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## Against unfairness: Young children's judgments about merit, equity, and equality



Laura Elenbaas\*

Department of Clinical & Social Sciences in Psychology, University of Rochester, Rochester, NY 14627, USA

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### ABSTRACT

This study examined young children's judgments of resource distributions that either adhered to or diverged from principles of equality, equity, or merit in straightforward, peer-based scenarios. The sample comprised 192 ethnically and socioeconomically diverse 3- to 8-year-olds. Between 3 and 8 years of age, children evaluated inequitable and anti-meritorious allocations more negatively but did not evaluate equitable and meritorious allocations more positively. Rather, between 3 and 8 years, children increasingly supported equality. Highlighting an important but often overlooked developmental distinction, these results suggest that young children are increasingly against unfairness, but do not always endorse the most complex forms of distributive fairness.

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### Introduction

Changes in children's decisions and reasoning about how to regulate access to resources have long been considered a key marker of developing moral conceptions of fairness (Damon, 1975; Killen & Smetana, 2015). Approaches to testing this question empirically have progressed considerably over the years, and through careful experimental designs recent work has revealed the remarkably early origins of children's fairness concerns in distributive contexts. Children as young as 3 years, for example, allocate rewards such as cookies in accordance with how much effort recipients contribute,

\* Fax: +1 585 273 1100.

E-mail address: [laura.elenbaas@rochester.edu](mailto:laura.elenbaas@rochester.edu)

suggesting an appreciation of merit (Baumard, Mascaro, & Chevallier, 2012; Kanngiesser & Warneken, 2012). Similarly, children as young as 4 years distribute more items such as toys to recipients who have less, suggesting an appreciation of equity (Li, Spitzer, & Olson, 2014). Despite these crucial advances, many recent studies in this area have overlooked one simple but foundational question regarding the emergence and early development of moral reasoning about distributive justice: When it comes to dividing up resources in everyday contexts, are children for fairness or against unfairness? To address this question, we investigated 3- to 8-year-olds' judgments of resource distributions that either adhered to or diverged from principles of equality, equity, and merit in straightforward, peer-based scenarios.

Support for fairness and disapproval of unfairness are not incompatible. Yet this distinction echoes core questions about human morality. Foundational theories emphasize the difference between, for example, the obligation to refrain from certain actions, such as harm to others, and the duty to engage in other actions, such as helping others (Kant, 1785/2018). From the perspective of social domain theory, fairness is a fundamental moral concern that is viewed by children and adults alike as distinct from other conventional or personal issues (Killen & Smetana, 2015). Grounded in reasoning about others' welfare, rights, and equality between persons, children view everyday acts of resource denial as wrong (e.g., taking all the crayons needed for a group art project, giving fewer cookies to one person at snack time). In fact, young children view such actions as wrong even in the absence of a stated rule about them, and even when authority figures suggest that they are permissible (Smetana & Ball, 2019).

Once the moral ground rules about unfairness are understood, however, many possibilities emerge for how to be fair. Yet few studies to date have endeavored to separate children's endorsement of principles such as merit and equity from their condemnation of actions that go against these fairness concerns. Indeed, experimental designs have often blurred the lines between possible interpretations of children's behavior. For instance, does a child's decision to distribute more toys to an under-resourced peer than to a well-resourced peer reflect the child's concern for equity (support for fairness) or the child's attempt to avoid inequity (refraining from unfairness)? Similarly, rewarding a hard worker with more treats (support for fairness) could be interpreted as avoiding rewarding a lazy recipient (refraining from unfairness).

Thus, an important developmental question concerns whether changes in children's conceptions of fairness are driven by an increasing concern for *upholding* principles such as equality, merit, and equity or an increasing recognition of what one should *not* do in order to avoid being unfair to others. Whereas some recent studies highlight the increasing complexity of children's moral reasoning about how others *should* be treated (Malti et al., 2016; Rizzo, Elenbaas, Cooley, & Killen, 2016; Wörle & Paulus, 2018), other lines of work emphasize how children use fair behavior to signal that they are *not* selfish or partial cooperation partners (Blake et al., 2015; Fehr, Bernhard, & Rockenbach, 2008; Shaw & Olson, 2014). Given that young children must navigate social interactions about who needs, owns, and deserves what on a regular basis (Nancekivell, Van de Vondervoort, & Friedman, 2013; Rutland & Killen, 2017), resolving this question is important for understanding what underlies moral development in contexts involving sharing and distributing resources—support for fair treatment, disapproval of unfair treatment, or both.

