To investigate whether children rectify social inequalities in a resource allocation task, participants (N = 185 African-American and European-American 5–6 year-olds and 10–11 year-olds) witnessed an inequality of school supplies between peers of different racial backgrounds. Assessments were conducted on how children judged the wrongfulness of the inequality, allocated new resources to racial ingroup and outgroup recipients, evaluated alternative allocation strategies, and reasoned about their decisions. Younger children showed ingroup favorability; their responses differed depending on whether they had witnessed their ingroup or an outgroup at a disadvantage. With age, children increasingly reasoned about the importance of equal access to school supplies and correcting past disparities. Older children judged the resource inequality negatively, allocated more resources to the disadvantaged group, and positively evaluated the actions of others who did the same, regardless of whether they had seen their racial ingroup or an outgroup at a disadvantage. Thus, balancing moral and social group concerns enabled individuals to rectify inequalities and ensure fair access to important resources regardless of racial group membership.

1. Introduction

One of the pervasive conditions that leads to social inequality is when opportunities and resources are more available to certain social groups than to other social groups. The structure of most societies includes resource disparities along group lines (e.g., inequalities linked with race and gender) as well as social hierarchies which are bolstered by biases and negative assumptions about disadvantaged groups (Levy, West, & Ramirez, 2005). Yet, at the same time, individuals are able to evaluate, critique, and sometimes even change inequalities that they deem to be unfair (Wainryb, Smetana, & Turiel, 2008). In fact, while much of social life involves learning about and applying social norms and expectations, in many instances individuals recognize the importance of resisting unfair practices and challenging social inequalities (Appiah, 2005; Nussbaum, 2001; Sen, 2009).

From early in life, children negatively evaluate the denial of resources (e.g., taking all the toys for oneself and leaving none for others) (Smetana, Jambon, & Ball, 2014). With age, children also recognize some circumstances under which it would be fair to allocate resources unequally, such as when one individual has worked harder and merits a greater reward (Baumard, Mascaro, & Chevallier, 2012; Rizzo, Elenbaas, Cooley, & Killen, 2016). But less research has examined how children conceptualize disadvantaged status regarding access to resources or recognize when it would be fair to rectify inequalities between groups (e.g., racial groups). Investigating the origins of concepts about social inequalities provides valuable insights into the factors that contribute to the decision to correct or perpetuate disadvantaged conditions. Such findings have the potential to contribute to the understanding of the cognitive processes involved in fairness judgments and prejudicial attitudes throughout childhood.

To date, little research has investigated how children address resource inequalities when they are linked with group membership (e.g., race, ethnicity, gender), and only a handful of studies have extended beyond the allocation of small, desirable items like candy and toys to investigate children’s responses to inequalities of resources with moral implications for recipients’ wellbeing, including concerns for others’ welfare. In order to address these questions, we examined children’s reasoning, judgments, and behavior in response to an inequality of educational resources between groups of peers from different racial backgrounds (African-American and European-American).
1.1. Concerns for fairness in resource allocation

From early in life, children are aware of resource inequalities, both between themselves and others and among third parties. For example, young children share resources equally with collaborators (Melis, Altrichter, & Tomasello, 2013; Warneken, Lohse, Melis, & Tomasello, 2011) and reject unequal allocations that favor a partner over themselves (Blake et al., 2015). By 8–10 years of age, children also reject unequal allocations that favor themselves over a partner (Blake & McAlufife, 2011; Fehr, Bernhard, & Rockenbach, 2008), or one recipient over another (Shaw & Olson, 2012), when both parties are equally deserving of resources.

Young children seek to equalize resource distributions between others, allocating limited resources to disadvantaged individuals, even when they do not stand to gain by acquiring resources for themselves. For example, young children correct inequalities between third parties by allocating more items to a recipient with fewer resources (Li, Spitzer, & Olson, 2014; Paulus, 2014), and this corrective approach increases with age. That is, in later childhood, children choose to allocate based on need (in order to correct inequalities) even when they could distribute equally. By 8 years of age, children prefer to rectify inequalities between recipients (by giving more to a disadvantaged individual) rather than dividing items strictly equally (Klenbaum & Wilkening, 2009; Rizzo & Killen, 2016; Schmidt, Svetlova, Johe, & Tomasello, 2016; Shaw & Olson, 2013). Thus, with age, children are increasingly capable of weighing and prioritizing complex moral claims to resources, often choosing to correct inequalities between individuals when they have the opportunity to distribute resources.

