EMPIRICAL RESEARCH



Children's and Adolescents' Expectations about Challenging Unfair Group Norms

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Abstract Youth often hold group norms that perpetuate inequality. One way these norms can be changed is by challenging these norms by choosing to include new members into these groups who hold morally just norms. In the current study, children's and adolescents' inclusion decisions and social reasoning about challenging group norms through inclusion were investigated. The sample included 9–10 (children) and 13–14 year-olds (adolescents) (N = 673, 54.4% female). Participants supported including challengers into groups holding norms supporting relational aggression and unequal allocation of resources, but they were less likely to support including a challenger into a physically aggressive group. Age-related differences and gender differences were found: children and female participants were more likely to include challengers than were adolescents and male participants. The findings indicate that youth support including new members who would challenge morally questionable group norms, but that their support depends on the specific norm the group holds.

Keywords Inclusion · Group norms · Challenging inequality · Moral judgments · Peer group dynamics

Introduction

Children and adolescents recognize that social inequalities occur frequently and judge these inequalities as morally problematic (Arsenio 2015). However, children and adolescents can also perpetuate social inequality through negative peer group norms. While peer groups can hold norms regarding a range of different types of behaviors, at times peer groups hold morally unacceptable group norms, which can encourage unequal or unfair treatment of others (Elenbaas and Killen 2016; Killen and Malti 2015). Peer groups with negative norms can serve as negative influences for group members and can encourage antisocial behaviors (Piehler and Dishion 2007). Research on a wide range of norms indicates that negative peer group norms can lead to inequitable treatment of others. For instance, children and adolescents who are part of aggressive sports teams or groups are more likely to engage in aggression toward others (Malete et al. 2013). Additionally, individuals who associate with peers who support relational aggression are more likely to engage in relational aggression (Brendgen et al. 2013). Children, and to a lesser extent, adolescents, often evaluate negative peer group norms as morally unacceptable: research suggests that children and adolescents recognize the problematic nature of norms that perpetuate inequalities in the distribution of resources (Killen et al. 2013) and that perpetuate inequalities by condoning physical and relational aggression toward peers (Mulvey and Killen 2016). One way in which youth may serve to challenge these social inequalities is by working to change negative peer group norms that condone behavior that creates inequality.

Research suggests that children and adolescents recognize the powerful influence that challenging a peer group norm can have for affecting change, particularly changing



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the way a group treats its own members as well as those from outside the group (Mulvey and Killen 2015, 2016). At the same time, however, they also understand that deviating from peer group norms will often be received negatively by the group (Mulvey et al. 2014b). Specifically, research indicates that children prefer outgroup members who agree with their norms over ingroup members who deviate from their norms (Abrams and Rutland 2008; Abrams et al. 2003a). Further, children and adolescents recognize that challenging peer group norms may lead to social exclusion or rejection from the group (Mulvey and Killen 2015; Mulvey et al. 2016b).

Scant research, however, has examined how children and adolescents think about the feasibility of changing norms, and challenging groups when their traditions are unfair. Understanding youth social cognition about challenging groups is important because group norms are not static. One way in which children and adolescents can change group norms is by changing the norms of the individual members of those groups or by including new ingroup members with different norms. Including peers who have morally just beliefs into groups that hold morally unacceptable norms may be one way in which children and adolescents can advocate for rectifying unequal or unfair treatment of others.

The current study draws on research from the Social Reasoning Developmental perspective (Rutland et al. 2010) to investigate how children and adolescents think about challenging groups for three different types of norms: resource allocation, physical aggression, and relational aggression. The Social Reasoning Developmental perspective posits that individuals balance their understanding of group norms and their feelings of loyalty to their group with their knowledge of moral principles when making social decisions and evaluations. Research from the Social Reasoning Developmental perspective demonstrates that children and adolescents attend to both group-based and moral concerns in their decision-making (Rutland and Killen 2015) and reason about these concerns in different ways (Mulvey 2016). Specifically, research demonstrates that individuals use distinct domains of reasoning when making social decisions: the moral domain, which involves rights, justice, and other's welfare; the societal domain, which involves customs, traditions, and group functioning; and the psychological domain, which involves personal choice, autonomy, and mental-state understanding (Smetana 2006).

