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Young children's reasoning about equality and ownership in resource conflicts

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ABSTRACT

This study examined how young children reasoned about two important factors—equality and ownership—when they were in conflict with one another in a resource distribution context. The sample included $N = 110$ ethnically and socioeconomically diverse 5- to 7-year-olds (M_{Age} = 6;4, SD = 9 months). Children reasoned about how to distribute resources (gummy bears) between two peers who differed in their outcomes (pictures colored) and their opportunities (crayons to color with). Many children found it unacceptable to distribute resources based on outcome when the opportunity to earn them was unequal, particularly if they explicitly reasoned about unequal opportunities. Once recipients had taken possession of their gummy bears, however, children who reasoned about ownership concluded that it was unacceptable to redistribute the treats in order to adjust for unequal opportunity while children who reasoned about equality found this action acceptable. These results highlight young children's emerging ability to balance competing moral concerns and resolve resource conflicts.

1. Introduction

Throughout development, the issue of who should have access to which resources is a fundamental moral question (Wainryb, Smetana, & Turiel, 2008). In early childhood, children acquire a number of strategies to address this issue in everyday social contexts, like sharing, turn taking, and negotiation (Rose-Krasnor & Denham, 2009). Accordingly, recent studies have examined young children's thinking about the distribution of familiar items, like toys, from many angles, including the emergence of concerns for equality, equity, and merit (e.g., Schmidt, Svetlova, Johe, & Tomasello, 2016). For the most part, these studies have set aside the question of where resources *come from* in order to focus on whom children give resources *to* (e.g., collaboration partners, peers in need). Young children, however, are highly attuned to where resources come from. In fact, children's understanding of who owns what, and what rights owners have over their property, develops rapidly during early childhood (Nancekivell, Van de Vondervoort, & Friedman, 2013). This means that, at the same time that young children strongly endorse resource equality between peers, for example, they also assert that resource owners can control who uses their property (Nancekivell & Friedman, 2014; Olson & Spelke, 2008). The central aim of the current study was to examine how young children weigh and prioritize these two important factors —equality and ownership— when they are in conflict with one another. In particular, we examined differences in 5–7 year-olds' evaluations and reasoning about everyday resource equality in contexts involving owned items.

Young children recognize that taking someone else's property (e.g., taking a peer's toy) is unfair, alongside other unfair actions like inflicting physical or psychological harm (Smetana & Ball, 2019). From the perspective of social domain theory, fairness is a foundational moral concern that is viewed by children and adults alike as distinct from other conventional or personal issues (Killen &

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Smetana, 2015). However, recent research from this perspective has also emphasized that an essential part of moral development involves reasoning, formulating judgments, and taking action in contexts where more than one moral consideration is at stake (Dahl, Gingo, Uttich, & Turiel, 2018; Nucci & Turiel, 2009; Wainryb, Brehl, Matwin, Sokol, & Hammond, 2005). For instance, between 5 and 11 years of age children become more accepting of teasing (a form of psychological harm) when it is done to prevent serious impending physical harm (Jambon & Smetana, 2014).

Multifaceted decisions such as these that involve resources like snacks, prizes, and toys are both frequent in young children's daily lives and familiar to children around the world (Rochat et al., 2014; Ross, 2013). Although weighing contrasting moral concerns is a challenge throughout the lifespan, considerable development in this area may occur in the early school years as children spend more time actively attempting to resolve these issues with their peers (Jambon & Smetana, 2014; Rizzo, Elenbaas, Cooley, & Killen, 2016). For example, young children may face questions like the following: if two peers need toy blocks to build with, but one child owns many more blocks than the other, is it acceptable for the child with less to take some blocks from the child with more so that both peers have the same number to build with?

Such an action clearly infringes on the right of the child with more to control who uses their property (Nancekivell & Friedman, 2014). On the other hand, it also establishes resource equality between peers, an arrangement that young children expect, prefer, and enforce over inequality (Rakoczy, Kaufmann, & Lohse, 2016). By presenting peer-based situations like this one, in which different moral concerns were in conflict, the current study aimed to determine whether and when young children's reasoning about who should receive resources is contingent on where the resources came from.

