

Perceptions of Economic Inequality Are Related to Children's Judgments About Access to Opportunities

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This study examined how children's perceptions of economic inequalities impacted their moral judgments about access to opportunities. The sample included ethnically diverse 8- to 14-year-olds ($N = 267$; $M = 11.61$ years, $SD = 1.88$) of middle- to upper-middle-income backgrounds. The larger the economic inequality in access to opportunities children perceived, the more negatively they evaluated granting access to a specific opportunity (an educational summer camp) to high-wealth peers alone, and the more they reasoned about the importance of fair access to learning. Further, children were more supportive of admitting low-wealth peers when they knew they had been excluded from the opportunity in the past, and children who chose to admit low-wealth peers reasoned about the implications of broader economic inequalities. Finally, most children preferred to take an active role in determining who should receive access to this special opportunity rather than leaving the decision to chance. These findings provide evidence for how perceptions of both broad and context specific intergroup relations contribute to moral judgments in childhood.

Keywords: economic inequality, moral judgment, social reasoning, resource allocation, fairness

Children and adolescents are aware of economic inequalities. For example, children recognize that their wealthier peers have greater access to opportunities than their less wealthy peers (Mistry, Brown, White, Chow, & Gillen-O'Neel, 2015). Less is known, however, about how perceptions of economic inequality relate to children's judgments about how opportunities should be distributed. Children are concerned with others' welfare and often view inequality as unfair (Elenbaas & Killen, 2016). Yet children also frequently infer that wealthy individuals are entitled to more resources (Sigelman, 2012). This study examined how children's perceptions of economic inequalities contributed to their decision making when they had the chance to grant access to an opportunity. Further, we examined how children's own economic background contributed to their decisions in this context.

In particular, children made decisions about access to an educational summer camp for high-wealth and low-wealth peers. Economic inequalities in access to educational opportunities raise moral questions about fairness and rights for children and adults (Duncan & Murnane, 2011; Wainryb, Smetana, & Turiel, 2008). Further, negative attitudes toward low-wealth peers established in childhood can persist into adulthood and translate into discrimi-

nation (Lott, 2012). Thus, understanding whether children judge it fair to rectify economic inequalities in access to opportunities is a crucial step toward reducing biases against economic groups.

Children's Perceptions of Economic Inequality

Economic inequalities are a salient part of social life for older children and adolescents. This study examined perceptions of inequality with a sample of 8- to 14-year-olds, focusing on a time in development when children can reliably identify their own families' economic status relative to other families (Goodman, Maxwell, Malspeis, & Adler, 2015; Mistry et al., 2015) and place increasing importance on social group identity when evaluating others (Abrams & Rutland, 2008). For instance, many older children and adolescents are selective in their friendships, befriending peers of the same economic background and teasing others based on their family financial situation (Bradshaw, Jay, McNamara, Stevenson, & Muldoon, 2016; Bucchianeri, Eisenberg, & Neumark-Sztainer, 2013; Due et al., 2009; Hjalmarsson, 2018).

Importantly, older children and adolescents are aware that their peers from high-wealth backgrounds are afforded more opportunities (e.g., to participate in afterschool clubs or travel to vacation destinations) than are their low-wealth peers (Hjalmarsson, 2018; Mistry et al., 2015; Weinger, 2000). In fact, late childhood is a time when children define many types of social groups in terms of their shared norms and traditions (Abrams, Rutland, Pelletier, & Ferrell, 2009). In contrast to younger children's focus on shared external characteristics, for older children and adolescents, sharing preferences and activities is a central part of what it means to be a member of a social group (Mulvey & Killen, 2015).

Children's perceptions of social groups and intergroup relations can also include stereotypes. For economic groups in particular, children often infer that economic inequality is justified and determine that high-wealth groups are entitled to their advantaged

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position. For example, children of middle-income backgrounds hold stereotypes that high-wealth peers are hardworking, intelligent, and responsible, and that low-wealth peers lack these qualities (Roussos & Dunham, 2016; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016; Sigelman, 2012; Woods, Kurtz-Costes, & Rowley, 2005). Thus, older children and adolescents are aware that greater wealth is associated with greater access to opportunities. Whether this awareness contributes to children's interest in rectifying or perpetuating patterns of economic inequality in access to opportunities was of primary interest for this study.

Judgments About Access to Educational Opportunities

This study focused on educational opportunities in particular. Children and adolescents demonstrate some awareness of the links between economic status and education. For example, adolescents are able to explain poverty in terms of societal causes, including lack of educational opportunities (Flanagan et al., 2014), and cite extra educational opportunities (e.g., test prep courses) as an advantage of wealth (Arsenio, Preziosi, Silberstein, & Hamburger, 2013). Likewise, children judge that it is wrong for authority figures to deny educational opportunities (e.g., participation in a science fair) on the basis of social group membership (e.g., gender) and reason about fairness, rights, and the wrongfulness of discrimination (Brown, 2006; Helwig & Jasiobedzka, 2001; Horn, 2003).

Thus, the denial of educational opportunities is a relevant moral issue for children. Determining how to grant access to opportunities in a context of inequality, however, requires children to weigh moral and social group concerns to determine the best course of action. By middle childhood, children distinguish between equality and impartiality (Groce, Rossano, & Tomasello, 2015; Shaw & Olson, 2014) and allocate resources unequally in order to adjust for a past or current disparity (Elenbaas & Killen, 2016; Rizzo & Killen, 2016). The capacity to make moral judgments about fairness that extend beyond strict equality is crucial for reasoning and decision making in a complex context in which more than one action may seem correct. In order to measure this type of decision in a familiar social context, we asked participants to determine who should get to attend an educational summer camp.

Children's Economic Background and Decisions About Fair Access

In addition, we sampled participants from middle- to upper-middle-income backgrounds (relative to their regional communities) and tested whether children's decisions differed as a function of family income, both when high-wealth peers had been excluded from the opportunity in the past and when low-wealth peers had been excluded in the past. When resources are limited, older children and adolescents are more responsive to the needs of members of their ethnic, gender, and school ingroups than members of relevant outgroups (Abrams, Van de Vyver, Pelletier, & Cameron, 2015; Sierksma, Thijs, & Verkuyten, 2015; Weller & Lagattuta, 2014). Likewise, in peer contexts when only one person can be chosen to join a group, older children and adolescents are more likely to include members of their social ingroups than members of social outgroups (Hitti & Killen, 2015; Killen & Stangor, 2001; Park & Killen, 2010).

One possibility is that when opportunities are limited, children may be more likely to grant them to economic ingroup members

than economic outgroup members. Thus, in addition to our primary focus on the impact of children's perceptions of economic inequalities on their decisions about how opportunities should be distributed, we also tested whether children's judgments might differ as a function of their own economic background.

Theoretical Framework: Social Reasoning Developmental Model

This study was framed by the social reasoning developmental (SRD) model (Killen, Elenbaas, & Rutland, 2015; Rutland, Killen, & Abrams, 2010). The SRD model integrates the social domain theory perspective on moral development (Smetana, Jambon, & Ball, 2014; Turiel, 2006) with developmental social identity theories (Nesdale, 2004; Verkuyten, 2007) and theories of group dynamics in childhood (Abrams & Rutland, 2008). This model proposes that when children make decisions in social contexts, they reason about multiple moral and social considerations, weighing concerns for fairness with knowledge about intergroup relations. In the current study, children and adolescents made judgments and decisions about access to opportunities in a context in which their concerns for fairness, perceptions of broader patterns of exclusion in society, and potential interest in benefitting others who may be perceived as more similar to them were salient, and potentially conflicting, considerations.