Children distinguish between these domains early in childhood and in straightforward contexts they reference the moral domain when evaluating morally relevant social decisions and the societal domain when evaluating conventions or customs of groups (Smetana 2006). Findings drawing on the Social Reasoning Developmental perspective have demonstrated developmental differences in how

children and adolescents balance moral and group-based concerns when reasoning about complex social decisions (Mulvey 2016). Specifically, with age, youth are more likely to recognize that both the moral and the societal domains may be relevant when making decisions about social situations that are complex or multifaceted (Richardson et al. 2012). Thus, given this tension between group norms and group membership and following procedures established in prior research (Theimer et al. 2001), in the current study participants were asked to choose between someone who shares their group membership (gender) but not their group norm or someone who shares their group norm, but not their group membership (gender). This design allows us provide an additional test of the Social Reasoning Developmental perspective by examining whether children and adolescents prioritize morality or group loyalty when making inclusion decisions.

Research also demonstrates that, with age, children place a greater focus on loyalty to the group and use more groupfunctioning reasoning to justify their social decisions (Mulvey et al. 2016b; Rutland et al. 2015). Further, research from this tradition highlights the ways in which intergroup contexts, for instance, contexts where children and adolescents do not all share group membership, can prove particularly challenging for youth as they make decisions about group processes (Mulvey et al. 2013). Indeed, research examining exclusion in intergroup contexts has centered on a range of different contexts including gender (Malti et al. 2012; Mulvey and Killen 2015), race and ethnicity (Hitti and Killen 2015; Killen et al. 2010), sexual orientation (Horn 2008; Horn and Sinno 2014), weight (Nguyen and Malti 2014), mental health status (O'Driscoll et al. 2015), and disability status (Gasser et al. 2013, 2014). What this large body of research demonstrates is that, while children recognize the harmful nature of exclusion, at times, they choose to support exclusion to protect group functioning (Killen and Rutland 2011). Moreover, there are many contexts in which children and adolescents prioritize morality when making decisions (Mulvey et al. 2016a).

As an example, research documents that experiencing bullying, including physical aggression and relational aggression, can lead to negative academic outcomes such as lower achievement and reduced school engagement (Buhs et al. 2006). Additionally, bullying experiences can lead shy and withdrawn children to become even more shy and withdrawn (Oh et al. 2008) and can result in higher rates of externalizing behavior among some children and adolescents (Broidy et al. 2003). As an illustration, sports contexts often encourage aggressive norms (Fields et al. 2010). Exposure to physical aggression in sports contexts may result in higher levels of aggression over time (Sønderlund et al. 2014). Additionally, research indicates that youth who experience inequities in access to resources also report more



internalizing symptoms and poorer overall health than those who have access to resources (Plenty and Mood 2016). Thus, youth can experience negative outcomes from exposure to group norms that encourage morally questionable behaviors such as aggression or denial of access to resources.

It may be that children and adolescents think that including a peer who disagrees with the negative norms of the group will propel the entire group toward recognizing the harmful nature of their current norm. While much research documents the ways in which peer groups can negatively influence members of these groups, peers can also serve as a positive source of influence on each other (van Hoorn et al. 2016a). For instance, peers can influence their friends' intentions to volunteer (Choukas-Bradley et al. 2015) and their prosocial allocations of resources (van Hoorn et al. 2016b). Further, neuroimaging studies have demonstrated increased activation in "social" brain areas (such as the medial prefrontal cortex, temporo-parietal junction and superior temporal sulcus) that reinforce prosocial behavior among peers (van Hoorn et al. 2016a). Further, adolescents who have been trained to intervene in instances of discrimination can positively influence their peers' behavior and norms (Paluck 2011).