1.1. Children's conceptions of ownership

Children's understanding that owners have the right to determine what others may do with their property emerges early and develops rapidly (Kim & Kalish, 2009; Neary, Friedman, & Burnstein, 2009; Rossano, Fiedler, & Tomasello, 2015). By 4 years of age, for instance, children judge that people can freely use items like bicycles that they own, but cannot use items that others own without their permission (Nancekivell & Friedman, 2014; Neary & Friedman, 2014). By age 5, children readily explain why a peer may or may not take or use an item in terms of ownership (Mammen, Köymen, & Tomasello, 2018; Nancekivell & Friedman, 2017). For example, a peer may explore the contents of her backpack "because it's hers" but may not put someone else's toy car in her backpack "because she stole". In support of these rights, young children protest when they witness someone using a toy without the owner's permission and return lost and stolen objects to their owners (Riedl, Jensen, Call, & Tomasello, 2015; Schmidt, Rakoczy, & Tomasello, 2013).

As they gain a greater understanding of others' needs, however, children do make some limited exceptions to the rule that owners should always control the use of their property. Specifically, one study found that 4- and 5 year-olds, but not 3 year-olds, judged it acceptable for someone to use a net against the owner's wishes in order to help a pet dog that was stuck in a swimming pool (Neary & Friedman, 2014). Like the research on psychological harm mentioned above, these judgments reflect children's developing capacity to evaluate contexts where different important moral concerns are in conflict with one another. In specific circumstances, young children prioritize the prevention of harm over the rights of owners to control the use of their property.

1.2. Children's perceptions of fair resource distribution

Another such exception to the rules of ownership may pertain to equality. For instance, imagine that two children are enthusiastically baking cookies to eat. However, one child owns more ingredients than the other does. Is it fair for the first child to enjoy more treats than the second, when they started with a marked advantage? In addition to issues of ownership, this question involves the principle of merit. By age 5–6 years (but less consistently before), children distribute items like candy and stickers according to recipients' relative effort or output, and expect others to do the same (Noh, D'Esterre, & Killen, 2019; Rizzo et al., 2016; Schmidt et al., 2016; Smith & Warneken, 2016). A child may, for instance, reward one peer with more stickers than another because they "made more" crafts, or approve of an activity leader who shares more treats with those who "did a better job".

It is not yet clear, however, whether children approve of rewarding merit when potential recipients do not have equal chances to earn the resources in question. In this case, as in the cookie example above, other moral concerns may take priority. Concern for equality, for instance, emerges very early in development; even toddlers expect and engage in equal sharing (Fehr, Bernhard, & Rockenbach, 2008; Olson & Spelke, 2008). By age 5–6 years, children also correct existing inequalities between peers by distributing items like toys in accordance with recipients' needs (Rizzo & Killen, 2016; Wörle & Paulus, 2018). However, recent studies indicate that children may only correct inequalities between peers when they perceive them to be caused by unfair practices (e.g., explicit favoritism of one person, or one group, over another) (Elenbaas & Killen, 2017; Rizzo, Elenbaas, & Vanderbilt, 2018). These findings point to the possibility that children may consider opportunity when determining whether resources should be distributed proportional to outcomes.

1.3. The current study

To examine how young children weigh and prioritize competing moral concerns –particularly concerns about equality and ownership– in contexts involving limited resources, this study examined young children's thinking about two central questions. First, children were asked to decide whether or not it was fair to distribute resources based on outcomes in a context of unequal opportunity. Then they were asked to decide whether or not it was fair to impinge on the rights of the new resource owners in order to adjust such a distribution to account for prior inequality of opportunity. Because children's judgments in situations involving limited

resources can be driven by diverse underlying cognitive and social-cognitive processes (e.g., Ball, Smetana, & Sturge-Apple, 2017; Chernyak, Harris, & Cordes, 2019), we assessed children's reasoning for their decisions in order to examine how they prioritized different moral factors.

The study employed a hypothetical story context in which two children were coloring with the promise of receiving a gummy bear treat for each picture that they completed. However, one child began the activity with many more crayons brought "from home" than the other child. A third story character distributed resources (gummy bears) according to outcome (pictures colored). Once the recipients had taken possession of their treats, a fourth character transferred some from the advantaged recipient to the disadvantaged recipient to adjust for opportunity (crayons to color with). The central aim was to examine how young children reasoned in this situation involving conflicting moral concerns, and how their decisions differed between 5 and 7 years of age.

We focused on kindergarteners and early elementary schoolers (ages 5, 6, and 7 years) because, as detailed in the preceding paragraphs, this may be a period of especially important gains in children's ability to weigh different moral concerns, as they spend more time actively attempting to resolve fairness issues with their peers. In fact, social domain theory holds that peer interactions are a primary driver of children's moral development, as they bring into sharp relief all of the reasons why unfair treatment is wrong (Killen & Smetana, 2015). Likewise, the social domain perspective on moral development has long emphasized the importance of understanding children's reasoning for their judgments and actions. Children's thinking about people and social interactions reveals how fundamental concerns for others' welfare and fairness emerge early in development, while social experience leads children to weigh and prioritize these moral concerns in new ways across the course of childhood (Dahl, 2019; Turiel, 2008).