A unique prediction of the SRD model is that knowledge about intergroup relations (in this case, perceptions of economic inequalities in access to opportunities) can contribute to the promotion of fairness in childhood. Notably, most research on intergroup relations in development focuses on how issues like stereotypes and prejudice can lead to negative behaviors (i.e., discrimination). Indeed, research on peer social exclusion from the SRD perspective indicates that children view explicit exclusion of the basis of group membership as wrong but also fail to include peers of other backgrounds (e.g., ethnicity, nationality) into their own social groups when they have the chance to do so (Killen et al., 2015).

However, when a social group is typically excluded from access to an opportunity, as in the current study, taking group membership into account may be necessary for ensuring fair access in the future. Few studies have investigated this possibility; however, recent research provides some evidence along these lines. For instance, older children apply their awareness of racial inequalities in broader society to address resource inequalities between peers (Elenbaas & Killen, 2016, 2017). Thus, both perceptions of inequality and moral concerns about fairness contribute to children's judgments about the fair way to address disparities, at least when race is concerned. Children do not always use their awareness of others' group membership to behave in ways that benefit members of their own groups. Rather, there are times when awareness of intergroup inequalities can promote fair decision making. Whether or not children would likewise use their perceptions of economic inequality to address wealth-based disparities in access to opportunities, however, remains untested.

Overview and Hypotheses for the Study

This study examined how children's perceptions of economic inequalities contributed to their decisions about how to allocate access to an educational opportunity between peers of high- and

low-wealth backgrounds. Based on research drawing on the SRD model, we proposed that awareness of economic disparities in access to opportunities would be related to fair decision making. To address our aims, we asked participants (ages 8–14 years) to make judgments and decisions about who should be admitted to an educational summer camp that traditionally only accepted children from high-wealth families or children from low-wealth families (between-subjects). The options were (a) *equal*—admit an equal number of children from both wealth backgrounds; (b) *impartial*—admit children without regard to wealth background; (c) *low-wealth only*—admit only children from low-wealth families; and (d) *high-wealth only*—admit only children from high-wealth families. Finally, we asked participants how often they thought that the high- and low-wealth children in this context had access to extra educational opportunities.

Table 1 provides a detailed overview of the hypotheses for this study. Broadly, we predicted that children's decisions about access to opportunities would differ according to their perceptions and reasoning about broader economic disparities. Further, we predicted that children would take into account a past history of exclusion when making judgments about access to opportunities. However, we predicted that the extent to which children took a past history of exclusion into account would further depend on their own economic background. Finally, we predicted that, in this context of inequality, children's reasoning would reflect the view that ensuring fair access to opportunities can require taking into

consideration what one knows about intergroup relations rather than ignoring group membership.

Method

Participants

Participants were 8- to 14-year-olds ($N = 267$; $M = 11.61$ years, $SD = 1.88$) living in the suburbs of a large city in the mid-Atlantic United States. Sample size was determined using a priori power analyses. Several different statistical models were planned, reflecting the study design and the different types of measures used. Thus, several different power analyses were conducted. As one example, for the multinomial logistic regression examining participants' strategy choice, we used odds ratio as a measure of effect size. Based on our assessment of the literature in this area, we determined that we might find an odds ratio of 1.2 to 1.5 (a relatively "small" effect). With alpha at .05 and power at .08, we determined that we would need a sample size of approximately 200 to 250.

Participant demographic information (age, gender, race or ethnicity, and approximate annual family income) was obtained by parent report (on the consent form) and is presented in Table 2. The sample was balanced by gender and reflected the racial and ethnic diversity of the geographic area in which the data were collected. Parents used a scale ranging from 1 = \$30–\$60K to 6 ≥

Table 1
Summary of Research Questions, Hypotheses, and Central Findings

Hypotheses	Findings	Hypothesis supported?
RQ: Children's judgments and decisions about access to opportunities will differ according to their perceptions and reasoning about broader economic disparities.		
H1a: The larger the economic gap in access to opportunities children perceive, the more negatively they will evaluate admitting only high-wealth peers to the summer camp opportunity.	The greater their <i>perceptions of economic inequality</i> , the more negatively participants evaluated the <i>high-wealth only</i> strategy.	Yes
H1b: The larger the economic gap in access to opportunities children perceive, the more positively they will evaluate admitting only low-wealth peers to the summer camp opportunity.	Participants' <i>perceptions of economic inequality</i> did not significantly predict their evaluations of the <i>low-wealth only</i> strategy.	No
H1c: Reasoning about broader patterns of exclusion in society will be positively related to decisions to admit low-wealth peers to the camp opportunity.	Participants who chose the <i>low-wealth only</i> strategy were the most likely to reason about <i>addressing economic inequality</i> .	Yes
RQ: Children will take into account a past history of exclusion when making judgments about access to opportunities.		
H2a: Children will be more supportive of admitting members of a group (high- or low-wealth) when they know that group has been excluded from the camp opportunity in the past.	Participants evaluated the <i>low-wealth-only</i> strategy more positively in the <i>low-wealth excluded</i> condition, and evaluated the <i>high-wealth-only</i> strategy more positively in the <i>high-wealth excluded</i> condition.	Yes
RQ: The extent to which children take a past history of exclusion into account when making judgments about access to opportunities will further depend on children's own economic background.		
H3a: Children's support for admitting members of a group that had previously been excluded will be stronger when the economic background of that group is more similar to their own.	The higher participants' <i>family income</i> , the more positively they evaluated the <i>high-wealth only</i> strategy in the <i>high-wealth excluded</i> condition (marginally significant).	Partially
RQ: In this context of inequality, children's decisions and reasoning will reflect the view that ensuring fair access to opportunities can require taking into consideration what one knows about intergroup relations rather than ignoring group membership.		
H4a: Children will prefer an equal allocation strategy over leaving the decision to chance.	Participants preferred the <i>equal</i> strategy to the <i>impartial</i> strategy.	Yes
H4b: Children who prefer an impartial strategy will reason about being unbiased.	Participants who chose the <i>impartial</i> strategy were the most likely to reason about <i>avoiding biased decisions</i> .	Yes

Note. RQ = Research Question; H = Hypothesis.

Table 2
Sample Descriptives

Demographics	<i>n</i>	%	<i>M</i>	<i>SD</i>	Range
Age in years			11.61	1.88	8–14
Gender					
Male	135	51			
Female	132	49			
Race or ethnicity					
European American	115	43			
African American	61	23			
Asian American	23	9			
Latinx	21	8			
Multiracial or multiethnic	41	15			
Declined to provide race or ethnicity information	6	2			
Approximate annual family income			4.18	1.76	1–6
(1) \$30–60K	31	12			
(2) \$60–90K	22	8			
(3) \$90–120K	44	17			
(4) \$120–150K	35	13			
(5) \$150–180K	41	15			
(6) >\$180K	94	35			
Total <i>N</i>	267				

\$180K to indicate their family's approximate annual income. These data were collected in the spring of 2016. At that time, the area of the United States where the participants lived had a median annual household income of \$99,435 and the national median income for the United States was \$55,775 (U.S. Census Bureau, 2015). We refer to these participants as middle- to upper-middle income relative to their regional community.