One particularly powerful way in which peers can exert positive influence is through bystander intervention. For instance, research suggests that bystander intervention is related to reduced rates of bullying in schools (Salmivalli et al. 2011) and that, when bystanders intervene, the unacceptable behavior tends to stop within ten seconds (Nansel et al. 2001). However, intervention is more likely if your group holds norms that support intervention (Barhight et al. 2015) and when adolescents recognize the positive role of bystanders who include others (Malti et al. 2015).

Much less is known, however, about intervention from within the group itself. This would include instances in which individuals reject members of their own groups for perpetuating norms that have harmful consequences to others or when individuals invite new peers to join a group that can help propel the group toward change. The current study focused on whether children and adolescents support decisions to include someone who shares their group membership but who also rejects the negative norms of the group. Understanding youth cognition about decisions regarding inclusion of members who can challenge inequalities is the first step toward understanding what factors encourage children to rectify inequalities.

Current Study

The aim of the current study was to examine whether children and adolescents would work to rectify inequalities

perpetuated by peer groups through the inclusion of individuals who hold positive social norms even when these norms conflict with the negative norms espoused by the group. Children's and adolescents' perceptions of the effectiveness of introducing a new member who does not agree with the group may vary depending on the specific norm that group holds. For this reason, the current study tested inclusion decisions for peer groups with three different norms that can perpetuate inequalities. These norms involved: (1) inequitable distribution of resources, (2) physical aggression, and (3) relational aggression. These three group norms were chosen as prior research has demonstrated that children and adolescents recognize the problematic nature of these group norms. For instance, research demonstrates that children support challenging group norms regarding unequal distribution of resources (Killen et al. 2013), and physical and relational aggression (Mulvey and Killen 2016). The group membership category chosen for the current study was gender. This was chosen as peers affiliate with same-gendered peers throughout childhood (Ruble et al. 2006; Zosuls et al. 2011). What is still unknown, however, is whether they support including someone who does not hold these morally unacceptable norms into these groups.

Thus, the focus of the current study was on inclusion decisions and reasoning about these decisions. If given the choice, will children and adolescents perpetuate group norms that support inequalities by including someone who shares negative group norms with the rest of the group, or challenge the group norms by including someone who actively resists that group's negative norms? Furthermore, how do children and adolescents reason about these inclusion and exclusion decisions? The current study not only measured youth inclusion choices, but also reasoning about these choices given research demonstrating that, from childhood to adolescence, group functioning reasoning to explain exclusion increases (Mulvey 2016). Thus, in the current study, we examined both children (9-10 years of age) and adolescents (13-14 years of age), in line with prior research on peer group dynamics (Killen et al. 2013; Mulvey and Killen 2016). These age groups are also appropriate given that children and adolescents at these ages have developed a clear understanding of these types of norms: research on resource allocation indicates that children prioritize equal allocation of resources by about 7 or 8 years of age (Fehr et al. 2008) and that children recognize physical aggression and psychological harm from relational aggression as morally unacceptable by the time they are 3 or 4 years of age (Smetana 2006).

We expected that children and adolescents would choose to include a new member who challenges the group's negative norms into the groups. This is based on prior findings that demonstrate that children and adolescents



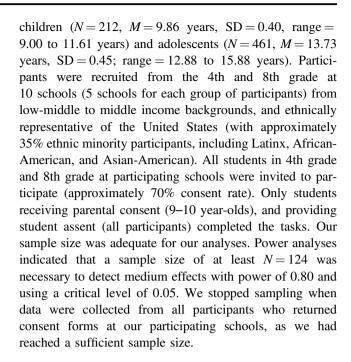
support deviance from group norms (Abrams et al. 2003a, 2007), including group norms that are morally unacceptable (Hitti et al. 2014; Killen et al. 2013). Additionally, we expected that there will be differences between the different types of norms, with lower rates of inclusion into the physically aggressive group than the relationally aggressive or unequal allocation group. Children and adolescents are less supportive of challenging group norms regarding physical aggression than relational aggression. This may be due to concerns that challenging physical aggression may lead to the aggression being redirected onto the challenger (Mulvey and Killen 2016).