In the context of resource allocation in particular, recent studies from this perspective have revealed how the early school years are a time of considerable development in children's reasoning about issues like ownership, merit, equity, and equality (Conry-Murray, 2015; Noh et al., 2019; Rizzo & Killen, 2016). Most pertinent to the current study, by age 5 (but less certainly before), children can readily reason about ownership in everyday life (e.g., Nancekivell & Friedman, 2017), consistently distribute items like toys and treats based on merit (e.g., Schmidt et al., 2016), and may distinguish between inequalities with fair versus unfair origins (e.g., Rizzo et al., 2018). This makes 5- to 7-year-olds a particularly interesting focus population for this study on how young children weigh and prioritize these competing moral concerns.

1.3.1. Hypotheses

Based on the evidence reviewed above, we hypothesized that the older the child the more they would approve of distributing rewards (gummy bears) according to outcome (pictures colored) and disapprove of transferring resources from one recipient to another to adjust for the initial inequality of opportunity (crayons owned). Further, we expected children who reasoned about merit to evaluate the initial distribution more positively than children who reasoned about opportunity or equality. Likewise, we expected children who reasoned about merit or ownership to evaluate the transfer of resources more negatively than children who reasoned about opportunity or equality.

2. Materials and methods

2.1. Participants

Participants were 5–7 year-old children ($N = 110$; $M_{Age} = 6;4$, $SD = 9$ months) enrolled in pre-kindergarten, kindergarten, or first grade at six public elementary schools or after-school programs in a midsized city in the northeastern United States. Response rates ranged from approximately 40% to 100% between sites. A priori power analyses for the models described in the Data Analytic Plan indicated that a sample size of approximately 87 would be necessary to detect small effects with α at .05 and power at .80. Parents were asked to provide additional demographic information for their children. As indicated in Table 1, the sample was balanced by gender and ethnically and socioeconomically diverse.

2.2. Procedure

Parental consent and children's verbal assent were obtained for all participants. Children were individually interviewed by research assistants in quiet spaces at their schools or after-school programs in the winter of 2017-2018. All stimuli and measures were presented on laptops in the form of a fully illustrated and semi-animated vignette. Participants were first familiarized with a six-point smiley/frowny face Likert-type scale used to measure their evaluations of characters' actions. The scale ranged from 1 = "Really Not Okay" (big frown) to 6 = "Really Okay" (big smile). The entire session took approximately 15 min.

2.3. Measures

The vignette first introduced the context, Art Day at a park, and the possibility of receiving rewards (gummy bears), contingent on both outcome (pictures colored) and opportunity (crayons owned): "On Art Day, kids can get a gummy bear for every picture that they color. […] There is lots of coloring paper for kids to use. But kids have to bring their own crayons from home. […] It takes a whole crayon just to color one page!" The central characters were silhouette outlines of elementary-aged children with gender-neutral names (e.g., Jordan) at Art Day.

There was an inequality of opportunity: "Both kids brought crayons from home in boxes. […] Look! This is A's. A has one crayon. Look! These are B's. B has five crayons." Both children colored, and finished when their crayons were completely used up, leaving

Table 1
Sample Demographics.

	%	*n*
Age in Years		
5 years	37%	41
6 years	37%	40
7 years	26%	29
Gender		
Girl	49%	54
Boy	39%	43
Declined to Provide Gender	12%	13
Race or Ethnicity		
European-American	46%	51
African-American	15%	16
Multiracial or Multiethnic	12%	13
Latinx	11%	12
Other	1%	1
Declined to Provide Race or Ethnicity	15%	17
Approximate Annual Family Income		
< $15 K	9%	10
$15–30 K	7%	8
$30-45K	10%	11
$45–60 K	15%	16
$60–75 K	7%	8
$75–90 K	6%	6
$90–105 K	6%	7
> $105 K	19%	21
Declined to Provide Approximate Annual Family Income	21%	23
Total *N*		110

only the crayon wrappers. As dictated by the stipulation that "it takes a whole crayon just to color one page", A colored one picture and B colored five.

2.3.1. Evaluation: initial distribution

Next a third character, described as another kid at the park who was in charge of giving out gummy bears for Art Day, distributed the rewards according to outcome: "C sees that A had one crayon and colored on picture, and B had five crayons and colored five pictures. C has six gummy bears to give to A and B. C gave one gummy bear to A and five gummy bears to B."