We conducted an ANOVA to examine potential racial and ethnic differences in participants' approximate annual family income, $F(4, 256) = 14.83, p < .001, \eta_p^2 = .19$. The family incomes of Latinx ($M = 2.81, SD = 1.78$) children were lower, on average, than those of their European American ($M = 4.95, SD = 1.29$) and multiracial or multiethnic ($M = 4.15, SD = 1.71$) peers (both $ps < .05$) but not different from those of African American ($M = 3.33, SD = 1.90$) children ($p = .99$). The family incomes of African American children, in turn, were lower than those of European American children ($p < .001$) but not children of any other background (all $ps > .05$). The family incomes of Asian American ($M = 4.13, SD = 1.74$) children did not differ from their peers of any other background (all $ps > .05$), and the family incomes of European American children and multiracial or multiethnic children did not differ from each other ($p = .06$).

Participants attended nine private schools (religious and non-sectarian) in racially and ethnically diverse majority middle- to upper-middle-income suburbs of a large city. Of these nine schools, seven were combined elementary and middle schools (in the same building or on the same campus), one was an elementary school, and one was a middle school. The sample was relatively evenly distributed across the six grade levels represented: 21% ($n = 55$) were in third grade, 15% ($n = 39$) in fourth grade, 15% ($n = 41$) in fifth grade, 16% ($n = 43$) in sixth grade, 15% ($n = 41$) in seventh grade, and 18% ($n = 48$) in eighth grade.

We conducted an ANOVA to determine whether the nine schools differed from each other, on average, in participants' approximate annual family income, $F(8, 258) = 5.47, p < .001,$

$\eta_p^2 = .15$ (see Table 3). Average income did not differ significantly across eight of the nine schools (all $ps > .05$). Average income at one school was higher than five of the other schools ($ps < .05$) but not the other three schools ($ps > .05$).

Procedure

Written parental consent and children's verbal assent were obtained for all participants. Participants completed all measures independently in a communal space at their school (e.g., library), supervised by trained research assistants. All stimuli and measures were presented on paper survey forms. The survey session took approximately 20 min. Participants were told that there were no "right" or "wrong" answers and that responses were confidential and anonymous. This study was approved by the Institutional Review Board at the University of Maryland (Project title: "Fair Allocation in Elementary and Middle School"; Protocol number: 858404).

Measures

Experimental conditions. First, the wealth groups were introduced with the following text:

Here are some kids who all live in the same city. Some of these kids' families have a lot of money. They live in houses like this and ride in cars like this. And some of these kids' families have a little money. They live in houses like this and ride in cars like this.

Images of children were silhouette outlines pretested to reveal no implications about race/ethnicity; houses and cars were adapted from another study on perceptions of economic status (Elenbaas & Killen, 2016).

Next, the opportunity was introduced:

Every summer the zoo organizes a special Zoo Summer Camp! Kids can go to Zoo Summer Camp for a whole week for free. It is really fun, and it is also a really important opportunity for kids to learn a lot. Learning about animals helps with science, math, language arts, social studies, and art.

Next was the between-subjects manipulation introducing the camp's past history of including only children of one economic background:

Table 3
Average Participant Approximate Annual Family Income by Research Site

Research site	Average annual family income (Range 1–6)	
	<i>M</i>	<i>SD</i>
School 1	5.41	1.01
School 2	4.91	1.34
School 3	4.70	1.57
School 4	4.53	1.65
School 5	3.98	1.78
School 6	3.89	1.64
School 7	3.50	2.03
School 8	3.50	1.24
School 9	2.75	2.21

A lot of kids want to go to Zoo Summer Camp for this special learning opportunity. But there are only a few spaces open each year. In past years, only kids whose families have [a little/a lot] of money have gone to Zoo Summer Camp. So kids from those families got to learn a lot. Kids whose families have [a lot of/a little] money have not gone. So kids from those families didn't get to learn a lot.

The task at hand was explained as the following:

This year, there are 20 new kids who want to go to Zoo Summer Camp. But there are only 10 spaces! Here are 10 of the kids who want to go. They are from families with a little money. And here are 10 of the kids who want to go. They are from families with a lot of money. The Zoo Summer Camp has to decide what to do. Let's hear what you think!

Judgments about allocation strategies. In order to examine judgments about access to the camp, participants were asked to separately evaluate four different ways of determining who should get to attend, each on a scale of 1 = *really not okay* to 6 = *really okay*. The four strategies were (a) *equal*—"How okay or not okay would it be if, this year, the Zoo Summer Camp gave 5 spaces to [low-wealth peers] and 5 spaces to [high-wealth peers]?"; (b) *impartial*—"... put all the new kids' names in a bag and pulled out 10 names without looking and gave the 10 spaces to those kids?"; (c) *low-wealth only*—"... gave all 10 spaces to [low-wealth peers]?"; and (d) *high-wealth only*—"... gave all 10 spaces to [high-wealth peers]?"

Allocation strategy choice. We then measured participants' decisions about which strategy was the "best" of the four. Participants were asked to choose (circle) the strategy they thought was best and write down their reasoning for their decision: "The Zoo Summer Camp has to make a choice now. They could ... [all options]. Which way do you think is the best? Please explain why that way is the best."

Participants' open-ended reasoning about why they thought the strategy that they chose was the best was coded for analyses into one of six mutually exclusive conceptual categories expected based on previous research (Killen et al., 2015) and confirmed by pilot testing for this study. Table 4 provides a label, definition, and example (i.e., an actual participant response) for each category. If

a participant's reasoning appeared to overlap categories in some way, coders assigned the response to the category that reflected the majority of the participant's reasoning. Responses that did not fit into one of the six categories were coded as "Other." Coding of open-ended responses was conducted by two coders blind to the hypotheses of the study. Using a subset of 30% of the data ($n = 80$ participant responses), Cohen's κ was .89 for interrater reliability.

Perceptions of inequality. We assessed participants' perceptions of broader economic inequality in access to opportunities similar to the one presented in the current study. Participants were asked the same question for each wealth group: "How often do these kids get extra learning opportunities, other than Zoo Summer Camp?" on a scale from 1 = *never* to 5 = *all the time*.

For each participant, a difference score was created by subtracting their rating for the low-wealth group from their rating for the high-wealth group. This established a scale ranging from -4 to $+4$, on which higher scores indicated greater perceived disparity in favor of high-wealth peers. The sample mean on this scale was 1.61 ($SD = 1.97$) and the median was 2.00, indicating that, overall, participants perceived that the high-wealth group had access to more opportunities than the low-wealth group.

Scores did not differ significantly as a function of participants' gender, race/ethnicity, family income, age, or own interest in attending a zoo summer camp. Participants in the experimental condition in which the low-wealth group had been excluded in the past reported a larger perceived disparity than participants in the condition in which the high-wealth group had been excluded in the past, $F(2, 245.66) = 27.30, p = .001$. However, participants in both conditions perceived that the high-wealth group had access to significantly more opportunities than the low-wealth group (low-wealth excluded: $M_{\text{High-Wealth}} = 4.43, SE = .09$, and $M_{\text{Low-Wealth}} = 1.99, SE = .09$; high-wealth excluded: $M_{\text{High-Wealth}} = 3.69, SE = .09$, and $M_{\text{Low-Wealth}} = 2.89, SE = .09$).

