rights” to “life, liberty, and the pursuit of happiness” and practices such as slavery, capital punishment, and imprisonment (Hannah-Jones, 2019). From such contradictions, societies have proposed, and gradually adopted, conceptions of universal human rights rooted in the recognition that human beings of all ethnicities and genders are endowed with similar capabilities (Ishay, 2004). Sen (2005) argues that advances in recognition of human rights and capabilities occur, in part, through reasoning within and across communities: “The viability and universality of human rights and of an acceptable specification of capabilities are dependent on their ability to survive open critical scrutiny in public reasoning” (p. 163). Through reasoning, argumentation, and debates, changes toward improving the rights of individuals have occurred. Similar moral change on a societal level has concerned treatment of non-human animals: As societies have increasingly learned about the cognitive and emotional capacities of non-human primates, changes have come about regarding their treatment based on ethical concerns for their welfare (de Waal, 1996, 2005). In both the developmental and historical time scales, moral judgments change as more information is acquired about the conditions and context for the application of moral reasoning.

Many events evoke both moral and non-moral reasoning (Nucci, 2001; Smetana, et al., 2014). When children decide whether to report on another student whom they observed stealing from another child, they balance moral concerns about stealing and property rights with concerns about loyalty to their peers (Abrams & Rutland, 2008) and their own welfare pertaining to retaliation concerns (Dahl, 2019; Waytz, Dungan, & Young, 2013). When children and adults reason about competing moral and non-moral principles, they do not always give priority to moral principles. Our psychological and developmental approach stresses that such balancing of moral and non-moral considerations is a central feature of moral life.

### **How our Account of Moral Reasoning Differs from Intuitionist and Dual-Process Accounts**

Our account of morality and moral reasoning differs from many prior and current approaches. First, many scholars of moral psychology and moral development have defined morality as norms that are shared by members of societies and that facilitate cooperation or compliance to rules (Durkheim, 1925; Kochanska & Aksan, 2006; Haidt, 2008). Research based on this definition of morality, however, has not sought to explain the developmental

and psychological underpinnings of societal change. By focusing on the cohesive functions of morality, these accounts leave unexplained how individuals sometimes challenge existing norms and practices based on concerns for welfare, rights, fairness, and justice. In contrast, our definition of morality in terms of welfare, rights, fairness, and justice provides a framework for explaining how morality can promote both cohesion *and* change. From childhood to adulthood, individuals use moral reasoning to evaluate acts as fair or unfair as well as scrutinize and challenge their groups and authorities on moral grounds.

Second, contrary to our view that reasoning is central to morality, other perspectives have argued that moral judgments typically stem from affective, automatic, and unconscious reactions, also called intuitions (see Greene, 2014; Haidt, 2012). Intuitionist and dual-process positions postulate that, by default, individuals make moral judgments based on “gut feelings,” such as disgust for another person or aversive affective reactions to forceful actions. According to intuitionist and dual-process theories, people occasionally engage in moral reasoning, for instance when providing post-hoc justifications to convince others, but even these moral judgments are based on automatic, affective reactions that individuals can neither articulate nor endorse. A key piece of evidence taken to support intuitionist and dual-process views is a phenomenon known as “moral dumbfounding:” people’s inability to explain their moral judgments (Haidt & Bjorklund, 2008). According to these views, if people are sometimes unable to explain their moral judgments, those judgments must be based on unconscious, affective reactions. However, empirical evidence for moral dumbfounding is scant and has often asked participants to make judgments about highly unusual and complex events, such as sexual relations among siblings (Royzman, Kim, & Leeman, 2015). Moreover, recent evidence has demonstrated that individuals do reason carefully about the very events used in research on moral dumbfounding, but in ways that was often overlooked in earlier studies. For instance, individuals reason about harm even in events that researchers had initially assumed to be harmless (e.g., consensual sexual relations among siblings; Royzman et al., 2015; see also Dahl et al., 2018). The pervasive use of moral reasoning to evaluate controversial issues is consistent with our propositions that moral reasoning is a fundamental part of moral judgments.

Our reasoning-based view of morality differs from intuitionist (and dual-process) views on at least two points: (1) the intuitionist view has adopted a restrictive definition of moral reasoning as slow and effortful (e.g., Haidt & Bjorklund, 2008; Greene, 2014), and (2) this restrictive definition leads intuitionists to claim that people rarely reason about moral issues (Dahl & Killen, 2018). These two propositions about moral reasoning, however, derive from the assumption that all moral judgments must be the result of either deliberate or conscious thought (“reasoning”) or automatic, unconscious reactions (“intuitions”). However, this dichotomy of moral judgments is assumed rather than demonstrated (Dahl et al., 2018; Kihlstrom, 2008); there is no evidence that these two categories are exhaustive of all moral judgments.