### *Against unfairness*

From as early as 3 years of age, children negatively evaluate and verbally protest peers who distribute items in ways that contradict principles of equity (more to a recipient who already has a lot) or merit (more to a recipient who was lazy) (Paulus, Nöth, & Wörle, 2018; Rizzo et al., 2016; Wörle & Paulus, 2018). This suggests that children are against unfair resource distribution from an early age. Complicating the picture, however, is the question of whether young children's negative reactions in these contexts reflect thinking about equity or merit in particular or whether they reflect a more general disapproval of resource allocations that deviate from equality.

In fact, when there are enough toys or treats to go around, the majority of young children distribute equally regardless of recipient merit or need (Olson & Spelke, 2008; Rizzo & Killen, 2016; Schmidt, Svetlova, Johé, & Tomasello, 2016; Smith & Warneken, 2016). This introduces some important caveats

to the idea that even very young children are opposed to inequitable or anti-meritorious divisions of toys or treats.

#### *For fairness*

Findings diverge as well when it comes to what one *should* do with limited resources. For instance, between 3 and 8 years of age, children are increasingly likely to distribute items such as stickers and candy to peers on the basis of merit or equity (Malti et al., 2016; Rizzo & Killen, 2016; Schmidt et al., 2016). Yet 3- to 6-year-olds are just as likely to affirm a peer's decision to distribute equally as they are to affirm a peer's decision to distribute equitably (Paulus et al., 2018) and find equal distributions just as fair as merit-based distributions (Smith & Warneken, 2016). In fact, even 8-year-olds judge equality very positively in situations where more complex distributive strategies could be applied (Rizzo et al., 2016; Rizzo, Elenbaas, & Vanderbilt, 2018). This casts some doubt on the conclusion that children consistently prioritize increasingly complex fairness concerns over equality over the course of early childhood.

Much of the detailed experimental work to date has been guided by research questions about whether children *can* systematically prioritize one resource recipient over another when they have several compelling cues to merit or equity. Accordingly, some studies strongly emphasize differences between potential recipients, presenting, for instance, peers who are either completely without resources or flush with resources (e.g., Rizzo & Killen, 2016) or who make explicit claims reflecting the expectation of reward for work (e.g., Schmidt et al., 2016). Other studies provide an odd number of toys or treats to allocate, eliminating the option to divide equally (e.g., Baumard et al., 2012). This research has produced important insights into the origins of children's concerns for merit and equity, however, less is known about how young children balance competing priorities (e.g., equity vs. equality) in more familiar social interactions when the differences between resource recipients are more subtle and there are enough items to divide evenly.

#### *Supporting equality*

In such contexts, young children may well adhere to principles of equality. Across a variety of everyday contexts, from childhood to adulthood, individuals often determine that equality is a fair and desirable way to manage access to limited resources. In first-person interactions, sharing equally both signals that one is a fair cooperater (Blake et al., 2015) and upholds moral norms about others' rights (Smetana & Ball, 2019). In third-party scenarios, distributing resources equally to others demonstrates both impartiality (the absence of bias; Shaw & Olson, 2014) and a willingness to enforce fair norms even with no benefit to the self (Rakoczy, Kaufmann, & Lohse, 2016). In many cases, sharing or distributing resources equally communicates interpersonal respect and commitment to equal opportunity above and beyond the more immediate allocation of material goods (Engelmann & Tomasello, 2019).