Own interest. Finally, participants reported whether or not they would personally want to attend a zoo summer camp (from 1 = *definitely no* to 5 = *definitely yes*). The sample average was a mean of 3.41 ($SD = 1.17$) and the median was 4.00. We used this variable as a covariate to control for potential influence of personal interest on children's judgments and decisions.

Table 4
Reasoning Coding System

Conceptual category	Definition	Example
Rectifying access inequality	References to the need for corrective action in the form of giving greater opportunities to the group (high- or low-wealth) that had been excluded in the past	"Because the people with a lot of money have never gone"
Addressing economic inequality	References to economic inequality in society and the implications for access to opportunities	"Families with little money cannot afford many summer camps but rich ones can have almost any choice they want"
Ensuring equal representation	References to the importance of making sure that members of both wealth groups are equally represented	"People from each group get a chance"
Avoiding biased decisions	References to the importance of avoiding bias in the process by not taking wealth group membership into account	"It is random so the people have exactly the same chance of getting in or not getting in"
Ensuring access to learning	References to the opportunity as a learning experience and the need to take this into account	"Everyone has the right to education no matter what background they come from"
Avoiding conflict	References to the importance of avoiding disputes over access	"So they don't have to start a fight over it"

Data Analytic Plan

All analyses were conducted in SPSS 24. Because data were collected from multiple schools, intraclass correlation coefficients (ICCs) were calculated for all outcome variables using mixed models to examine the school-level clustering of this data. ICCs were between 0 and .06, suggesting that there was little shared variance among children in the same schools. We determined that the use of multilevel models was not necessary for the current analyses.

To test our hypotheses about children's (within-subjects) judgments of the four allocation strategies, however, we used a linear mixed model, as judgments were nested within children. Judgments (equal, impartial, low-wealth only, and high-wealth only) were included using an unstructured repeated covariance matrix. Comparisons of model fit were conducted using maximum likelihood estimation; restricted maximum likelihood estimation was used when interpreting parameter estimates.

To test our hypotheses about children's choice of which (single) strategy was the best (equal, impartial, low-wealth only, or high-wealth only), we used a multinomial logistic regression model. We used the same modeling approach to test our hypotheses about children's reasoning regarding which strategy was the best (i.e., references to rectifying access inequality, addressing economic inequality, ensuring equal representation, avoiding biased decisions, ensuring access to learning, or avoiding conflict). In cases in which cell sizes were small, we followed up on interactions of categorical predictors using Fisher's exact test and z tests (with Bonferroni correction for multiple comparisons) and interactions of continuous predictors using correlations.

For all of the models, the covariates of gender, race/ethnicity, age, and own interest were entered first, followed by the predictors of interest—excluded group, perceived disparity, family income, and (for the model examining reasoning only) strategy choice. Table 1 provides an overview of the main research questions for this study, specific hypotheses, and central findings.

Results

Judgments About Allocation Strategies

First, we examined children's judgments (from *really not okay* to *really okay*) about four different ways of determining who should receive access to the opportunity. An initial model containing the within-subjects variable judgments and the participant variables gender, race/ethnicity, age, and own interest revealed a significant effect for Judgments only, $F(3, 251.96) = 169.89, p < .001$. Children evaluated *equal* more positively than any other strategy ($M = 4.84, SE = .07$; all $ps < .001$), did not differ significantly in their evaluations of low-wealth only ($M = 3.93, SE = .10$) and impartial ($M = 3.89, SE = .09; p = .99$), and evaluated high-wealth only ($M = 2.52, SE = .09$; all $ps < .001$) more negatively than any other strategy. Thus, overall, children supported equal access to the camp for peers of both economic backgrounds.

Next, we tested our hypotheses regarding differences in children's judgments as a function of excluded group, perceived disparity, and family income. Addition of these predictors to the model significantly improved model fit, LR (likelihood ratio) $\chi^2(12, N = 251) = 107.46, p < .001$. Supporting Hypothesis 1a (H1a), the interaction of judgments with perceived disparity, $F(4, 245.45) = 4.15, p = .003$, revealed that the larger the disparity participants perceived the more negatively they evaluated the high-wealth-only strategy ($\beta = -.14, 95\% \text{ CI } [-.23, -.05], p = .003$; see Figure 1). Perceived disparity did not, however, significantly predict evaluations of the low-wealth-only strategy ($\beta = .07, 95\% \text{ CI } [-.03, .17], p = .19$; in regard to H1b) or the equal or impartial strategies. In short, children who perceived a larger economic gap in access to opportunities were less supportive of admitting high-wealth peers alone to the camp opportunity.

Further, supporting H2a, the interaction of judgments with excluded group, $F(4, 242.86) = 8.01, p < .001$, revealed that participants evaluated low-wealth only more positively when the

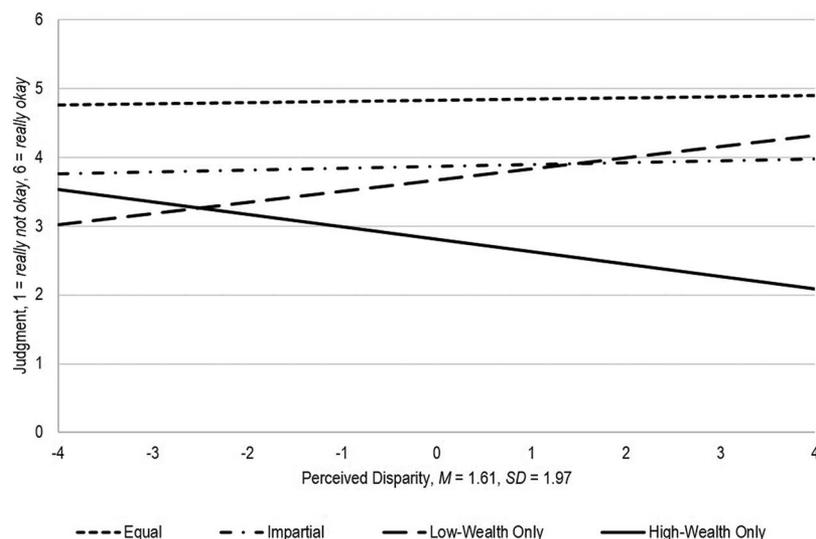


Figure 1. Children's perceptions of economic inequality predict their judgments about access to opportunities.

low-wealth group had been excluded in the past ($M = 4.42$, $SE = .10$) than when the high-wealth group had been excluded in the past ($M = 3.44$, $SE = .13$; $p < .001$), and evaluated high-wealth only more positively when the high-wealth group had been excluded in the past ($M = 2.71$, $SE = .12$) than when the low-wealth group had been excluded in the past ($M = 2.32$, $SE = .13$; $p = .03$; see Figure 2). Judgments of the equal and impartial strategies did not differ significantly as a function of this experimental manipulation. When the high-wealth group had been excluded in the past, children evaluated equal most positively, followed by impartial, followed by low-wealth only, followed by high-wealth only (all $ps < .01$). When the low-wealth group had been excluded in the past, however, children evaluated low-wealth only just as positively as equal ($p = .44$), followed by impartial, followed by high-wealth only (both $ps < .01$). Thus, children considered how access to this particular camp had been restricted in the past when determining whom to admit (see Figure 2).