Building on philosophical and psychological work, we propose that reasoning does not require that people go through multiple, conscious steps of thought. On the contrary, over the course of development, many forms of reasoning may become so well-rehearsed that such reasoning appears to happen quickly and without effort and yet can be applied to many



contexts. One example comes from research on expertise: A physics expert may solve a physics problem in a way that appears automatic and fast but, in fact, it is the outcome of years of research and effort at building up knowledge about the domain (Larkin, McDermott, Simon, & Simon, 1980). Developmental data are important for this position because the effortful process of reasoning about issues of other's welfare and fairness over the course of childhood and adolescence has been well documented. For example, the effects of rehearsal on reasoning are evident when watching young children negotiate and re-negotiate the fair distribution of resources (e.g., sharing of toys) over the course of many months and many years. In fact, studies focused on object disputes during early childhood reveal that moral reasoning (e.g., claims about what's fair, property rights, and how to share) is used repeatedly by children during peer interactions with important advances in the sophistication of the reasoning over the course of childhood (Paulus, 2015; Paulus, Gillis, & Moore, 2013; Pesowski, Kannegiesser, & Friedman, 2019; Shantz, 1987).

From our view, then, moral reasoning includes a wide range of processes, from seemingly immediate inferences acquired through years of rehearsal to the slow and deliberate reasoning seen in the explanations given by legal scholars writing an argument for a change in jurisprudence, or social science scholars writing about complex moral issues. Moreover, moral reasoning is not only about deliberate judgments; it is also motivated by compassion and caring for others. Thus, the implication that moral emotions are focused mostly on disgust leaves out the positive emotions, such as compassion and caring, that motivate individuals to use moral reasoning to foster change (Malti & Ongley, 2014; Nussbaum, 2001; Turiel & Killen, 2010).

Individuals know why they judge some actions as wrong, and they do so most of the time, unlike the intuitionist expectation that moral reasoning is used rarely in the course of everyday life. Several bodies of research highlight the centrality of moral reasoning, fast and slow, in developmental and societal change. In the subsequent section, we briefly review the developmental psychological research on moral reasoning from early childhood to adulthood, focusing on how individuals grapple with issues of fairness and equality. We further discuss how insights about the development of moral reasoning have implications for understanding societal change.

### **Moral Reasoning Develops Slowly over the Lifespan**

**Precursors to moral reasoning in infancy and toddlerhood.**—The past two decades have seen a wave of research on the precursors of morality in infancy and toddlerhood (Dahl, 2019; Wynn & Bloom, 2014; Hamlin & Van de Vondervoort, 2018). In several seminal studies, Hamlin and colleagues explored whether infants preferred helpful over hindering characters (Hamlin, Wynn, Bloom, & Mahajan, 2011). Infants observed puppet shows in which one puppet tried to achieve a goal, for instance climbing a hill. Next, infants repeatedly observed either a helper pushing the puppet up the hill or a hinderer pushing the puppet down. In a subsequent test, researchers presented infants with the helper and the hinderer, and assessed which puppet infants preferred (Hamlin, et al., 2011). The basic finding, replicated by studies from other laboratories, was that most infants preferred to reach or look toward the helper rather than the hinderer (for a meta-analysis, see Margoli

& Surian, 2018). Focusing more specifically on fairness, research has also demonstrated that infants and toddlers look longer at unfair distributions than at fair distributions when watching an agent distribute resources to two recipients (Sommerville, Schmidt, Yun, & Burns, 2013; Ziv & Sommerville, 2017).

Infants' preferences for helpful agents and sensitivity to fair distributions are likely precursors of moral judgments and reasoning. For instance, these preferences and interests may enable young children to learn how to help others during everyday social interactions (Dahl, 2019; Dunn, 1988). Cooperative interactions with others, for instance during play, mealtime, and chores, create opportunities to learn how to attune to others' intentions, preferences, and actions (Carpendale, Hammond, & Atwood, 2013). Nevertheless, we do not consider infants' social preferences and sensitivities as evidence of moral *judgments* or *reasoning* in the first two years of life.

Our definition of morality is rooted in prescriptive principles—principles about right and wrong ways to act—concerning others' welfare, rights, justice and fairness. Extant research offers no evidence that infants make judgments about right and wrong (for similar arguments regarding infants' fairness expectations, see Ziv & Sommerville, 2017). Relative preferences, as demonstrated with infants, do not demonstrate categorical judgments of right and wrong. As an example, children and adults who witness a moral violation deem the violation as categorically wrong, even without comparing the violation to an alternative action, and sometimes protest or otherwise intervene to stop the violation (Nucci, 2001; Schmidt, Rakoczy, & Tomasello, 2012; Smetana et al., 2012).