We expected that there may be age-related differences, with children more likely to include peers who might resist the group norm than would adolescents, consistent with prior research that demonstrates that children are more supportive of challenges to group norms than are adolescents because of the increasing focus on group functioning and group loyalty in adolescence (Killen et al. 2013; Mulvey and Killen 2016). Given findings from social identity theory that indicate that individuals show ingroup positivity and try to protect the status of their group (Tajfel and Turner 1976), we expected that participants might be less willing to support including someone into their own group that did not share their group norm than they would support including someone into another group that did not share that group's norm. Related to this, we tested for differences based on gender of participant and expected that female participants may be more willing to include challengers than would male participants, given prior research that has, at times, found that girls are more inclusive than boys (Killen and Rutland 2011), and that girls at times show increased attention to the morally unacceptable nature of exclusion because of their prior experiences with exclusion (Malti et al. 2012; Park and Killen 2010). Finally, we expected to find that participants would use both group functioning and moral reasoning when they justify their inclusion decisions, given prior research documenting the role of both forms in reasoning in youth cognition regarding inclusion and exclusion (Mulvey 2016).

Method

Participants

Participants were recruited from the Mid-Atlantic region of the United States (N = 673). One group of participants assessed the unequal allocation condition (N = 381, including 122 9–10 year olds) and another group assessed the two aggression conditions (N = 292, including 90 9–10 year olds). This was done due to different interview scheduling sessions. Participants (54.4% female) included



Design and Procedures

All participants completed the assessment in a quiet room in their school under the guidance of a trained researcher. Children were interviewed individually or in small groups (children recorded their own responses while the researcher read aloud the items and answered questions), while adolescents completed a survey with their classmates who were also participating. Participants were told that there are no right or wrong answers and that all responses are anonymous and confidential. Additionally, participants were told that their participation is voluntary and that they may choose to stop the assessment if they desired. Participants were also given a warm-up task that involved completing practice items. For instance, they were asked to indicate whether they liked pizza or not. Depending on the condition assigned, participants either completed inclusion assessments about resource allocation or about aggression.

All participants received the same introduction to the task, which involved showing an image of a group of children (digital drawings of four children reflecting the age range of participants) who matched their gender and were asked to identify a symbol (star or lightning bolt), name and special event (ice cream or pizza party) for their group (see Mulvey et al. 2014a). They were introduced to the norms of their group and another group (that did not share their gender, labeled "their group"). This introduction was based upon research on the minimal group paradigm, which has documented that individuals affiliate with and exhibit strong ingroup identification toward minimal groups after short tasks such as these that involve making choices about a novel group (Bourhis and Gagnon 2001; Turner 1978).



There were three conditions: relational aggression, physical aggression, and resource allocation. For the relational aggression condition, participants were told about a group that always gossips about other students. For the physical aggression condition, they were told about a group that always pushes and shoves in a soccer context. Finally, for the resource allocation condition, they were told about a group that likes to take most of the common school funds (\$80) for their own group and only share a small amount (\$20) with other groups.

In each scenario, half of participants assessed their own group that held each norm and half of participants assessed a group of the opposite gender that held each norm. In each case, participants were told about the group norm and then asked to make a decision about who to include in the group. Participants were told that they could include either someone who shared the group's norm, but was the opposite gender, or someone who disagreed with the group's norm, but shared the group's gender. Thus, participants had a potential reason to include each member in the group and were choosing between whether to focus on the norm or the potential member's gender. For instance, in the resource allocation condition (female group), they were told:

"There is only room for one more member. They have to choose who to invite to join. Remember, [this group] ...usually votes to give \$80 to your group and \$20 to the other group. Who should this group invite: Kevin who wants to be in the group and would say that your group should get \$80 and their group should get \$20 or Mary who wants to be in the group and would say that their group should get \$50 and your group should get \$50?"