Understanding of many of these implications and meanings of equality (e.g., cooperation, rights, impartiality, norms, opportunity) emerges and develops across the course of early childhood. For instance, infants expect equality between peers (Sommerville, 2018), and toddlers often share toys equally even when they could monopolize them (Ulber, Hamann, & Tomasello, 2015). Young children protest when peers distribute toys unequally (Rakoczy et al., 2016) and prefer to affiliate with peers who share equally (Rizzo, Cooley, Elenbaas, & Killen, 2017). Similarly, older children support peers who want to split valuable resources evenly even when it would be beneficial to keep more for themselves (Killen, Rutland, Abrams, Mulvey, & Hitti, 2013). In many cases, even adolescents share money equally regardless of relative effort (Almås, Cappelen, Salvanes, Sørensen, & Tungodden, 2017), divide supplies evenly regardless of relative need (McGuire, Elenbaas, Killen, & Rutland, 2018), and condone the social exclusion of peers who refuse to share equally (Hitti, Mulvey, Rutland, Abrams, & Killen, 2014).

In short, without discounting the clear (but contextually dependent) importance of principles such as merit and equity (or reciprocity, ownership, or other fairness concerns), equality may be at the psychological core of what it means to be fair. Furthermore, because children's recognition of multiple

reasons for sharing equally (e.g., rights, impartiality) increases over the course of early childhood, children may increasingly endorse these actions in others.

### *The current study*

Highlighting an important distinction between supporting fair treatment and condemning unfair treatment, this study was designed to determine whether children become more supportive of strategies for ensuring the fair distribution of resources, less supportive of strategies that result in unfair access, or both over the course of early childhood. Specifically, we investigated young children's judgments of resource allocations that adhered to or diverged from principles of equality, equity, and merit. The sample was composed of socioeconomically and ethnically diverse 3- to 8-year-old children in the United States.

We used two simple vignettes in which recipient peers differed in the degree, rather than the absolute presence or absence, of their work and need, and the number of resources available allowed for an equal split. In one vignette, one potential recipient was more productive than the other (merit). In another vignette, one potential recipient had fewer resources than the other (equity). In both vignettes, a third-party peer gave out resources in three different ways. One approach was consistent with the relevant fairness principle (merit or equity), one was inconsistent with the fairness principle (anti-meritorious or inequitable), and one supported equality (equal resources to both characters). Participants evaluated how "okay" or "not okay" each action was. This design allowed for a succinct within-participants assessment of age-related differences in children's judgments of these resource distribution strategies in peer-based scenarios.

### *Hypotheses*

We formulated three primary hypotheses for this study. First, based on research indicating that children demonstrate their disapproval of unfair resource allocations in more complex ways over the course of early childhood, we predicted that, between 3 and 8 years of age, children would evaluate resource allocations that were *inconsistent* with merit and equity increasingly negatively (H1). However, children also show increasing appreciation of multiple reasons for why equality is fair. Thus, we predicted that, when given the option to use *equality* as a distribution strategy, children would increasingly support this approach between 3 and 8 years of age (H2). Furthermore, we predicted that, in this context, children would evaluate distributions that were *consistent* with equity and merit positively but would not increasingly support these approaches with age (H3).

Notably, H2 and H3 ran counter to the predictions of several other studies in this area. Most work has hypothesized that children will prioritize equity or merit over equality with age (e.g., Baumard et al., 2012; Malti et al., 2016; Rizzo et al., 2016; Schmidt et al., 2016; Wörle & Paulus, 2018). Our predictions rested on the possibility that prior findings may have been driven at least in part by large differences between recipients, explicit claims reflecting recipients' expectations, or restrictions based on the number of resources available to allocate. To be clear, we did not hypothesize that children would judge meritorious and equitable distributions negatively. Instead, we predicted that, in the everyday contexts used in this study, children would be against unfairness but not necessarily *for* the most complex forms of fairness. That is, children would be against rewarding the lazy or well-resourced over the hard-working or under-resourced, but they might view equal allocations as preferable to merit- and equity-based allocations in these scenarios.