Using the six-point scale from 1 = "Really Not Okay" to 6 = "Really Okay", the interviewer asked: "Was it okay or not okay for C to do that?" and followed up with "Was it a little (not) okay, (not) okay, or really (not) okay?" For both questions participants responded verbally or by pointing to a smiley or frowny face on the scale. Then the interviewer asked: "Why was it (not) okay?" Children's verbal responses were audio recorded. The characters then placed their rewards in bags "to take home".

2.3.2. Evaluation: transfer

Finally a fourth character, described as another kid at the park who was not coloring, transferred some gummy bears from the well-resourced character to the under-resourced character: "D sees that A had one crayon and colored one picture and got one gummy bear. D sees that B had five crayons and colored five pictures and got five gummy bears. D took two gummy bears from B's bag and put them in A's bag." The interviewer assessed participants' evaluations and reasoning about D's action using the procedure described above.

2.3.3. Reasoning coding

Participants' verbal reasoning for both evaluations was later coded into one of four mutually exclusive conceptual categories expected based on previous research. Table 2 provides the label and definition for each category, as well as example responses. Approximately 6% of responses did not fit into one of the categories (e.g., "Just because"); these were coded as "Other" and not included in the analyses below. If a participant referenced more than one conceptual category, their response was coded into the category that reflected the majority of their reasoning. Coding was conducted by two coders blind to the hypotheses of the study. Using responses from 10% of participants, Cohen's $\kappa = .90$ for inter-coder reliability.

2.4. Data analytic plan

All analyses were conducted in SPSS 24. To test our hypotheses we used two general linear models to examine the effects of Age (5–7 years) and Reasoning (Equality, Ownership, Merit, Opportunity) on children's evaluations of the vignette characters' actions

Table 2
Reasoning Coding System.

Conceptual Category	Definition	Examples
Equality	References to equalizing resources or avoiding inequality	"Now they have the same." "He got one [gummy bear] and he got five, that's not fair."
Ownership	References to ownership and ownership rights	"She can't just take gummy bears out of the bag like that. They're B's gummy bears." "Because those belong to him."
Merit	References to merit in terms of effort or outcome	"He colored more pictures, so he deserves more gummy bears." "A only did one picture, so then why would D be giving him more gummy bears?"
Opportunity	References to the characters' opportunities in this context	"It's fine to do that because A didn't have enough crayons to color with." "Well, she didn't get to do five pictures because she didn't have five crayons and so that's why she didn't get five gummy bears."

(initial distribution and transfer, both from 1 = "Really Not Okay" to 6 = "Really Okay"). Comparisons of model fit were made using maximum likelihood estimation; restricted maximum likelihood estimation was used to interpret parameter estimates.

Because data were collected from six sites, ICCs were calculated for both evaluations. These were low (.03 and .04) indicating little shared variance in evaluations between children recruited from the same sites; site was not included in the models below. As indicated in Table 3, children's race or ethnicity was correlated with one evaluation at the bivariate level. For both models we initially included child race or ethnicity, approximate annual family income, and gender to assess any potential effects. In no case were the effects significant; these variables were not included in the models below.

3. Results

Table 3 provides correlations among all study variables. Overall, 61% of children found it "not okay" to distribute rewards (gummy bears) according to outcome (pictured colored) when recipients did not have the same opportunities (crayons to color with), binomial $p = .03$. On average, children evaluated this action at $M = 2.95$ ($SD = 2.05$) on the scale from 1 = "Really Not Okay" to 6 = "Really Okay". Many children reasoned about Equality (43%) or Merit (41%), with a smaller proportion reasoning about Opportunity (16%) and no children referencing Ownership.

Overall, 58% of children found it "okay" to reallocate some resources (gummy bears) to the character with fewer opportunities (crayons) after the initial distribution, binomial $p = .11$. On average, children evaluated this action at $M = 3.85$ ($SD = 2.17$) on the scale from 1 = "Really Not Okay" to 6 = "Really Okay". Many children reasoned about Equality (45%) or Ownership (34%), with some referencing Merit (9%) or Opportunity (3%).

3.1. Initial distribution

The model testing our hypotheses about children's evaluations of an outcome-based resource distribution in the context of unequal opportunity was significant, LR $\chi^2(3, N = 110) = 69.51$, $p < .001$. Supporting our hypothesis, the significant effect for Reasoning, $F(2, 98) = 46.57$, $p < .001$ indicated that children who reasoned about Merit evaluated this initial distribution significantly more positively ($M = 4.70$, $SE = .23$) than children who reasoned about Equality ($M = 1.81$, $SE = .22$) or Opportunity ($M = 1.80$, $SE = .36$), both $ps < .001$; see Fig. 1. The evaluations of children who reasoned about Equality and Opportunity did not differ significantly from each other, $p = 1.0$. Age, however, was not a significant predictor of children's evaluations, $F(1, 98) = .31$, $p = .58$, $b = .10$, 95% CI [-.27, .47], providing no support for this hypothesis.