For the physical aggression condition (male group), they were told:

"There is only room for one more member. They have to choose who to invite to join. Remember, [this group] ... says: "It's okay to play really rough just to score points." Who should this group invite: Gary who wants to be in the group and would say "It's important to play nicely, even if you don't score as many points." Or Alice who wants to be in the group and would say "It's okay to play really rough just to score points."

For the relational aggression condition (female group), they were told:

"There is only room for one more member. They have to choose who to invite to join. Remember, [this group] ... says: "We gossip about the kid who sits alone all the time because we don't know why the kid acts that way." Who should [this group] invite: Katelyn, who wants to be in this group and would

say "Even though we won't find out why the kid acts that way, you shouldn't gossip about the kid all the time." Or David, who wants to be in this group and would say "It's okay to gossip about the kid all the time because we don't know why the kid acts that way."

Measures

Participants completed two measures. First, they completed a *forced choice inclusion* question, which asked them to choose between the person who held the group's norm or the person who would challenge the group's norm. Next, participants completed a *reasoning* question where they justified their inclusion choice.

Coding and Reliability

Participants' justifications were coded by using coding categories drawn from Social Domain Theory (Smetana et al. 2014). The coding system included the following codes, which are the focus of the analyses for the current study: (1) Other's Welfare (Moral): this code captured justifications that referenced presence or avoidance of physical or psychological harm to others such as "She will feel bad if she is left out" or "She can make sure they don't hurt anyone"; (2) Group Functioning (Societal): this code captured justifications that referenced group conventions, norms, practices or beliefs such as "He does not agree with the group" or "They won't like what she thinks". Justification analyses were conducted using these two most frequently used justifications, which were used more than 10%. Justifications were coded as 1 = use of the category; 0 = no use of the category. The coding was conducted by coders blind to the hypotheses of the study. For the resource allocation context, on the basis of 25% of the interviews, Cohen's $\kappa =$ 0.87 for inter-rater reliability. For the aggression contexts, on the basis of 25% of the interviews, Cohen's $\kappa = 0.92$ for inter-rater reliability.

Results

Plan for Analyses

Repeated measures binary logistic regression analyses were conducted to test for differences in inclusion decisions for the potential group member who challenges the group's norm as well as differences in reasoning use. Analyses were conducted using generalized linear mixed models, following procedures developed by (Liang and Zeger 1986). Analyses were tested using both logistic regression frameworks and ANOVA frameworks, with similar findings, and



in each case model fit was assessed using Akaike information criterion (AIC). Preliminary analyses indicated no differences based on the gender of the group, thus this variable was dropped from analyses.

Forced Choice Inclusion

Repeated measures logistic regressions were run with *inclusion decision* as the dependent variable and gender, age group (9–10 years and 13–14 years), and condition (resource allocation vs. relational aggression, resource allocation vs. physical aggression and relational aggression vs. physical aggression) as the independent variables. Analyses also tested for interactions.

For inclusion choice comparing resource allocation and physical aggression, condition and condition by age group were statistically significant, with the model AIC = 48.443, which is a lower AIC than for the model without the interactions, see Table 1. As the condition by age group interaction was significant, results are interpreted in terms of this interaction. There was a significant interaction between condition and age group, p = 0.001, see Fig. 1. This interaction revealed that 9–10 year olds were more likely to include the challenger who wanted to resist the group resource allocation norm than were 13–14 year olds and that both 9–10 year olds and 13–14 year olds were less likely to include the challenger in the physical aggression group than in the resource allocation group.