## **Method**

### *Participants*

Participants were 192 3- to 8-year-old children ( $M_{\text{age}} = 5.28$  years,  $SD = 1.48$ ) from nine community sites (one preschool, four child-care centers, and four elementary schools), all located in the same mid-sized city in the northeastern United States. Response rates ranged from approximately 40% to 100% between sites. A priori power analyses based on the models described in the "Data analytic plan"

section indicated that a sample size of approximately 140 would be necessary to detect small effects with alpha at .05 and power at .80. We tested all interested children at participating sites, resulting in a sample size that exceeded the minimum threshold. Parents were asked to provide demographic information for their children. The sample was racially and socioeconomically diverse and was balanced by gender (see Table 1 for details).

### Procedure

Parental consent and children's verbal assent were obtained for all participants. Children were individually interviewed in quiet spaces at each community site during the winter of 2018. All stimuli and measures were presented on laptop computers in the form of two fully illustrated and semi-animated vignettes. The characters in each vignette were silhouette outlines of young children with gender-neutral names (e.g., Taylor) that were pretested to reveal no implications about gender or race. Clay pots, erasers, and stickers were multicolored.

Prior to the first vignette, participants were familiarized with a 6-point smiley/frowny face Likert-type scale used to measure their judgments of characters' actions, from 1 = *really not okay* (big frown) to 6 = *really okay* (big smile). Pilot testing revealed no effects for vignette order or question order within each vignette, so vignettes and questions were presented in a fixed order with a short filler task in between to retain participants' attention. Each participation session took approximately 10 min.

### Merit vignette

This vignette introduced two characters who were making clay pots. One ("A") made five pots and the other ("B") made one pot. Then a third character ("C") gave out stickers in three ways:

**Table 1**  
Sample demographics.

	%	<i>n</i>
Age		
3 years	13	25
4 years	21	40
5 years	22	43
6 years	21	40
7 years	15	29
8 years	8	15
Gender		
Girls	48	92
Boys	41	78
Declined to provide gender	11	22
Race or ethnicity		
European American	35	68
African American	21	40
Multiracial or multiethnic	13	25
Latinx	11	21
Other	2	4
Asian American	2	3
Declined to provide race or ethnicity	16	31
Approximate annual family income		
<\$15,000	10	20
\$15,000–\$30,000	8	16
\$30,000–\$45,000	12	22
\$45,000–\$60,000	14	27
\$60,000–\$75,000	7	14
\$75,000–\$90,000	4	8
\$90,000–\$105,000	5	9
>\$105,000	17	32
Declined to provide approximate annual family income	23	44
Total <i>N</i> in each category		192

1. *Consistent*: Five stickers to A and one sticker to B “because A made more pots than B”
2. *Equal*: Three stickers to each character “because that’s the same for A and B”
3. *Inconsistent*: One sticker to A and five stickers to B “because B made less pots than A.”

Following each action, the experimenter 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?” in order to record participants’ judgments on the 6-point scale. Children responded verbally or by pointing to one of the smiley/frowny faces, from 1 = *really not okay* to 6 = *really okay*.

#### Equity vignette

This vignette introduced two characters who had erasers. One (“A”) had five erasers, and the other (“B”) had one eraser. Then a third character (“C”) gave out erasers in three ways:

1. *Consistent*: Five erasers to B and one eraser to A “because B had less erasers than A”
2. *Equal*: Three erasers to each character “because that’s the same for A and B”
3. *Inconsistent*: Five erasers to A and one to B “because A had more erasers than B.”

As above, the experimenter used the 6-point scale to record participants’ judgments of these actions.

In both vignettes, each distributive action was introduced as a hypothetical with the phrase, “Let’s say that C . . .” The recipient characters themselves made no direct claims on the resources, and no characters were completely without merit (both made at least one clay pot) or without resources (both had at least one eraser).