Infants' preferences for “good” puppets also do not appear to extend to infants themselves. During the second and third years of life, infants hit, bite, and kick others more often than during any other period of life, often without provocation or distress (Dahl, 2016; Dahl, 2019; Hay, 2005). These acts of force are not trivial to victims, but can elicit strong reactions, for instance angry vocal prohibitions from mothers (Dahl, Sherlock, Campos, & Theunissen, 2014). Only after months of social experiences around hitting and other moral violations do children begin to apply moral judgments to themselves, as evidenced by distinct signs of guilt and shame (Zahn-Waxler, Radke-Yarrow, Wanger, & Chapman, 1992). Thus, while the infancy research has been groundbreaking in its demonstrations of early social preferences, it is not until 3 – 4 years of age that moral orientations, as reflected by moral judgments and reasoning about right and wrong, emerge.

**Developing basic moral concerns in early childhood.**—By age three, children understand that the infliction of physical and psychological harm on others is wrong (Nucci, 2001; Dahl, 2019; Smetana, et al., 2012). Children begin to reason that moral principles are obligatory and that the evaluation of a moral transgression as wrong is not contingent upon the expectations of authorities (Smetana, et al., 2012). For example, children view moral transgressions such as inflicting harm on others as wrong, even when a teacher states that it is all right, when they would not get punished for it. Further, children also view the infliction of harm on others as wrong in other schools (young children) and other countries (late childhood and adolescents) (Smetana, et al., 2014). Their reasons focus on the observation that experiencing harm is painful and, with age, refer to explanations based on equality and



rights. Social interactions with peers, resolving conflicts as well as cooperating with others, becomes a basis for learning from others and developing a sense of reciprocity which leads to obligations towards others (Nucci, 2001; Olson & Spelke, 2008; Tomasello, 2014). Thus, children's early moral reasoning about concerns with others' welfare enables individuals to challenge existing arrangements or authority commands on moral grounds. This provides the basis for reasoning that challenges the status quo and motivates individuals to seek societal change when actions are deemed as wrong or unfair (Killen, Elenbaas, & Rizzo, 2018).

As children's moral concerns develop, they balance these concerns against social pressure or other social norms. When faced with competitions between moral and non-moral concerns, children sometimes decide to reject social norms that they deem to be unfair. The ability to challenge social norms derives from children's ability to distinguish between different norms. Research from multiple research traditions has shown that children do indeed draw distinctions between moral and non-moral norms and events (Dahl & Schmidt, 2018; Rakoczy & Schmidt, 2013; Rizzo, Cooley, Elenbaas, & Killen, 2018; Smetana, Ball, Jambon, & Yoo, 2018). For instance, children learn conventional norms about ways of dressing, eating, or speaking that serve to coordinate social interactions, but recognize from an early age that conventional concerns differ from moral concerns (Dahl & Waltzer, in press; Smetana, et al., 2012). Children and adults maintain that social conventions, unlike basic moral principles about fairness or rights, are alterable, do not generalize to other contexts, and do not have intrinsic connections to the welfare of others (e.g., eating with chopsticks instead of a knife and fork does not intrinsically affect others).

Even young children (ages 3 to 6 years) who were asked to decide between including an ingroup member who challenged the group norm or an outgroup member who supported the group norm, responded differently depending on whether the norm was about equality (moral) or a group custom (conventional) (Rizzo, et al., 2018). Children ignored the ingroup/outgroup distinction to support a positive moral norm but preferred ingroup-members when the norm was about upholding a conventional norm. Further, distinguishing norms from group membership increases with age and reflects the increasing sophistication about obligations towards others (Abrams & Rutland, 2008). On a societal level, many efforts to challenge the status quo on moral grounds stem from concerns with fairness and equality which are differentiated from general group norms such as conventional ones. We now turn to this topic.

**Fairness and equality.**—Considerations of fairness and equality often arise when individuals and groups have to distribute resources, decide whom to include or exclude, and when evaluating the just treatment of others (Sen, 2009). In this section, we focus on how individuals think about the fair allocation of resources and make decisions about how to allocate resources. These decisions involve balancing equality, equity, and others' need. We also focus on equality in the context of concepts of equality of persons. Developing a society of equals involves taking into account group-based advantages and disadvantages when making moral judgments, and challenge existing stereotypic expectations in group contexts (Anderson, 1999; Fourie, Schuppert, Wallimann-Helmer, 2015; Scheffler, 2015).

Regarding judgments about the fair allocation of resources, recent research has shown that children focus on both equality and equity when distributing resources (Baumard, Mascaró, & Chevallier, 2012; Shaw, DeScioli, & Olson, 2012). Moreover, children weigh multiple considerations when making allocation decisions, including harm to others and social relationships (Moore, 2009; Schmidt, Svetlova, Johe, & Tomasello, 2016). For example, whereas children ages 3–5 years allocate luxury (e.g., nice to have to enjoy) and necessary (e.g., need to have to avoid getting sick) resources similarly without considering need, children ages 6–8 year allocate luxury resources based on merit (giving more to those who worked hard) and necessary resources based on others' welfare (distributing equally) (Rizzo et al., 2016).