For inclusion choice comparing resource allocation and relational aggression, all main effects (condition, gender and age group) were statistically significant, with the model

Table 1 Repeated measures logistic regression model for inclusion choice: resource allocation and physical aggression

	В	SE	Wald	df	Sig	Exp(b)
Intercept	-0.28	0.19	2.28	1	0.136	0.75
Condition	1.26	0.28	20.69	1	0.000	3.52
Gender	0.19	0.24	0.58	1	0.45	1.20
Age group	-0.15	0.26	0.33	1	0.57	0.86
Gender * condition	0.38	0.37	1.02	1	0.31	1.46
Age group * condition	1.52	0.58	10.15	1	0.001	4.56

Table 2 Repeated measures logistic regression model for inclusion choice: physical aggression and relational aggression

	В	SE	Wald	df	Sig	Exp(b)
Intercept	1.40	0.20	44.55	1	0.000	4.05
Condition	-0.46	0.23	3.91	1	0.048	0.63
Gender	0.725	0.23	10.08	1	0.001	2.06
Age group	1.15	0.30	14.26	1	0.000	3.16

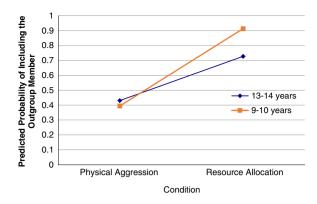


Fig. 1 Predicted probability of including the outgroup member who challenges the group norm

 Table 3 Repeated measures logistic regression model for inclusion choice: resource allocation and relational aggression

	В	SE	Wald	Df	Sig	Exp(b)
Intercept	049	0.17	7.89	1	0.005	0.61
Condition	2.24	0.22	102.46	1	0.000	9.38
Gender	0.43	0.21	4.43	1	0.035	1.54
Age group	0.89	0.22	0.16	1	0.686	1.09

AIC = 43.12, which is a lower AIC than for the model with the interactions, see Table 2. Therefore, the model with the main effects only was retained. When holding all else constant, the odds of a participant including the peer who will challenge the group norm were 37% lower for the resource allocation condition than for the relational aggression condition (OR = 0.63, p = 0.048). In terms of gender, the odds of a female participant including the peer who will challenge the group norm were 106% higher than the odds of a male participant including the peer who will challenge the group norm, when holding all else constant (OR = 2.06, p = 0.001). Finally, the odds of a 9–10 year old including the peer who will challenge the group norm were 216% higher than the odds of a 13-14 year old including the challenger, when holding all else constant (OR = 3.16, p < 0.001).

For inclusion choice comparing physical and relational aggression, all main effects (condition, gender and age group) were statistically significant, with the model AIC = 48.863, which is a lower AIC than for the model with the interactions, see Table 3. Therefore, the model with the main effects only was retained. When holding all else constant, the odds of a participant including the peer who will challenge the group norm were 838% higher for the relational aggression condition than for the physical aggression condition (OR = 9.38, p < 0.001). In terms of gender, the odds of a female participant including the peer who will challenge the group norm were 54% higher than



the odds of a male participant including the peer who will challenge the group norm, when holding all else constant (OR = 1.54, p = 0.035).

Reasoning

Proportional use for each reasoning code by condition are provided in Table 4. Repeated measures logistic regressions were run with *reasoning* as the dependent variable and gender, age group (9–10 years and 13–14 years), and justification (moral reasoning vs. group functioning reasoning) as the independent variables. Separate regressions were run for each condition (resource allocation, physical aggression and relational aggression). Analyses also tested for interactions.

Resource allocation reasoning

For reasoning regarding inclusion decisions when the group norm involved unequal resource allocation, reasoning by inclusion choice and reasoning by age group were statistically significant, with the model AIC = 73.58, which is a lower AIC than for the model without the interactions, see Table 5. As the interactions were significant, results are interpreted in terms of these interactions. There was a significant interaction between reasoning and age group, p < 0.001, see Fig. 2. This interaction revealed that 9–10 year olds were more likely to use moral reasoning than were 13–14 year olds and less likely to use group functioning reasoning. There was also a significant interaction between inclusion choice and reasoning, p < 0.001, see Fig. 3. This

Table 4 Proportional use of reasoning by condition

	Group functioning reasoning	Moral reasoning
Resource allocation	0.46	0.47
Relational aggression	0.47	0.32
Physical aggression	0.53	0.26

Table 5 Repeated measures logistic regression model for moral and group functioning reasoning: resource allocation condition