An interaction of family income with judgments was not found, $F(4, 255.92) = 1.27$, $p = .28$. However, a final model including the interaction of Judgments \times Excluded Group \times Family Income resulted in a marginally significant improvement in model fit, LR $\chi^2(4, N = 251) = 8.97$, $p = .06$. The hypothesized effect was marginally significant, $F(4, 242.60) = 2.22$, $p = .07$. The higher participants' family income, the more positively they evaluated the high-wealth-only strategy when high-wealth peers had been excluded in the past ($\beta = .17$, 95% CI [.02, .31], $p = .02$). No other significant effects of family income on judgments were found in either experimental condition.

Thus, children were more supportive of admitting low-wealth peers when they knew they had been excluded in the past. Higher income children, however, were marginally more supportive of admitting high-wealth peers when they knew they had been excluded in the past.

Allocation Strategy Choices

When asked to choose which strategy was the "best" overall, 56% ($n = 148$) of participants chose equal, 24% ($n = 63$) chose low-wealth only, 19% ($n = 50$) chose impartial, and 1% ($n = 3$) chose high-wealth only, $\chi^2(3, N = 264) = 166.03$, $p < .001$. Thus, providing support for H4a, children preferred an equal strategy over leaving the decision to chance.

An initial model examining whether strategy choice differed by participant gender, race/ethnicity, age, and own interest was not significant, LR $\chi^2(12, N = 253) = 8.07$, McFadden $R^2 = .02$, $p = .78$. However, central to our hypotheses, inclusion of the variables excluded group, perceived disparity, and family income resulted in a significant model, LR $\chi^2(21, N = 251) = 38.16$, McFadden $R^2 = .07$, $p = .01$. The effect for excluded group was significant, $\chi^2(3, N = 251) = 14.54$, $p = .002$, providing support for H2a. The effects for perceived disparity and family income were not significant.

For the effect of excluded group, Fisher's exact = 18.28 ($p < .001$). Children were more likely to admit low-wealth peers in the condition in which low-wealth peers had been excluded in the past and more likely to choose equal when high-wealth peers had been excluded (see Table 5). That is, when low-wealth peers had been excluded from the camp, children were especially likely to support including them in the future, and when high-wealth peers had been excluded, equal was preferred. The proportion of children choosing impartial and high-wealth only did not differ significantly by condition.

Reasoning for Allocation Strategy Choices

When explaining why the strategy they chose was the best, 39% of participants ($n = 101$) referenced ensuring equal representation, 15% ($n = 40$) referenced ensuring access to learning, 15% ($n =$

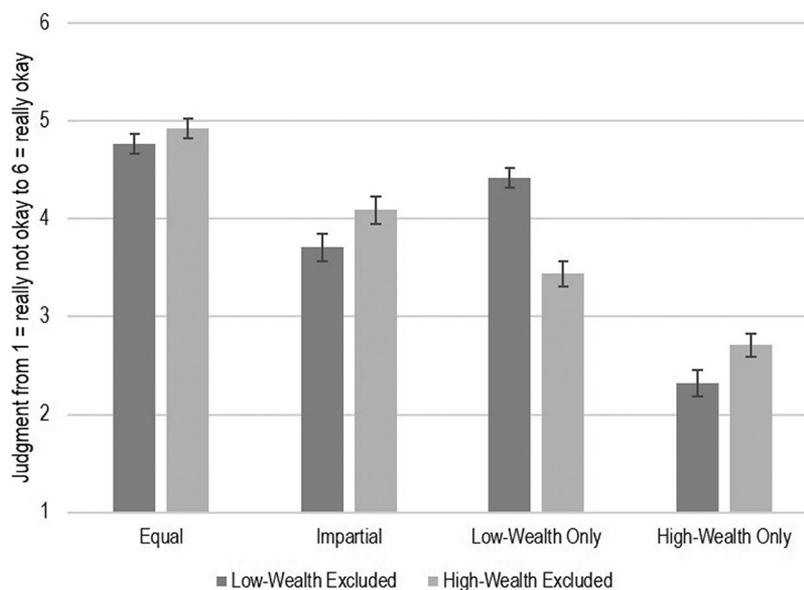


Figure 2. Children's judgments about access to opportunities are moderated by summer camp traditions. Bars represent the standard errors of the means.

Table 5
Children's Decisions About Access to Opportunities for High- and Low-Wealth Peers

Experimental condition	Allocation strategy choice			
	Equal	Impartial	Low-wealth only	High-wealth only
Low-wealth peers excluded	.49	.16	.35	0
High-wealth peers excluded	.63	.22	.13	.02

40) referenced avoiding biased decisions, 12% ($n = 32$) referenced addressing economic inequality, 11% ($n = 27$) referenced rectifying access inequality, and 8% ($n = 20$) referenced avoiding conflict, $\chi^2(5, N = 260) = 98.94, p < .001$. Seven additional children gave statements coded as "Other" (e.g., "Just because"); their responses are not included in the analyses.

An initial model examining whether reasoning differed by participant gender, race/ethnicity, age, and own interest was not significant, LR $\chi^2(20, N = 249) = 23.44$, McFadden $R^2 = .03, p = .27$. However, inclusion of the effects of interest (strategy choice, excluded group, perceived disparity, and family income) resulted in a significant model, LR $\chi^2(50, N = 247) = 292.59$, McFadden $R^2 = .36, p < .001$. The effects for strategy choice, $\chi^2(15, N = 247) = 234.45, p < .001$, and perceived disparity, $\chi^2(5, N = 247) = 230.93, p < .001$, were significant. The effects for family income and excluded group were not significant.

Specifically, the greater the economic disparity in access to opportunities children perceived, the more likely they were to reason about ensuring access to learning ($r = .23, p < .001$) and the less likely they were to reason about ensuring equal representation ($r = -.17, p = .005$). Reasoning about other concepts did not differ significantly as a function of perceived disparity. Thus, providing support for H1c, children who perceived a larger economic disparity in access to opportunities were more likely to focus on concerns about access to education.

For the effect of strategy choice, Fisher's exact was 302.25 ($p < .001$; see Table 6 for all proportions). Children who chose low-wealth only were the most likely to reason about addressing economic inequality, providing further support for H1c. Further, in line with H4b, children who chose equal were the most likely to reason about ensuring equal representation, whereas children who chose impartial were the most likely to reason about avoiding biased decisions. Children who choose low-wealth only or high-wealth only were also more likely to reason about rectifying access inequality and ensuring access to learning than children who chose equal or impartial. References to avoiding conflict did not differ

significantly by strategy choice. All differences referenced were significant to at least $p < .05$.