#### Data analytic plan

We used a linear mixed model to examine differences in children’s judgments (from 1 = *really not okay* to 6 = *really okay*) as a function of the within-participants factors Fairness Concept (merit or equity) and Allocation Type (consistent, inconsistent, or equal) and the between-participants factor age (3–8 years). To test H1, H2, and H3, the model examined the main effect of Allocation Type, the interactions Allocation Type  $\times$  Fairness Concept and Allocation Type  $\times$  Age, and the full interaction Allocation Type  $\times$  Fairness Concept  $\times$  Age. Participant was included as a random effect. Comparisons of model fit were made using maximum likelihood estimation; restricted maximum likelihood estimation was used to interpret parameter estimates. A proportional reduction in variance estimate was calculated using [Raudenbush and Bryk’s \(2002\)](#) formula. All analyses were run in SPSS 24 (IBM, Armonk, NY, USA).

ICCs ranged from .01 to .09, indicating little shared variance between children recruited from the same community sites; we did not include an effect for site in the model. As noted in [Table 2](#), slightly more younger children than older children were of ethnic or racial minority backgrounds, and parent-reported approximate annual family income was associated with child race or ethnicity. We initially tested for effects of children’s race or ethnicity, approximate annual family income, and gender in our model; no effects were significant, and these variables were not included in the final model presented below.

## Results

As noted in [Table 2](#), at the bivariate level, children’s age correlated negatively with their judgments of inequitable and anti-meritorious allocations and correlated positively with their judgments of equal allocations. Correlations between age and children’s judgments of equitable and meritorious allocations were not significant.

The model testing our three hypotheses was a significant improvement over a null model, likelihood ratio  $\chi^2(11, N = 191) = 342.10, p < .001, R^2(\text{approx.}) = .30$ . The effect for Allocation Type  $\times$  Age was significant,  $F(3, 405.87) = 18.92, p < .001$ . No other effects were significant: Allocation Type,

**Table 2**

Correlations among study variables.

	1	2	3	4	5	6	7	8	9
1. Age									
2. Gender	.14								
3. Race or ethnicity	-.16*	.07							
4. Approximate annual family income	.14	-.09	-.53**						
5. Judgment of consistent allocation: Merit vignette	-.08	-.05	-.08	.05					
6. Judgment of equal allocation: Merit vignette	.26**	-.06	-.06	.10	.00				
7. Judgment of inconsistent allocation: Merit vignette	-.24**	.09	.05	-.14	.38**	-.05			
8. Judgment of consistent allocation: Equity vignette	-.02	.10	.03	-.11	.25**	.03	.43**		
9. Judgment of equal allocation: Equity vignette	.28**	-.08	-.11	.15	.06	.42**	.12	.05	
10. Judgment of inconsistent allocation: Equity vignette	-.20**	-.06	-.10	.03	.45**	-.01	.35**	.21**	-.02

Note. For gender, 1 = boy. For race or ethnicity, 1 = racial or ethnic minority background.

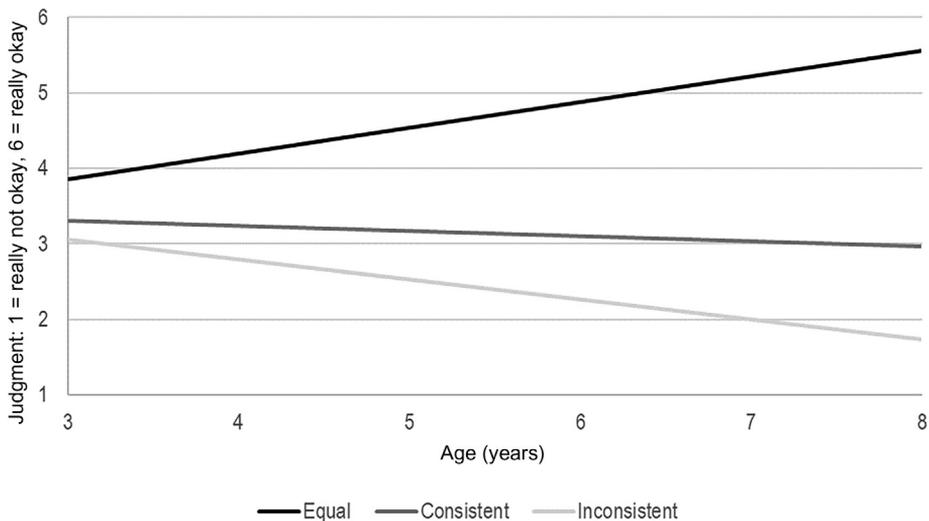
\*  $p < .05$ .