3.2. Transfer

The model testing our hypotheses about children's evaluations of adjusting the initial distribution to account for prior inequality of opportunity was significant, LR $\chi^2(4, N = 110) = 158.61$, $p < .001$. A significant effect for Reasoning supported our hypothesis, $F(3, 99) = 118.55$, $p < .001$. Children who reasoned about Equality ($M = 5.53$, $SE = .13$) and Opportunity ($M = 4.12$, $SE = .59$)

Table 3
Correlations Among Study Variables.

	1	2	3	4	5
1. Age					
2. Gender	.08				
3. Race or Ethnicity	.04	.10			
4. Approximate Annual Family Income	.03	−.22*	−.55*		
5. Evaluation: Initial Distribution	.10	.00	−.22*	.12	
6. Evaluation: Transfer	−.04	.04	.03	.07	−.20*

Note. * $p < .05$. For Gender 1 = boy. For Race or Ethnicity 1 = racial or ethnic minority. For Approximate Annual Family Income parents used a scale from 1 = < $15 K to 8 = > $105 K.

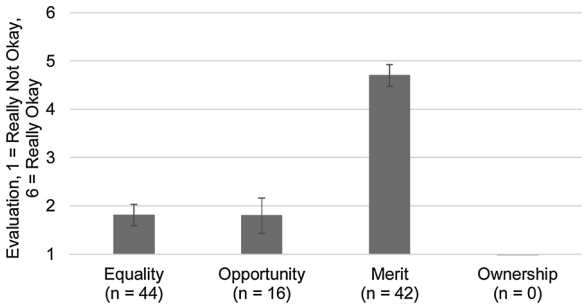

Fig. 1. Children who reasoned about merit evaluated an outcome-based resource distribution in the context of unequal opportunity more positively than children who reasoned about equality or opportunity.

evaluated this resource transfer significantly more positively than children who reasoned about Ownership (M = 1.73, SE = .17) or Merit (M = 1.19, SE = .34), all $ps < .01$; see Fig. 2. The evaluations of children who reasoned about Opportunity and Equality did not differ significantly from each other, both $ps > .05$ and the evaluations of children who reasoned about Ownership and Merit did not differ significantly from each other, both $ps > .05$. Contrary to our hypothesis, Age was not a significant predictor of children's evaluations of this action, $F(1, 99) = 1.02$, $p = .32$, b = .13, 95% CI [-.13, .39].

4. Discussion

This study examined how young children reasoned about conflicting moral considerations —particularly equality and ownership— in a peer context involving familiar resources. On average, 5- to 7-years-olds found it "not okay" to distribute rewards based on outcome when recipients' opportunity to earn them was unequal. These evaluations were predicted by reasoning about both opportunities (e.g., "She didn't get to do five pictures because she didn't have five crayons") and the importance of equality. Once recipients had taken possession of their rewards, however, children who reasoned about who owned the resources concluded that it was unacceptable to transfer some from one peer to another in order to adjust for unequal opportunity (e.g., "Because those belong to him") while children who reasoned about equality found this action acceptable (e.g., "Now they have the same").

Young children's abilities to resolve resource conflicts through negotiation, taking turns, respecting ownership, and sorting out issues of merit undergo significant development in the early school years (Nancekivell et al., 2013; Schmidt et al., 2016). At the same time, the moral questions implicated when ownership rights and equality are in conflict with one another can emerge in diverse contexts throughout the lifespan (Wainryb, Smetana, & Turiel, 2008). Thus, an essential part of moral development involves reasoning about how to prioritize different important, yet competing, moral concerns.

From at least 5 years of age, children view it as fair to allocate rewards proportional to outcomes (Rizzo et al., 2016; Schmidt et al., 2016). Likewise, a sizeable minority of children in the current study defended the decision to distribute gummy bears based on merit (e.g., "He colored more pictures, so he deserves more gummy bears"). However, many children found it unacceptable to do this when opportunity was unequal. This means that many, but not all, young children considered whether the playing field was level when making a merit-based decision.