Discussion

Perceptions of Inequality Support Moral Judgments

Building on the theoretical foundation of the SRD model, this study provided evidence for how perceptions of intergroup relations can contribute to moral judgments in childhood. The larger the economic inequality in access to opportunities children perceived, the more negatively they evaluated granting access to an opportunity to high-wealth peers alone. These results accord with recent studies indicating that children who know more about racial inequalities are more likely to take corrective action when they have the chance to allocate limited resources (Elenbaas & Killen, 2016; Hughes & Bigler, 2011). Although this study focused on wealth groups rather than racial groups, perceiving disparities in access to opportunities did not prompt children to perpetuate the pattern that they observed. Rather, children who perceived larger "gaps" in access to opportunities on the basis of economic status judged that high-wealth peers should not be admitted to the camp opportunity at the expense of low-wealth peers.

Children also took into consideration the summer camp's specific history of exclusion, providing an additional test of the predictions of the SRD model regarding how perceptions of intergroup relations relate to moral judgments. Specifically, children were more likely to admit low-wealth peers when they had direct evidence that low-wealth peers had been excluded from the camp in the past, and more supportive of admitting high-wealth peers when they knew that high-wealth peers were traditionally excluded.

Reasoning About Complex Moral Concerns

Children's reasoning for their decisions revealed the emergence of complex moral concerns in this context. For instance, children

Table 6
Children's Reasoning About Their Decisions

Reasoning	Allocation strategy choice			
	Equal	Impartial	Low-wealth only	High-wealth only
Rectifying access inequality	.05	.04	.24	.67
Addressing economic inequality	.05	.02	.37	0
Ensuring equal representation	.68	0	.02	0
Avoiding biased decisions	.03	.75	0	0
Ensuring access to learning	.11	.04	.34	.33
Avoiding conflict	.08	.15	.03	0

who chose to admit low-wealth peers were the most likely to reason about broader economic inequalities (e.g., "A child with a lot of money has the option of more or different camps than a kid with little money"; "Kids with little money don't get the same opportunities as others who are rich"). Related research indicates that older adolescents reason more explicitly about the structural causes of economic inequality (Arsenio & Willems, 2017; Flanagan et al., 2014). Yet 8- to 14-year-olds' references to economic factors in this study points to the emergence of children's capacity to integrate issues of societal inequality into their moral decision making in late childhood and early adolescence.

Along these same lines, the larger the economic disparity in access to opportunities children perceived, the more likely they were to reason about ensuring access to learning (e.g., "They need a chance to learn about animals"; "It's fair if they can all learn new things"). This reasoning is particularly interesting in light of related research indicating that older children support others' rights to quality education (Peterson-Badali, Morine, Ruck, & Slonim, 2004) and that adolescents reference education when asked what rights children have (Ruck, Keating, Abramovitch, & Koegl, 1998). Children's reasoning about the importance of access to learning in familiar social contexts (like an educational summer camp) may form the foundation for more complex reasoning about rights to education later in adolescence.

Fairness and Impartiality

One of the broadest propositions of the SRD model is that fairness in intergroup contexts can require more than impartiality. To test this, we examined whether children would prefer a "group blind" approach over one that guaranteed a given distribution of peers at the camp. Children evaluated the impartial strategy neutrally to positively in this context. When choosing the best way to determine who should receive access to the opportunity, however, most children (56%) preferred equal access for peers from both wealth backgrounds.

Concerns about appearing biased may make children hesitant to acknowledge others' social group membership (Apfelbaum, Pauker, Ambady, Sommers, & Norton, 2008; Pauker, Apfelbaum, & Spitzer, 2015). In this study, however, most children who opted for an impartial approach stated that choosing individuals for an opportunity on the basis of their wealth status was unfair rather than socially inappropriate (e.g., "It's a random choice, no one is choosing because of money or favoritism"; "That way everyone who signs up for the camp isn't looked at by their money"). Although admitting an equal number of children from both wealth backgrounds is not as proactive an approach as admitting children from a traditionally excluded group, it is a less passive approach than leaving the decision to chance. Children who chose equality often reasoned about balanced representation (e.g., "It lets in an equal amount of people from both situations and it's completely fair"; "Splitting it evenly is fairest"). Thus, in this context, most children perceived that the optimal solution was not to disregard peers' wealth backgrounds but to use that information when determining how to grant access to opportunities.

Few studies on children's conceptions of fairness have examined developing views on impartiality (particularly when other options like equality are available). Notably, this strategy emphasized the means by which access to the summer camp was deter-

mined over the end distribution of children in the camp. The fact that 19% of children viewed this approach as the "best," however, suggests that future research would benefit from a closer examination of how children incorporate questions of procedural justice into their conceptions of fairness. In contexts of economic exclusion, impartial strategies may also provide a way for children to "opt out" of taking a stance on how to address inequality.

Developmental Implications

Studies from the SRD perspective often find that adolescents evidence a more complex understanding of group identity and group processes relative to children (Killen et al., 2015). For example, there are age-related changes in children's and adolescents' decisions about peer social exclusion based on ethnicity and gender (Hitti & Killen, 2015; Mulvey, Hitti, Rutland, Abrams, & Killen, 2014). This suggests that, relative to younger participants, older participants in this study might have been expected to more readily apply their perceptions of inequality when considering how to grant access to opportunities. However, children's judgments, decisions, and reasoning did not differ significantly as a function of their age (8–14 years). This may be attributable to a number of factors.

One possibility is that previous research may have underestimated the extent to which children are aware of economic inequalities in access to opportunities. By 8 years of age (the youngest age investigated in this study), children recognize that there are times when it is appropriate to allocate resources unequally in order to adjust for past inequality (Rizzo & Killen, 2016). If children are also aware of economic inequalities in access to opportunities earlier than 8 years of age, then the familiar study scenario involving a summer camp may have been especially effective at evoking concerns for fair access across the full age range studied.

Along these same lines, references to equity and rights, especially rights to learning, emerged in children's reasoning in this study. Most research on these issues has focused on adolescence. However, younger children negatively judge restrictions on access to learning in everyday contexts (Brown, 2006; Helwig & Jasiobedzka, 2001). Thus, one possibility is that the straightforward study scenario involving learning at a zoo may have elicited more sophisticated reasoning about education than might typically be expected for younger children. These possibilities remain open for further investigation.

Limitations and Future Directions

Although these findings represent an important step toward understanding children's perceptions of economic inequality and moral judgments about access to opportunities, many questions remain. First, children's decisions about access to opportunities may also differ as a function of their own economic background. One marginal effect pointed to the possibility that the higher children's family income, the more supportive they were of admitting high-wealth peers when they knew that high-wealth peers had been excluded from the summer camp opportunity in the past. One explanation is that the higher the participant's family income, the more they may have interpreted the camp's traditions through the lens of their own economic background. Children often exhibit more concern for the needs of social ingroups than the needs of

social outgroups (Abrams et al., 2015; Sierksma et al., 2015; Weller & Lagattuta, 2014). For this first study on the topic, we focused on a sample of children who were likely to personally have access to special opportunities, limiting the hypotheses to potential differences in the responses of children from upper-middle- versus middle-income backgrounds. The perspectives of children from lower income backgrounds, however, are crucial for understanding the potential role of ingroup biases in children's judgments about access to opportunities.

In fact, the issue of access to educational opportunities in particular may be especially salient for lower income children. Many lower income adolescents perceive barriers to their educational attainment (Taylor & Graham, 2007) and stress related to family financial constraints contributes negatively to academic achievement, school engagement, and positive attitudes about education in adolescence (Benner & Wang, 2014; Mistry, Benner, Tan, & Kim, 2009). Thus, lower income children may be more aware of disparities in access to educational opportunities than their middle- or higher income peers. Greater awareness of disparities may likewise be related to greater concern for rectifying inequalities in a peer context like the one used in the current study.