\*\*  $p < .01$ .

$F(2, 949.33) = 2.61, p = .07$ , Allocation Type  $\times$  Fairness Concept,  $F(3, 949.33) = 0.64, p = .59$ , Allocation Type  $\times$  Fairness Concept  $\times$  Age,  $F(3, 949.23) = 0.28, p = .84$ .

As illustrated in Fig. 1, the older the child, the more negatively they evaluated allocations that were *inconsistent* with principles of equity and merit,  $b = -.27, 95\% \text{ CI} [-.45, -.09], p = .003$ , supporting H1. Furthermore, the older the child, the more positively they evaluated *equal* allocations,  $b = .31, 95\% \text{ CI} [.13, .48], p = .001$ , supporting H2. Age was not significantly related to children's evaluations of allocations that were *consistent* with principles of equity and merit,  $b = -.11, 95\% \text{ CI} [-.29, .07], p = .23$ , supporting H3.

To facilitate comparison of our findings with those of prior studies in this area, which have often divided 3- to 8-year-old samples into age groups for analyses, we reran the same model with age divided into three groups: 3- and 4-year-olds, 5- and 6-year-olds, and 7- and 8-year-olds. Results paralleled those reported above (see online [supplementary material](#) for details).



**Fig. 1.** Children's judgments differ by age. "Consistent" refers to equitable and meritorious allocations; "inconsistent" refers to inequitable and anti-meritorious allocations.

## Discussion

This study examined young children's judgments of resource allocations that adhered to or diverged from principles of equality, equity, and merit. Between 3 and 8 years of age, children increasingly rejected allocations that went *against* the fairness principles of merit and equity but did not evaluate allocations that *adhered* to these principles more positively. Rather, between 3 and 8 years, children were increasingly supportive of *equality*.

Important work in this area has revealed the early origins of children's concerns for merit and equity. In doing so, however, many studies have blurred the lines between children's support for fairness and disapproval of unfairness, and moved away from the more graded differences between peers that characterize everyday interactions around who needs and deserves what. This study aimed to disambiguate the underlying question of what drives moral development in contexts involving sharing and distributing resources—support for fairness, disapproval of unfairness, or both.

### *Against unfairness*

Very clearly, disapproval of unfairness in the form of inequitable or anti-meritorious resource allocations emerged by 5 or 6 years of age and gained strength by 7 or 8 years. That is, similar to prior work (e.g., Rizzo et al., 2016; Wörle & Paulus, 2018), children in this study demonstrated increasingly clear disapproval of rewarding the lazy over the hard-working or allocating more to the well-resourced over the under-resourced. These findings provide strong evidence of children's increasing appreciation for the principles of merit and equity, and confirm that condemnation of unfairness in situations involving familiar resources such as toys and treats emerges and gains traction during early childhood.

The findings that diverged most clearly from prior work, however, concerned children's views on the fairest way to distribute limited resources. Several recent studies have emphasized that children exchange a preference for strict equality for an adherence to principles of merit and equity during the early elementary school years (e.g., Malti et al., 2016; Rizzo & Killen, 2016; Schmidt et al., 2016). Alternatively, some studies suggest that, with age, children view equity and merit as equivalently acceptable to equality, rather than as more fair (e.g., Paulus et al., 2018; Rizzo et al., 2018; Smith & Warneken, 2016). In the current study, by contrast, children increasingly supported equality between 3 and 8 years of age. The youngest and oldest participants alike viewed equitable and meritorious allocations neutrally.