Similarly, research has also shown that during the 3-to-8-year period children's equality preferences diminish and their acceptance of other reasons for privileged treatment increases (Schmidt, et al., 2016). These findings demonstrate that children take fairness into account when allocating resources but also equality and others' needs as well. This ability sets the stage for considering group-based inequalities and advocating for change. To illustrate this point, following early childhood, concepts of fairness are applied to more complex contexts such as those that involve group-level decisions, not solely dyadic and triadic contexts as shown in research with young children.

Unlike individual-based inequalities, which result from differences in individual effort, group-based inequalities often derive from prejudice, bias, and discrimination about groups (Anderson, 1999; Li, Devine, & Heath, 2008). Group-based inequalities address the larger context of societal inequalities and require information about group-level normative expectations. One needs information involving whether a group has experienced advantages and disadvantages and whether these different experiences are based on prejudice or bias and other factors that may contribute to the lack of equality.

For example, discovering that certain groups in society, such as ethnic minority groups, have been consistently lacking in resources due to biases about the population being served might render a decision to distribute more needed resources to this group than to others more fortunate and who have not experienced the same biases (Elenbaas & Killen, 2016; Hazelbaker, Griffin, Nenadal, & Mistry, 2018). Group-based inequalities involve multiple forms of reasoning, beyond equality and equity, such as the historical context of advantaged or disadvantaged status. How children reason about these components of inequalities bears on the issue of when individuals recognize the need for change.

### **Children Identify with Groups and Recognize the Necessity of Change**

Humans are members of many social groups, including families and friendship networks (Verkuyten, 2011). Children affiliate and identify with groups, first in terms of membership ("I am a girl") and then in terms of norms ("my group likes to win;" "my group likes to be fair") (McGuire, Rutland, & Nesdale, 2015). As group norms become salient, group loyalty also becomes a part of group identity. As children get older, they understand that being disloyal to the group is costly and can result in exclusion or ostracism (Mulvey & Killen, 2015; Uskul & Over, 2017).

Studying morality in the context of developing individual, group, and societal considerations has been a central focus for social domain theory (Turiel, 2002) as well as variants of this approach, such as the social reasoning developmental model (Killen & Rutland, 2011; Rutland & Killen, 2017). When making judgments about group-based social equality, with age, children take group identity and group membership into account (Olson, Dweck, Spelke, & Banaji, 2011; Paulus, Gillis, Li, & Moore, 2013). By 6–8 years of age recognize the importance of a group-focused perspective when it comes to evaluating moral norms (Elenbaas, 2019; Hitti & Killen, 2015; Mulvey, 2016). This does not mean that children will accept any group norm or belief. Rather, it means that children take information about groups and group norms into account when making moral judgments. Sometimes this means rejecting the group norm when it conflicts with a moral consideration.

Starting around 5–6 years of age, children begin to evaluate group-based inequalities as unfair, using moral reasoning to explain why they view it necessary to rectify such inequalities. Elenbaas and her colleagues (2016) examined whether children will rectify an existing resource inequality they witness between two groups of children (ages 5–6 years and 10–11 years) attending different schools which reflect different racial and ethnic backgrounds (e.g., African American or European American). Using a counterbalanced design, children witnessed one or the other group advantaged or disadvantaged regarding necessary resources (e.g., educational supplies) (Elenbaas, et al., 2016). While many participants, overall, gave more to the disadvantaged group, the pattern varied by age. Younger children, ages 5–6 years, displayed an in-group bias, allocating more resources to their own group. By ages 10–11 years, no in-group bias was displayed, with more resources assigned to the disadvantaged ethnic minority group by all children (who were evenly divided by the racial groups depicted).

Children who rectified the inequality used reasoning based on past inequality (“I always saw that group with fewer resources, so they need more to make it fair and it’s even”). Children who perpetuated the inequality used strict equality reasoning without taking into account the initial inequity (“I want to give the same to both schools”) or status quo (“I saw that they had more so they should get more because maybe they worked more”). In a follow-up study on economic inequality, Elenbaas (2019) demonstrated that children’s perceptions of economic inequalities were related to their moral reasoning. Children who were supportive of admitting low income peers who had been excluded from a summer camp opportunity in the past used moral reasoning about the implications of broader economic inequalities (“Families with little money cannot afford many summer camps, but rich ones can have any choice they want”). Thus, children between 5 and 11 years begin to make judgments about potential unfair access to resources.

Adolescents confront a number of competing considerations when considering challenging the status quo, including societal and legal barriers (Arsenio, 2015; Arsenio & Willems, 2017; Seider, et al., 2016) as well as group dynamics, and group loyalty (McGuire, et al., 2015; Mulvey, 2016). Arsenio and Willems (2017) examined ethnic minority adolescents’ conceptions of how wealth is distributed in the U.S. and how it ought to be distributed. Adolescents who underestimated actual levels of wealth in the U.S. also preferred a more egalitarian distribution than they thought existed. Overall, adolescents’ reasoning converged

on a consistent theme that reflected dissatisfaction with the current societal norms and legal systems in place: "...the law represents the values of the people in power, rather than the values of people like you" (Arsenio & Willems, 2017, p. 471). Adolescents' reasoning for their fairness judgments revealed that they were concerns about discrimination: "...there's still racial profiling and others get treated differently" (2017, p. 471).