Further, children's attitudes about many social groups are affected by the nature of the personal contact that they have with individuals of different backgrounds (Hayward, Tropp, Hornsey, & Barlow, 2017). For instance, as income inequality increases in countries, neighborhoods, and schools, rates of peer bullying increase as well (Due et al., 2009; Elgar, Craig, Boyce, Morgan, & Vella-Zarb, 2009; Pickett & Wilkinson, 2007). The participants in the current study lived in an area with considerable economic variability. Future research examining perceptions of economic inequality or moral judgments about access to opportunities may benefit from examining how both differ as a function of children's broader economic environment.

Conclusions

Overall, this study found that awareness of economic inequality predicted support for low-wealth peers when children decided whom to admit to a special opportunity. Further, children were able to use both broad and context-specific information about intergroup relations to make decisions about how to fairly determine access to opportunities, demonstrating more support for admitting low-wealth peers when they had evidence that low-wealth peers had been excluded in the past. Interesting effects regarding the role of children's own economic background point to future directions for research on children's decisions about who should have access to opportunities.

References

- Abrams, D., & Rutland, A. (2008). The development of subjective group dynamics. In S. R. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 47–65). New York, NY: Oxford University Press.
- Abrams, D., Rutland, A., Pelletier, J., & Ferrell, J. M. (2009). Children's group nous: Understanding and applying peer exclusion within and between groups. *Child Development, 80*, 224–243. <http://dx.doi.org/10.1111/j.1467-8624.2008.01256.x>
- Abrams, D., Van de Vyver, J., Pelletier, J., & Cameron, L. (2015). Children's prosocial behavioural intentions towards outgroup members. *British Journal of Developmental Psychology, 33*, 277–294. <http://dx.doi.org/10.1111/bjdp.12085>
- Apfelbaum, E. P., Pauker, K., Ambady, N., Sommers, S. R., & Norton, M. I. (2008). Learning (not) to talk about race: When older children underperform in social categorization. *Developmental Psychology, 44*, 1513–1518. <http://dx.doi.org/10.1037/a0012835>
- Arsenio, W. F., Preziosi, S., Silberstein, E., & Hamburger, B. (2013). Adolescents' perceptions of institutional fairness: Relations with moral reasoning, emotions, and behavior. In T. Malti (Ed.), *Adolescent emotions: Development, morality, and adaptation* (pp. 95–110). San Francisco, CA: Jossey-Bass.
- Arsenio, W. F., & Willems, C. (2017). Adolescents' conceptions of national wealth distribution: Connections with perceived societal fairness and academic plans. *Developmental Psychology, 53*, 463–474. <http://dx.doi.org/10.1037/dev0000263>
- Benner, A. D., & Wang, Y. (2014). Demographic marginalization, social integration, and adolescents' educational success. *Journal of Youth and Adolescence, 43*, 1611–1627. <http://dx.doi.org/10.1007/s10964-014-0151-6>
- Bradshaw, D., Jay, S., McNamara, N., Stevenson, C., & Muldoon, O. T. (2016). Perceived discrimination amongst young people in socio-economically disadvantaged communities: Parental support and community identity buffer (some) negative impacts of stigma. *British Journal of Developmental Psychology, 34*, 153–168. <http://dx.doi.org/10.1111/bjdp.12120>
- Brown, C. S. (2006). Bias at school: Perceptions of racial/ethnic discrimination among Latino and European American children. *Cognitive Development, 21*, 401–419. <http://dx.doi.org/10.1016/j.cogdev.2006.06.006>
- Bucchianeri, M. M., Eisenberg, M. E., & Neumark-Sztainer, D. (2013). Weightism, racism, classism, and sexism: Shared forms of harassment in adolescents. *Journal of Adolescent Health, 53*, 47–53. <http://dx.doi.org/10.1016/j.jadohealth.2013.01.006>
- Due, P., Merlo, J., Harel-Fisch, Y., Damsgaard, M. T., Holstein, B. E., Hetland, J., . . . Lynch, J. (2009). Socioeconomic inequality in exposure to bullying during adolescence: A comparative, cross-sectional, multi-level study in 35 countries. *American Journal of Public Health, 99*, 907–914. <http://dx.doi.org/10.2105/AJPH.2008.139303>
- Duncan, G. J., & Murnane, R. J. (Eds.). (2011). *Whither opportunity? Rising inequality, schools, and children's life chances*. New York, NY: Russell Sage Foundation.
- Elenbaas, L., & Killen, M. (2016). Children rectify inequalities for disadvantaged groups. *Developmental Psychology, 52*, 1318–1329. <http://dx.doi.org/10.1037/dev0000154>
- Elenbaas, L., & Killen, M. (2017). Children's perceptions of social resource inequality. *Journal of Applied Developmental Psychology, 48*, 49–58. <http://dx.doi.org/10.1016/j.appdev.2016.11.006>
- Elgar, F. J., Craig, W., Boyce, W., Morgan, A., & Vella-Zarb, R. (2009). Income inequality and school bullying: Multilevel study of adolescents in 37 countries. *Journal of Adolescent Health, 45*, 351–359. <http://dx.doi.org/10.1016/j.jadohealth.2009.04.004>
- Flanagan, C. A., Kim, T., Pykett, A., Finlay, A., Gallay, E. E., & Pancer, M. (2014). Adolescents' theories about economic inequality: Why are some people poor while others are rich? *Developmental Psychology, 50*, 2512–2525. <http://dx.doi.org/10.1037/a0037934>
- Goodman, E., Maxwell, S., Malspeis, S., & Adler, N. (2015). Developmental trajectories of subjective social status. *Pediatrics, 136*, e633–e640. <http://dx.doi.org/10.1542/peds.2015.1300>
- Groce, P., Rossano, F., & Tomasello, M. (2015). Procedural justice in children: Preschoolers accept unequal resource distributions if the procedure provides equal opportunities. *Journal of Experimental Child Psychology, 140*, 197–210. <http://dx.doi.org/10.1016/j.jecp.2015.07.008>
- Hayward, L. E., Tropp, L. R., Hornsey, M. J., & Barlow, F. K. (2017). Toward a comprehensive understanding of intergroup contact: Descriptions and mediators of positive and negative contact among majority and