These findings fit well with related work indicating that older children distinguish between resource inequalities caused by fair (e.g., differential need) versus unfair (e.g., gender bias) processes (Elenbaas & Killen, 2017; Rizzo et al., 2018), and extend this type of moral question to a younger sample. Importantly, research on distributive fairness in childhood has often set aside the issue of resource origins in order to focus on children's decisions about who should receive what. However, in the current study, when recipients did not have equal chances to earn treats, many young children did not support distributing them based on outcome, taking the origins of the disparity into account.

Moreover, once recipients had taken possession of their rewards, opinions were split regarding whether or not it was acceptable to

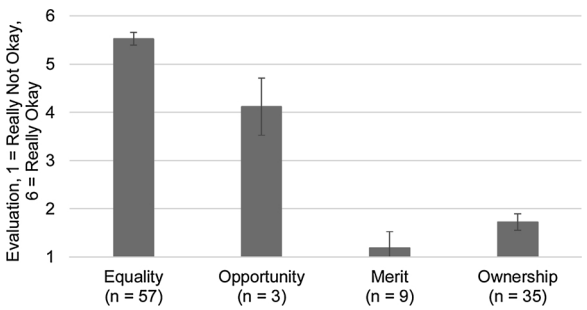

Fig. 2. Children who reasoned about equality or opportunity evaluated adjusting the resource distribution to account for prior inequality of opportunity more positively than children who reasoned about ownership or merit.

transfer some from one recipient to another in order to adjust for the initial inequality of opportunity. Reasoning about equality predicted support for this action, while reasoning about ownership or merit predicted negative evaluations. Though small in number, children who reasoned about opportunity were also supportive of this redistributive action.

The prevention of harm is one condition under which young children find it acceptable to use another person's property against their wishes (Neary & Friedman, 2014). Findings from this study indicate that, for some children, adjusting rewards to account for a prior inequality of opportunity also warranted a context-specific exception to the rules of ownership. However, when ownership rights are in conflict with other moral concerns, the need to promote equality is not as clear-cut for young children as the need to prevent harm. These findings again highlight how young children can (but do not always) take the origins of a resource disparity into account when determining whether it is acceptable to correct it.

4.1. Future directions and conclusions

Findings from this study highlight young children's emerging abilities to reason and formulate judgments in contexts where more than one moral consideration is at stake, and point to several directions for further investigation. In particular, the question of why some children reasoned about ownership or merit while others focused on opportunity or equality in this multifaceted scenario is an important area for follow-up. Future studies could assess children's hesitation, contradictory responses, or changing answers as indices of the extent to which children find such scenarios morally conflicting. Likewise, studies might examine how children distribute or redistribute resources in similar situations where they are personally involved (e.g., Chernyak et al., 2019), to assess relations between children's own behavior and their evaluations and reasoning about other's actions. Further, measures of children's expectations, reactions, corrections, or perceptions of consensus around others' actions could be assessed (e.g., Conry-Murray, 2015) in order to examine whether children view their own reasoning about a situation involving multiple moral concerns as normative, or whether they can conceptualize several sides of the argument.

This study did not find evidence of age-related differences in children's evaluations, however, understanding of multiple types of rights continues to develop well into adolescence (Ruck, Peterson-Badali, Elisha, & Tenenbaum, 2017), and there is meaningful variability in adolescents' support for different resource distribution strategies. For instance, U.S. adolescents who attribute inequality in society to individual causes (e.g., responsibility, intelligence) are more likely to prioritize merit-based distribution strategies (Kornbluh, Pykett, & Flanagan, 2019), while adolescents who perceive larger economic gaps in access to opportunities in society are more likely to distribute equitably (Elenbaas, 2019). Interestingly, on a broad scale, a large majority of U.S. adults report a desire for a more equal distribution of wealth in society while simultaneously disapproving of policies like taxation that would reduce inequalities (Norton & Ariely, 2011). Thus, moral reasoning about the tension between the fairness of keeping what one earns and the fairness of ensuring a level playing field for all is salient throughout the lifespan.

The challenges associated with balancing ownership and equality in children's peer interactions are a common example of how children must often navigate social contexts where multiple fairness concerns are at odds with one another. Together, the findings from this study highlight how young children simultaneously prioritize equality in access to resources and closely attend to others' rights to control the use of their property. Further, these results pinpoint one condition in which some young children accept an infringement on ownership rights: when doing so adjusts for inequality of opportunity.

References

Ball, C. L., Smetana, J. G., & Sturge-Apple, M. L. (2017). Following my head and my heart: Integrating preschoolers' empathy, theory of mind, and moral judgments. *Child Development, 88*, 597–611. https://doi.org/10.1111/cdev.12605.