Research on the connections between explanations of poverty and judgments of distributive justice has shown that adolescents who explained poverty based on structural sources (societal obstacles) rather than solely individual sources (effort) were more likely to distribute resources based on need rather than merit (Kornbluh, Pykett, & Flanagan, 2019). These findings reveal that reasoning about the source of poverty is related to how individuals will distribute resources, a fundamental decision in society that effects the fair and equal treatment of individuals.

### **Moral Reasoning and Societal Change**

The development of moral reasoning is consequential, in part, because moral reasoning enables youth and adults to challenge unfair societal arrangements (Arsenio, 2015; Flanagan, 2013; Flanagan, et al., 2014; Ruck, Mistry, & Flanagan, 2019). Research on adolescents' political theories and civic engagement reveal how adolescents take fundamental moral concerns such as welfare, rights, fairness, and justice into account. In fact, adolescents view extreme levels of social stratification as a product of a society that is not equal and a government that will favor some groups over other groups (Flanagan, et al., 2014). The realization that society may be unfair is often related to the motivation to seek change. Thus, the orientations that develop during childhood and adolescence may be those that activists and voters embrace as they push for social change. To be effective, creating change requires, not an intuition, hunch or gut-reaction, but clear and unambiguous statements about the obligation to treat others with fairness and integrity: an unequivocal assertion about the necessity to correct an injustice. Moreover, if humans could not reason about moral tensions in laws or practices, such as the contradiction between human rights and slavery at the founding of the United States, they could not advocate for changing those laws and practices in the moral terms deployed throughout history.

In recent years, the world has witnessed protests and resistance about climate change from children and adolescents from Sydney to London. Protesters have used scientific data from the U.N.'s Intergovernmental Panel on Climate Change warning about rising levels of global temperatures to reason about the urgency of changing laws and policies. Students argue that these laws are necessary because "...we deserve to create a safe future for all of us" (Parker, 2019). In her TedX Stockholm talk, Greta Thunberg, age 16, and a climate activist, used moral reasoning to make her case for the immediate need to act on climate change: "...Nor does hardly anyone ever speak about the aspect of equity or climate justice, clearly stated in the Paris Agreement... we can't save the world by playing by the rules because the rules have to be changed. Everything has to be changed and it has to start today" (Thunberg, 2018). Thunberg's efforts have been effective because of her moral reasoning about connections between acts and consequences, and the articulation of her position.

Over historical time, norms that once seemed alterable seem not only unalterable but even wrong. Here, we will consider two reasons for such changes. First, the *informational assumptions*—factual beliefs about how the world works—underlying some norm may be undercut (Turiel, Killen, & Helwig, 1987). For instance, in the United States, some resisted women’s right to vote on the belief that women were too emotionally unstable or intellectually deficient to make political decisions (Cep, 2019). This position became increasingly untenable as it became more and more evident that average differences between men and women in emotional and intellectual abilities are virtually non-existent (Hyde, 2005). When such information assumptions are changed or undermined, moral judgments about right and wrong will often change accordingly.

A second reason why norms can become alterable is that the societal circumstances to which the norm responds can change. When the United States was founded, it was virtually impossible to run a truly national campaign for president, given the logistic difficulties of traveling and spreading information. To deal with this problem, the Founders adopted the solution of the Electoral College: voters would pick electors that would travel to the state capital to cast their votes for presidential candidates (Wegman, 2020). Since then, it has become possible to travel from one coast to another in half a day and presidential candidates can communicate instantaneously with millions of voters. Because of these societal changes, some are now arguing that the Electoral College is both unfair and unnecessary, and should be abandoned (Wegman, 2020). Thus, both through changing informational assumptions and changing societal circumstances, norms once deemed morally required can become morally repugnant to many or most members of a society.

### **What Makes Challenging the Status Quo Difficult?**

The fight for social equality is costly. Throughout development individuals are increasingly aware of the negative consequences that come with challenging the status quo. Psychological barriers for resisting unfair treatment of others include costs associated with deviating from group norms, such as incurring disapproval or sanctions from other group members. Other costs that prevent individuals from challenging groups include costs to the individual (giving up one’s own resources as well as personal goals) and feasibility (whether one’s action will be effective and productive). For this article, we focus on the first barrier, the costs of challenging groups that result from deviating from group norms. However, it is important to recognize that many other costs help explain why fair-minded individuals do not always challenge unfair practices.