- minority groups. *Personality and Social Psychology Bulletin*, 43, 347–364. <http://dx.doi.org/10.1177/0146167216685291>
- Helwig, C. C., & Jasiobedzka, U. (2001). The relation between law and morality: Children's reasoning about socially beneficial and unjust laws. *Child Development*, 72, 1382–1393. <http://dx.doi.org/10.1111/1467-8624.00354>
- Hitti, A., & Killen, M. (2015). Expectations about ethnic peer group inclusivity: The role of shared interests, group norms, and stereotypes. *Child Development*, 86, 1522–1537. <http://dx.doi.org/10.1111/cdev.12393>
- Hjalmarsson, S. (2018). Poor kids? Economic resources and adverse peer relations in a nationally representative sample of Swedish adolescents. *Journal of Youth and Adolescence*, 47, 88–104. <http://dx.doi.org/10.1007/s10964-017-0747-8>
- Horn, S. S. (2003). Adolescents' reasoning about exclusion from social groups. *Developmental Psychology*, 39, 71–84. <http://dx.doi.org/10.1037/0012-1649.39.1.71>
- Hughes, J. M., & Bigler, R. S. (2011). Predictors of African American and European American adolescents' endorsement of race-conscious social policies. *Developmental Psychology*, 47, 479–492. <http://dx.doi.org/10.1037/a0021309>
- Killen, M., Elenbaas, L., & Rutland, A. (2015). Balancing the fair treatment of others while preserving group identity and autonomy. *Human Development*, 58, 253–272. <http://dx.doi.org/10.1159/000444151>
- Killen, M., & Stangor, C. (2001). Children's social reasoning about inclusion and exclusion in gender and race peer group contexts. *Child Development*, 72, 174–186. <http://dx.doi.org/10.1111/1467-8624.00272>
- Lott, B. (2012). The social psychology of class and classism. *American Psychologist*, 67, 650–658. <http://dx.doi.org/10.1037/a0029369>
- Mistry, R. S., Benner, A. D., Tan, C. S., & Kim, S. Y. (2009). Family economic stress and academic well-being among Chinese-American youth: The influence of adolescents' perceptions of economic strain. *Journal of Family Psychology*, 23, 279–290. <http://dx.doi.org/10.1037/a0015403>
- Mistry, R. S., Brown, C. S., White, E. S., Chow, K. A., & Gillen-O'Neel, C. (2015). Elementary school children's reasoning about social class: A mixed-methods study. *Child Development*, 86, 1653–1671. <http://dx.doi.org/10.1111/cdev.12407>
- Mulvey, K. L., Hitti, A., Rutland, A., Abrams, D., & Killen, M. (2014). Context differences in children's ingroup preferences. *Developmental Psychology*, 50, 1507–1519. <http://dx.doi.org/10.1037/a0035593>
- Mulvey, K. L., & Killen, M. (2015). Challenging gender stereotypes: Resistance and exclusion. *Child Development*, 86, 681–694. <http://dx.doi.org/10.1111/cdev.12317>
- Nesdale, D. (2004). Social identity processes and children's ethnic prejudice. In M. Bennett & F. Sani (Eds.), *The development of the social self* (pp. 219–245). New York, NY: Psychology Press. http://dx.doi.org/10.4324/9780203391099_chapter_8
- Park, Y., & Killen, M. (2010). When is peer rejection justifiable?: Children's understanding across two cultures. *Cognitive Development*, 25, 290–301. <http://dx.doi.org/10.1016/j.cogdev.2009.10.004>
- Pauker, K., Apfelbaum, E. P., & Spitzer, B. (2015). When societal norms and social identity collide: The race talk dilemma for racial minority children. *Social Psychological and Personality Science*, 6, 887–895. <http://dx.doi.org/10.1177/1948550615598379>
- Peterson-Badali, M., Morine, S. L., Ruck, M. D., & Slonim, N. (2004). Predictors of maternal and early adolescent attitudes toward children's nurturance and self-determination rights. *The Journal of Early Adolescence*, 24, 159–179. <http://dx.doi.org/10.1177/0272431603262667>
- Pickett, K. E., & Wilkinson, R. G. (2007). Child wellbeing and income inequality in rich societies: Ecological cross sectional study. *British Medical Journal*, 335, 1080. <http://dx.doi.org/10.1136/bmj.39377.580162.55>
- Rizzo, M. T., & Killen, M. (2016). Children's understanding of equity in the context of inequality. *British Journal of Developmental Psychology*, 34, 569–581. <http://dx.doi.org/10.1111/bjdp.12150>
- Roussos, G., & Dunham, Y. (2016). The development of stereotype content: The use of warmth and competence in assessing social groups. *Journal of Experimental Child Psychology*, 141, 133–144. <http://dx.doi.org/10.1016/j.jecp.2015.08.009>
- Ruck, M. D., Keating, D. P., Abramovitch, R., & Koegl, C. (1998). Adolescents' and children's knowledge about rights: Some evidence for how young people view rights in their own lives. *Journal of Adolescence*, 21, 275–289. <http://dx.doi.org/10.1006/jado.1998.0153>
- Rutland, A., Killen, M., & Abrams, D. (2010). A new social-cognitive developmental perspective on prejudice: The interplay between morality and group identity. *Perspectives on Psychological Science*, 5, 279–291. <http://dx.doi.org/10.1177/1745691610369468>
- Shaw, A., & Olson, K. (2014). Fairness as partiality aversion: The development of procedural justice. *Journal of Experimental Child Psychology*, 119, 40–53. <http://dx.doi.org/10.1016/j.jecp.2013.10.007>
- Shutts, K., Brey, E. L., Dornbusch, L. A., Slywotzky, N., & Olson, K. R. (2016). Children use wealth cues to evaluate others. *PLoS ONE*, 11, e0149360. <http://dx.doi.org/10.1371/journal.pone.0149360>
- Sierksma, J., Thijs, J., & Verkuyten, M. (2015). In-group bias in children's intention to help can be overpowered by inducing empathy. *British Journal of Developmental Psychology*, 33, 45–56. <http://dx.doi.org/10.1111/bjdp.12065>
- Sigelman, C. K. (2012). Rich man, poor man: Developmental differences in attributions and perceptions. *Journal of Experimental Child Psychology*, 113, 415–429. <http://dx.doi.org/10.1016/j.jecp.2012.06.011>
- Smetana, J. G., Jambon, M., & Ball, C. (2014). The social domain approach to children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 23–45). New York, NY: Psychology Press. <http://dx.doi.org/10.4324/9780203581957.ch2>
- Taylor, A. Z., & Graham, S. (2007). An examination of the relationship between achievement values and perceptions of barriers among low-SES African American and Latino students. *Journal of Educational Psychology*, 99, 52–64. <http://dx.doi.org/10.1037/0022-0663.99.1.52>
- Turiel, E. (2006). The development of morality. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 863–932). Hoboken, NJ: Wiley.
- U.S. Census Bureau. (2015). *QuickFacts*. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/24031>
- Verkuyten, M. (2007). Ethnic in-group favoritism among minority and majority groups: Testing the self-esteem hypothesis among preadolescents. *Journal of Applied Social Psychology*, 37, 486–500. <http://dx.doi.org/10.1111/j.1559-1816.2007.00170.x>
- Wainryb, C., Smetana, J. G., & Turiel, E. (2008). *Social development, social inequalities, and social justice*. New York, NY: Taylor & Francis/Erlbaum.
- Weinger, S. (2000). Economic status: Middle class and poor children's views. *Children & Society*, 14, 135–146. <http://dx.doi.org/10.1111/j.1099-0860.2000.tb00161.x>
- Weller, D., & Lagattuta, K. H. (2014). Children's judgments about prosocial decisions and emotions: Gender of the helper and recipient matters. *Child Development*, 85, 2011–2028.
- Woods, T. A., Kurtz-Costes, B., & Rowley, S. J. (2005). The development of stereotypes about the rich and poor: Age, race, and family income differences in beliefs. *Journal of Youth and Adolescence*, 34, 437–445. <http://dx.doi.org/10.1007/s10964-005-7261-0>

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