The goal of much prior research in this area has been to determine whether children are *able* to reward hard workers or share with under-resourced peers when they have every opportunity to do so. Accordingly, many experiments have been designed to detect the subtlest traces of children's consideration of merit or equity, for instance, by presenting recipients who represent the extremes of these principles or by requiring participants to prioritize one recipient over another by design. Indeed, when young children do evidence support for merit or equity in experimental studies, it is rarely by a wide margin (e.g., Baumard et al., 2012; Rizzo et al., 2016; Schmidt et al., 2016). The focus of the current study was not on whether young children could prioritize merit or equity but rather on whether they actively thought that one *should* do so when other options were available. The answer, on average, was “no”. In these scenarios, where resource recipients differed in the degree of their merit or need but there were enough stickers and erasers to divide evenly, children increasingly viewed equality as the best approach.

### *For equality*

It is important to note the many ways in which equality is foundational to developing conceptions of fairness. Equality is an extremely early-emerging fairness concern that young children defend (e.g., Rakoczy et al., 2016) and older children often prioritize over personal gain (e.g., Killen et al., 2013). In interpersonal interactions, sharing equally communicates respect (Engelmann & Tomasello, 2019) and moral consideration of others' welfare and rights (Smetana & Ball, 2019).

From the perspective of social domain theory, children judge everyday acts of inequality (e.g., monopolizing all the toys for oneself) as wrong not based on the behavior itself, but rather based on the intentions of the actor and the consequences for the recipient (Killen & Smetana, 2015). In other words, equality of resources is morally right to the extent that it upholds or restores fairness between persons. Thus, although a variety of other fairness concerns are certainly present in young children's social interactions, throughout development individuals often support equality in distribution and access to limited resources. As evidenced in this study, young children also do so when the reasons for allocating unequally appear to be modest.

Interestingly, recent studies with older participant samples have revealed important sources of individual variability in support for equity and merit as fair distribution strategies. For instance, in the United States, adolescents who attribute inequality in broader society to individual causes (e.g., effort, responsibility) are more likely to personally distribute resources based on merit than based on need (Kornbluh, Pykett, & Flanagan, 2019). By contrast, older children and adolescents who perceive substantial economic gaps in access to opportunities in society are more likely to distribute equitably than equally (Elenbaas, 2019). Young children, too, may differ in the extent to which they prioritize principles of merit or equity over equality as a function of their broader views on the causes and consequences of resource disparities. These individual (or group) differences may be best investigated with experimental paradigms like the one used in the current study, in which more than one distributive approach may be interpreted as fair.

Together with the results of the current study, these recent findings suggest that, although equality may be more universally recognized as fair, there is considerable developmental, individual, and contextual variability in children's evaluations of equity and merit as legitimate reasons for allocating more to one person than another. Certainly there is more variability in this area of moral development than previously anticipated, highlighting the need for more research on the origins of variability in children's evaluations of various fair (and unfair) ways to share and distribute resources.

### *Conclusions and future directions*

Findings from this study point to several directions for further investigation. For instance, future studies might include behavioral distribution measures or measures of children's reasoning for their judgments in order to strengthen the evidence for age-related differences in children's evaluations (e.g., Rizzo et al., 2018). There are inconsistencies in the extant evidence regarding whether concern for merit precedes concern for equity in development or vice versa. Some studies point to equity concerns as the earliest emerging (e.g., Huppert et al., 2019), and other studies suggest that merit comes first (e.g., Baumard et al., 2012). This study, as well as others (e.g., Schmidt et al., 2016), indicates no differences. Multimethod investigations may help to resolve this debate by clarifying when concerns for merit and equity emerge in children's behavior and reasoning in addition to their evaluations of others' actions. Moreover, many everyday decisions involve negotiating access to resources for oneself in addition to evaluating distributions involving third parties (e.g., Smith, Blake, & Harris, 2013). Future studies should investigate how concerns for self-interest, ownership, or other factors intersect with children's fairness judgments in contexts where children are personally involved.

Taken together, the results of the current study suggest that, in contexts involving limited resources children increasingly disapprove of unfair treatment but do not necessarily increasingly endorse the most complex forms of fairness. Although related work indicates that young children can act in accordance with principles of merit and equity when sharing and distributing items such as toys and treats, the results of this study suggest that, in many contexts, this may rarely be their preferred course of action. Instead, equality may be increasingly supported across early childhood.

### **Appendix A. Supplementary material**

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jecp.2019.05.009>.

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