As we have indicated, group affiliation is a fundamental part of being human. Beginning in childhood, deviating from group norms is recognized as likely to result in exclusion, stigmatization, and ostracism (Abrams & Rutland, 2008; Nesdale & Lawson, 2011; Over & Uskul, 2016). Consequences for resisting unfair group norms include not only social exclusion and rejection from peer groups, but also admonishment from those in positions of authority. As well, conventions, traditions, and stereotypic expectations of others often *permit* children and adolescents, especially those in high status groups, to accept and perpetuate the status quo in situations involving unfair or unequal treatment of others, such as norms about segregation and social status hierarchies. For those individuals in low

status groups, and for those who experience discrimination and ostracism the cost can be quite high, including the cost of life. Thus, while the origins of moral reasoning include promoting social equality, there are also challenges for doing so. Understanding the factors that influence early responses to these types of situations is of paramount importance.

Young children enforce group social norms but do so selectively (Engelmann, Herrmann, Rapp, & Tomasello, 2016; McGuire, Rizzo, Killen, & Rutland, 2018; Schmidt, Rakoczy, & Tomasello, 2013). For example, young children understand when a person is entitled to do something, and they will actively defend it when they perceive unjustified interference from second parties (Schmidt, Rakoczy, & Tomasello, 2013). Further, when preschoolers are presented with a majority who does the wrong thing (not sharing food with a hungry child) they will stick with their moral norm and share their food, when the recipient is in need. However, when the need appears to be low, then children will conform with an anti-social group norm and refrain from sharing (Engelmann et al., 2016). In contexts in which normative expectations reflect gender stereotypic ones, most young children will reject stereotypic expectation about play preferences when a group member wants to exclude a peer but a minority will rely on stereotypic expectations when deciding themselves whom to include into the group (Killen, Pisacane, Lee-Kim, & Ardila, Rey, 2001). In these contexts, children evaluate both the norm and the actions by others.

In middle childhood and adolescence, youth use more complex and sophisticated reasoning about the obstacles to advocating for changes regarding group norms that conform to stereotypic expectations (Mulvey, 2016). A significant change from early childhood to adolescence is the role of highly salient group norms and group loyalty (McGuire, Manstead, & Rutland, 2017). Betraying the group norm can result in exclusion from the group and accusations of disloyalty. Given that peer group identity becomes increasingly salient during late childhood and through adolescence, being disloyal to the group becomes a substantial obstacle to challenging group norms, even ones that are perceived to be unfair. When 9- to 14-year-olds were asked about whether they – and their peers – would challenge or resist gender stereotypes in group contexts involving exclusion, participants stated that they would personally resist gender stereotypic norms (e.g., asking their peer group about trying out for activities that were not associated with their own group, such as ballet for boys or football for girls), but that they did not expect their peers to resist (Mulvey & Killen, 2015); moreover participants expected that exclusion from the group was a consequence for challenging the peer group, and understood the asymmetrical status of gender stereotypes (such that it would be more difficult for boys to advocate for doing “girl-associated” activities (e.g., ballet) than for girls to advocate for doing “boy-associated” activities (e.g., football).

In fact, expectations of peers to resist gender stereotypic pressure to conform to group norms declines with age. Adolescents who support resisting stereotypes use reasoning based on inclusion of diverse perspectives in the group; those who conform to stereotypic expectations use gender group identity or group functioning reasoning. Thus, adolescents use moral reasoning and group functioning reasoning to make decisions about inclusion in group contexts but also expect that voicing a norm that is counter to the stereotypic expectations of the group has its costs. Verifying these concerns, research has shown that



10 – 14 year old children’s and adolescents’ peer-reported gender nonconformity was significantly predictive of peer-reported victimization (Aspenlieder, Buchanan, McDougall, & Sippola, 2009). Recognizing that silent bystanders are actually supporting unfair treatment of others has the potential to change these types of group dynamics (Palmer, Cameron, Rutland, & Blake, 2017).

The costs of challenging group norms are recognized not only at the peer group level but also at the societal level. In traditional societies with rigid hierarchies, children and adolescents are aware of status differences, preferring high status groups. For example, in a study in Nepal, a country similar to India with rigid social hierarchies based on socioeconomic status (and caste), adolescents who recognized that parents would be unfavorable towards friendship between a high- and a low-SES peer dyad referenced negative social hierarchies (“Because their levels don’t match up. You must be friends with the people from your same level. Those friends can support you when you work on something. That is why rich people do not want their daughter to be friends with such a poor girl.”) (Grütter, Dhakal, & Killen, 2020). Thus, the potential cost of social equality is felt by adolescents who understand that social hierarches present an obstacle.

At the same time, adolescents also referenced social mobility and the potential for change when individually advocating for cross-SES peer friendships. (“They [low-SES peers] feel if the rich become their friends they will get to learn things, their future would be bright, and the rich wouldn’t discriminate them anymore.”) They also referred to moral concerns (“If they become friends then they will help each other in the future when there are problems”). Nepalese adolescents living in a rigidly hierarchical societal structure had different views about challenging the status quo. A sizeable portion of the Nepalese sample, however, used reasoning that reflected their recognition that the system is unfair, and that their preference would be for friendships across economic boundaries to be feasible.