Chernyak, N., Harris, P. L., & Cordes, S. (2019). Explaining early moral hypocrisy: Numerical cognition promotes equal sharing behavior in preschool-aged children. *Developmental Science, 22*, e12695. https://doi.org/10.1111/desc.12695.

Conry-Murray, C. (2015). Children's judgments of inequitable distributions that conform to gender norms. *Merrill-Palmer Quarterly, 61*, 319–344. https://doi.org/10.13110/merrpalmquar1982.61.3.0319.

Dahl, A. (2019). The science of early moral development: On defining, constructing, and studying morality from birth. In (1st ed.). J. B. Benson (Vol. Ed.), *Advances in Child Development and Behavior: Vol. 56*, (pp. 1–24). Cambridge, MA: Academic Press. https://doi.org/10.1016/bs.acdb.2018.11.001.

Dahl, A., Gingo, M., Uttich, K., & Turiel, E. (2018). Moral reasoning about human welfare in adolescents and adults: Judging conflicts involving sacrificing and saving lives. *Monographs of the Society for Research in Child Development, 83*, 1–133. https://doi.org/10.1111/mono.12378.

Elenbaas, L. (2019). Perceptions of economic inequality are related to children's judgments about access to opportunities. *Developmental Psychology, 55*, 471–481. https://doi.org/10.1037/dev0000550.

Elenbaas, L., & Killen, M. (2017). Children's perceptions of social resource inequalities. *Journal of Applied Developmental Psychology, 48*, 49–58. https://doi.org/10.1016/j.appdev.2016.11.006.

Fehr, E., Bernhard, H., & Rockenbach, B. (2008). Egalitarianism in young children. *Nature, 454*, 1079–1083. https://doi.org/10.1038/nature07155.

Jambon, M., & Smetana, J. G. (2014). Moral complexity in middle childhood: Children's evaluations of necessary harm. *Developmental Psychology, 50*, 22–33. https://doi.org/10.1037/a0032992.

Killen, M., & Smetana, J. G. (2015). Origins and development of morality. In (7th ed.). M. E. Lamb (Vol. Ed.), *Handbook of child psychology and developmental science: Vol. 3*, (pp. 701–749). New York, NY: Wiley-Blackwell.

Kim, S., & Kalish, C. W. (2009). Children's ascriptions of property rights with changes of ownership. *Cognitive Development, 24*, 322–336. https://doi.org/10.1016/j.cogdev.2009.03.004.

Kornbluh, M. E., Pykett, A. A., & Flanagan, C. A. (2019). Exploring the associations between youths' explanations of poverty at the societal level and judgements of distributive justice. *Developmental Psychology, 55*, 488–497. https://doi.org/10.1037/dev0000523.

Mammen, M., Köymen, B., & Tomasello, M. (2018). The reasons young children give to peers when explaining their judgments of moral and conventional rules. *Developmental Psychology, 54*, 254–262. https://doi.org/10.1037/dev0000424.

Nancekivell, S. E., & Friedman, O. (2014). Mine, yours, no one's: Children's understanding of how ownership affects object use. *Developmental Psychology, 50*, 1845–1853. https://doi.org/10.1037/a0036971.

Nancekivell, S. E., & Friedman, O. (2017). "Because it's hers": When preschoolers use ownership in their explanations. *Cognitive Science, 41*, 827–843. https://doi.org/