1.2. Concerns for group membership when allocating resources

The studies introduced above highlight the early emergence and continued development of children's consideration of moral concerns when allocating resources. In intergroup contexts, however, additional group-related concerns can also influence children's resource allocation decisions, including issues of prejudice, discrimination, and bias. For instance, young children sometimes allocate more resources like candy and toys to members of their own race, gender, and minimal ingroup than to outgroup members (Benizio & Diesendruck, 2015; Dunham, Baron, & Carey, 2011; Moore, 2009; Renno & Shutts, 2015). This type of differential allocation based on group membership is a form of ingroup bias. Likewise, older children have been shown to allocate resources preferentially based on group membership (Gummerum, Takezawa, & Keller, 2009), and to use group stereotypes to justify differential resource allocation (McGillicuddy-De Lisi, Daly, & Neal, 2006).

1.3. Social inequality and resource allocation

In particular, research on children's allocation decisions in light of between-group (or intergroup) resource disparities is necessary for understanding how allocation decisions bear on social inequalities. As an illustration, Olson, Dweck, Spelke, and Banaji (2011) tested whether children from 3 to 11 years of age perpetuated or rectified an inequality of cookies between recipients from different racial groups. Children most often adhered to the status quo, giving more cookies to the recipient from the racial group that they had seen receiving more cookies. Similar work indicates that observation of a resource inequality between racial groups or novel groups can lead children to assume that the disparity is legitimate or deserved, and to perpetuate it themselves by allocating more goods to a member of an advantaged group (Horwitz, Shutts, & Olson, 2014; Li et al., 2014). Likewise, some research shows that young children are more likely to reject resource inequalities that disadvantage their minimal ingroup than inequalities that disadvantage their minimal outgroup (Jordan, McAuleiffe, & Warneken, 2014).

However, the role of intergroup biases in children's reasoning about the distribution of resources that pertain to others' welfare (e.g., educational needs) remains relatively unexplored. The distribution of educational resources is one that is relevant for group-level analysis given that societal patterns of inequality in access to quality education based on group membership, including racial group membership, remain pervasive (Duncan & Murnane, 2011). When faced with an inequality of educational resources between peers of different racial backgrounds, one possibility is that children will perpetuate the status quo inequality by allocating more resources to an advantaged group (more to the group that already has more), particularly if they identify with the advantaged group. The studies described above would support this prediction. Alternatively, children may demonstrate increasing concern for fairness and others' welfare with age, choosing to distribute in a way that corrects the inequality.

Supporting this second possibility, one recent study found that, by 8 years of age, children distinguish between resources described as luxuries and resources described as necessities in a merit-based allocation context. In this study, children allocated luxury resources meritoriously (more to the hard working character), and allocated necessary resources equally, based on a concern for recipients' welfare (Rizzo et al., 2016). This study, however, did not have an intergroup component. Given that children begin to endorse their own and others' equal rights to quality education by early adolescence (Peterson-Badali, Morine, Ruck, & Slonim, 2004), and negatively judge denial of access to education (Brown, 2006; Helwig & Jasobiak, 2001), it is likely that older children may perceive an inequality of educational resources as highly detrimental for the disadvantaged group, potentially overcoming ingroup biases in favor of corrective action when differential resource allocation would cause harm to disadvantaged parties.

Further, there is some evidence that older African-American children and adolescents are more perceptive of discrimination in various social contexts than their European-American peers (Brown, Alabi, Huyhn, & Masten, 2011; McKown, 2004; McKown & Weinstein, 2003). This suggests that older African-American children may be more likely than older European-American children to perceive an inequality of resources between peers of different racial backgrounds as wrong, and to support corrective action. To date, most studies of children's differential resource allocation to racial ingroup versus outgroup members and of children's corrective actions in light of a pre-existing resource inequality have been conducted with predominantly European-American samples. Thus, it is an open question whether African-American children may be more supportive of corrective action in light of an intergroup inequality of educational resources compared to their European-American peers.

1.4. Social reasoning developmental model

As outlined above, children must navigate potentially competing concerns for fairness and group membership in intergroup resource allocation contexts. That is, children must balance moral concerns regarding the treatment of others (fairness and others' welfare) with social group concerns regarding the treatment of others based on their ingroup or outgroup membership (Killen, Elenbaas, Rizzo, & Rutland, 2016).

In order to frame the current study, we drew on an integrative theoretical model called the social reasoning developmental (SRD) model, which emphasizes the importance of both moral concerns about fairness and justice as well as group affiliations and expectations throughout development (Killen, Elenbaas, & Rutland, 2015;