### **What is the Connection between Moral Reasoning, Judgment, and Action?**

Reasoning and judgments are inherently tied to actions: Insofar as people care enough about moral principles to form reasons and judgments—and they clearly do from early childhood—moral principles elicit emotions and motivate actions (Dahl et al., 2018; Lazarus, 1991; Turiel, 1983). In the developmental science reported here, most of the studies on challenging or rectifying inequalities involved assessments of both reasoning and action. For example, the resource allocation studies asked children to evaluate inequalities (based on race or gender) and then to allocate resources (to see if they rectify or perpetuate). Similarly, studies on the cost of challenging stereotypic expectations inducted children into an actual group (“this is your school; this is the other school” -- using their actual school--, or “this is your group —gender—and this is the other group”), with follow-up probes designed to assess whom children wanted to include or exclude. The method involves judgment, reasoning, and decision-making. Theoretically, this approach reflects the expectation that judgment and action are closely intertwined, with reciprocal interactive influences (Turiel, 2015). Investigating judgment, reasoning, and action within one experimental paradigm contributes to understanding the relationship between reasoning and action.

To study the relation between judgments and actions, however, it is crucial to examine judgments and actions at the same level of analysis (Kohlberg, 1971; Turiel, 2003). A consistent finding is that general attitudes predict aggregate behaviors (e.g., most people think stealing is generally wrong and most people generally refrain from stealing) and specific attitudes predict specific behaviors (e.g., judgments about which of two candidates will make a better president predicts voting actions in the presidential election, see Ajzen & Fishbein, 2005). For this reason, we would not expect that endorsement of general moral principles (e.g., whether someone endorses a general principle of equality) will predict what a person decides in a concrete situation that also evokes consideration about merit, welfare, and social conventions. How individuals judge concrete, multifaceted situations will depend on which principles they strive to balance in those situations (Dahl & Killen, 2018).

Thus, to explain decisions and actions in specific situations, researchers need to examine reasoning and judgments about those types of situations. Of course, the principles that people bring to bear on concrete situations are the same principles they generally care about, even if we cannot always know in advance how individuals will balance those principles (e.g., should I protest this unfairness or is it better to stay quiet?). Thus, research general attitudes, reasoning, and principles allow us to make sense of the motives, intentions, and explanations that underlie observed behavior in concrete situations. In short, both general principles of reasoning and specific judgments about concrete situations are essential for understanding the course and emergence of moral reasoning and societal change.

### Conclusions and Future Directions

The ability to challenge unfair practices is rooted in moral reasoning, with precursors in infancy and development from early childhood to adulthood. Children reject authority statements that they view as unfair or unequal, rectify inequalities when distributing necessary resources, and resist stereotypic expectations when making group inclusion decisions. However, challenging unfair arrangements based on moral reasoning is not easy. As knowledge about groups and group identity develops, children recognize the costs of challenging their group members. These costs include social exclusion from the group, stigmatization, and ostracism. Reasoning about unfairness and about the costs of challenging unfair practices continue to develop, from childhood to adulthood and, at a societal level, across human history.

We assert that moral reasoning enables change on two timescales: developmental and societal. Our central focus has been on the evidence from developmental science for promoting change. We also draw a parallel to how moral reasoning has accounted for change at the societal level. Articulating what makes unfair treatment of others wrong has prompted societies to establish declarations protecting the rights of individuals (such as Civil Rights laws, the U.N. Universal Declaration of Human Rights, the U.N Convention on the Rights of the Child, and other similar documents around the globe). Social equality of persons reflects a continuously evolving aspect of human history (Fourie, et al., 2015). Theories of justice have emphasized equality of resources as well as equality of persons (Appiah, 2011; Miller, 1997; Nussbaum, 2001; Sen, 2009). Developmental science has provided a basis of

scholarship to draw on for formulating hypotheses about the emergence of social equality understanding in childhood.

**New avenues.**—There are many new avenues of research to embark on to understand moral reasoning in the context of developmental and societal change. First, why do some societal injustices sometimes remain hidden in plain view? Today, children in many (but not all) countries appear to view exclusion based on gender as more legitimate than exclusion based on race or ethnicity. This may be a result of changing societal messages that condone gender segregation but reject racial or ethnic segregation; this has not always been the case in human history and it does not remain the case in certain countries around the globe that continue to promote racial segregation. These societal messages may, among other things, instill informational assumptions that males and females (or groups based on racial background) are inherently different. This finding needs to be tested in a range of societal contexts that vary regarding messages about segregation and integration. In some societies, religion remains a large barrier to integration and research may show that children in these cultures view exclusion based on religion as more legitimate than those based on gender or race (Verkuyten, 2011). Following from this pattern of judgment, challenging religious traditions perceived to be unfair may be more costly and difficult for children (and adults). In general, future research should examine how children’s moral reasoning and judgments draw on their experiences with, and beliefs about, groups that vary along ethnic, gender, religious, and other characteristics; and to conduct this research in many different cultural contexts.