10.1111/cogs.12358.
Nancekivell, S. E., Van de Vondervoort, J. W., & Friedman, O. (2013). Young children's understanding of ownership. *Child Development Perspectives, 7*, 243–247. https://doi.org/10.1111/cdep.12049.
Neary, K. R., & Friedman, O. (2014). Young children give priority to ownership when judging who should use an object. *Child Development, 85*, 326–337. https://doi.org/10.1111/cdev.12120.
Neary, K. R., Friedman, O., & Burnstein, C. L. (2009). Preschoolers infer ownership from "control of permission". *Developmental Psychology, 45*, 873–876. https://doi.org/10.1037/a0014088.
Noh, J. Y., D'Esterre, A., & Killen, M. (2019). Effort or outcome? Children's meritorious decisions. *Journal of Experimental Child Psychology, 178*, 1–14. https://doi.org/10.1016/j.jecp.2018.09.005.
Norton, M. I., & Ariely, D. (2011). Building a better America—One wealth quintile at a time. *Perspectives on Psychological Science, 6*, 9–12. https://doi.org/10.1177/1745691610393524.
Nucci, L., & Turiel, E. (2009). Capturing the complexity of moral development and education. *Mind Brain and Education, 3*, 151–159. https://doi.org/10.1111/j.1751-228X.2009.01065.x.
Olson, K. R., & Spelke, E. S. (2008). Foundations of cooperation in young children. *Cognition, 108*, 222–231. https://doi.org/10.1016/j.cognition.2007.12.003.
Rakoczy, H., Kaufmann, M., & Lohse, K. (2016). Young children understand the normative force of standards of equal resource distribution. *Journal of Experimental Child Psychology, 150*, 396–403. https://doi.org/10.1016/j.jecp.2016.05.015.
Riedl, K., Jensen, K., Call, J., & Tomasello, M. (2015). Restorative justice in children. *Current Biology, 25*, 1731–1735. https://doi.org/10.1016/j.cub.2015.05.014.
Rizzo, M. T., Elenbaas, L., Cooley, S., & Killen, M. (2016). Children's recognition of fairness and others' welfare in a resource allocation task: Age related changes. *Developmental Psychology, 8*, 1307–1317. https://doi.org/10.1037/dev0000134.
Rizzo, M. T., Elenbaas, L., & Vanderbilt, K. E. (2018). Do children distinguish between resource inequalities with individual versus structural origins? *Child Development*. https://doi.org/10.1111/cdev.13181.
Rizzo, M. T., & Killen, M. (2016). Children's understanding of equity in the context of inequality. *The British Journal of Developmental Psychology, 34*, 569–581. https://doi.org/10.1111/bjdp.12150.
Rochat, P., Robbins, E., Passos-Ferreira, C., Donato Oliva, A., Dias, M. D. G., & Guo, L. (2014). Ownership reasoning in children across cultures. *Cognition, 132*, 471–484. https://doi.org/10.1016/j.cognition.2014.04.014.
Rose-Krasnor, L., & Denham, S. (2009). *Social-emotional competence in early childhood. Handbook of peer interactions, relationships, and groups*. New York, NY: The Guilford Press162–179.
Ross, H. S. (2013). Effects of ownership rights on conflicts between toddler peers. *Infancy, 18*, 256–275. https://doi.org/10.1111/j.1532-7078.2012.00121.x.
Rossano, F., Fiedler, L., & Tomasello, M. (2015). Preschoolers' understanding of the role of communication and cooperation in establishing property rights. *Developmental Psychology, 51*, 176–184. https://doi.org/10.1037/a0038493.
Ruck, M. D., Peterson-Badali, M., Elisha, I. M., & Tenenbaum, H. R. (2017). Children's voices about children's rights: Thoughts from developmental psychology. In M. D. Ruck, M. Peterson-Badali, & M. Freeman (Eds.). *Handbook of children's rights: Global and multidisciplinary perspectives* (pp. 597–610). New York, NY: Routledge.
Schmidt, M. F. H., Rakoczy, H., & Tomasello, M. (2013). Young children understand and defend the entitlements of others. *Journal of Experimental Child Psychology, 116*, 930–944. https://doi.org/10.1016/j.jecp.2013.06.013.
Schmidt, M. F. H., Svetlova, M., Johe, J., & Tomasello, M. (2016). Children's developing understanding of legitimate reasons for allocating resources unequally. *Cognitive Development, 37*, 42–52. https://doi.org/10.1016/j.cogdev.2015.11.001.
Smetana, J. G., & Ball, C. L. (2019). Heterogeneity in children's developing moral judgments about different types of harm. *Developmental Psychology, 55*, 1150–1163. https://doi.org/10.1037/dev0000718.
Smith, C. E., & Warneken, F. (2016). Children's reasoning about distributive and retributive justice across development. *Developmental Psychology, 52*, 1–17. https://doi.org/10.1037/a0040069.
Turiel, E. (2008). The development of children's orientations toward moral, social, and personal orders: More than a sequence in development. *Human Development, 51*, 21–39. https://doi.org/10.1159/000113154.
Wainryb, C., Brehl, B. A., Matwin, S., Sokol, B. W., & Hammond, S. (2005). Being hurt and hurting others: Children's narrative accounts and moral judgments of their own interpersonal conflicts. *Monographs of the Society for Research in Child Development, 70*, 1–122. https://doi.org/10.2307/3701399.
Wainryb, C., Smetana, J. G., & Turiel, E. (2008). *Social development, social inequalities, and social justice*. New York, NY: Taylor & Francis Group/Lawrence Erlbaum Associates.
Wörle, M., & Paulus, M. (2018). Normative expectations about fairness: The development of a charity norm in preschoolers. *Journal of Experimental Child Psychology, 165*, 66–84. https://doi.org/10.1016/j.jecp.2017.03.016.