At the societal level, the consequences of challenging inequalities for some categories remains much more severe than for other categories depending on the larger societal context. As an illustration, working to increase freedoms for women is more costly in Saudi Arabia than in North America given the laws that restrict women’s travel and autonomy in Saudi Arabia; asserting freedoms for immigrants in the U.S. is more difficult than in Canada. Investigating how these distinctions are revealed in children’s willingness to challenge the status quo would be fruitful. Many people appear to remain unaware of societal injustices for a long time (e.g., institutions of slavery, gender, and religious discrimination), only for those institutions to be universally condemned decades or centuries later.

Another area of inquiry concerns how children’s explanations for disparities in resources and opportunities develop. Why do some people come to attribute wealth disparities largely to individual abilities and efforts (“You can make it if you work hard”), while other people develop more structural explanations (“Society excludes marginalized groups from opportunities for education and income”) (Heckman & Mosso, 2014)? These explanations may vary from one disparity to another, even within the same person. For example, children may explain disparities based on gender from an individually-based perspective (focusing on effort or ability for high status males) but explain gender differently when asked to evaluate disparities based on low-status ethnic minority males and high-status ethnic majority males. It also may be the case that these explanations vary as a function of children’s own status in terms of their family’s socioeconomic background (Arsenio, 2015). At the societal level, explanations about disparities based on access to necessary resources such as health care have generated extensive debates and have changed from

strictly individually based arguments to those that reflect a recognition and an understanding of structural inequalities, that is, the problem with obstacles that prevent access to care (such as preexisting conditions).

Another area of future research concerns how does one's own position in society in terms of social status and mobility bear on one's views about which inequalities are illegitimate? For instance, does experience with disadvantaged status in society make children less accepting of inequality? Children who have experienced exclusion often understand what makes it so hurtful, and yet, too much experience with social exclusion is disabling, resulting in disengagement from social groups (Bierman, 2004). Further, ethnic minority adolescents often view social inequalities as derived from individually-based sources, not structural sources (even in cases when data indicate that the latter explanation is more accurate) (Flanagan & Kornbluh, 2017). We expect that the group identity of an individual child is related to their evaluations of unfair treatment and their recognition of inequalities, and it may interact with other factors such as age and contact with other peers from different backgrounds. Offering some hope, research shows that children who are friends with others from different socioeconomic status positions are more supportive of rectifying inequality (Elenbaas, 2019). Developmental science needs to examine how these experiences and aspects of inequalities bear on the use of moral reasoning.

Lastly, the field needs new research on how children, adolescents, and adults reason about costs of challenging the status quo. What leads some to defy these costs by speaking up against injustice, while others choose to remain silent? In making these decisions, individuals weigh multiple costs with challenging unfair practices, some group-based, such as social exclusion and ostracism, and some individual-based, such as self-sacrifices for individual resources as well as personal goals. In addition, they must consider whether they can even achieve change if they try, and what would be most effective.

Recent protests against police violence, spurred by video-taped records of police officers killing Black men, demonstrate the role of moral reasoning in decisions to challenge the status quo. Patrisse Khan-Cullors, one of the founders of the *Black Lives Matter* movement, talks about one of her many reasons to seek change:

“We know that if we can get the nation to see and understand that Black Lives Matter, then every life would stand a chance. Black people are the only humans in this nation ever legally designated, after all, as not human. Which is not to erase any group's harm to ongoing pain in particular the genocide carried out against the First Nations peoples. But it is to say that there is something quite basic that has to be addressed in the culture, in the hearts and minds of people who have benefited from, and were raised up on, the notion that Black people are not fully human.” (Khan-Cullors & Bandele, 2018).

We predict that the likelihood of rectifying inequalities and challenging stereotypic expectations will be related to the degree to which the community provides supportive messages about the obligations to intervene or correct past wrongs. This requires more research on children's interpretations of parental and peer attitudes about social inequalities, societal messages, and to what extent they view the cost to be high in terms of disruptions

to social relationships and group membership when acting on their moral reasoning. Further, future research needs to be conducted in a wide range of cultural, ethnic, and religious contexts to fully understand the constraints and obstacles for challenging inequalities (Verkuyten, 2014).

Notably, the examples cited earlier in this article involved a high level of community support for speaking out for social justice. Mary Beth Tinker's Quaker community was supportive of her decision to challenge the school rules against wearing black arm bands to protest the Vietnam war. Greta Thunberg's parents describe their support of her mission to speak out about climate control as one in which they explicitly made changes in their own lifestyles to be consistent with her suggestions for actions such as avoiding air travel to diminish air pollution. Patsisse Khan-Cullors discusses her child experiences in school as what lifted her up and gave her a voice. Understanding the costs and obstacles for ensuring fair and just treatment for all members of society will help create positive change.

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