	В	SE	Wald	df	Sig	Exp(b)
Intercept	0.06	0.19	0.11	1	0.74	1.07
Inclusion choice	-0.10	0.30	0.12	1	0.73	0.90
Reasoning	-0.35	0.27	1.66	1	0.20	0.70
Gender	-0.06	0.22	0.09	1	0.77	0.94
Age group	-0.36	0.23	2.38	1	0.12	0.70
Gender * reasoning	0.28	0.32	0.79	1	0.37	1.33
Age group * reasoning	1.19	0.34	12.78	1	0.000	3.31
Inclusion choice * reasoning	-2.70	0.68	15.71	1	0.000	0.07

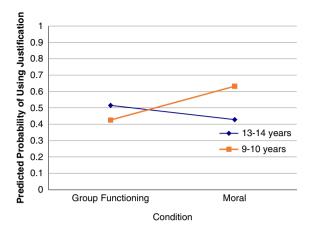


Fig. 2 Predicted probability of using moral and group functioning justifications by age group: resource allocation condition

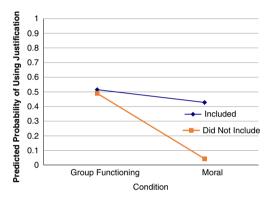


Fig. 3 Predicted probability of using moral and group functioning justifications by inclusion choice: resource allocation condition

interaction revealed that participants who chose to include the challenger were more likely to use moral reasoning than were participants who did not chose to include the challenger.

Relational aggression reasoning

For reasoning regarding inclusion decisions when the group norm involved relational aggression, the best fitting model included reasoning, gender and age group with the model AIC = 49.13, which is a lower AIC than for the model with the interactions or with inclusion choice included, see Table 6. When holding all else constant, the odds of a participant using group functioning reasoning were 91% high than the odds of a participant using moral reasoning for the relational aggression condition (OR = 1.91, p < 0.001). In terms of gender, the odds of a female participant using moral reasoning or group functioning reasoning were 44% higher than the odds of a male participant using this reasoning (OR = 1.44, p = 0.038).



Table 6 Repeated measures logistic regression model for moral and group functioning reasoning: relational aggression condition

	В	SE	Wald	df	Sig	Exp(b)
Intercept	-1.06	0.16	39.42	1	0.000	0.35
Reasoning	0.65	0.17	13.97	1	0.000	1.91
Gender	0.36	0.17	4.31	1	0.038	1.44
Age group	0.33	0.19	3.19	1	0.074	1.39

Table 7 Repeated measures logistic regression model for moral and group functioning reasoning: physical aggression condition

	В	SE	Wald	df	Sig	Exp(b)
Intercept	-1.26	0.21	33.63	1	0.00	0.29
Reasoning	1.05	0.28	13.73	1	0.00	2.87
Gender	0.07	0.27	0.07	1	0.79	1.07
Age group	0.49	0.28	2.97	1	0.08	1.63
Gender * reasoning	0.26	0.36	0.51	1	0.47	1.30
Age group * reasoning	-0.04	0.38	0.01	1	0.90	0.96

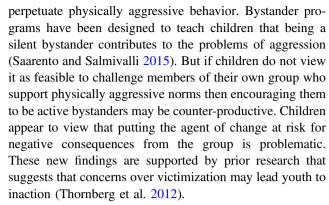
Physical aggression reasoning

For reasoning regarding inclusion decisions when the group norm involved physical aggression, the best fitting model included reasoning, gender, age group and interactions between reasoning and gender and reasoning by age group, AIC = 48.58, see Table 7. When holding all else constant, the odds of a participant using group functioning reasoning were 187% higher than the odds of a participant using moral reasoning for the physical aggression condition (OR = 2.87, p < 0.001).

Discussion

Children and adolescents have different ideas about challenging groups when the group norm was about unequal allocation, relational aggression or physical aggression. This is an important area for research as including such challengers into peer groups can be one way in which youth might begin the process of rectifying inequality perpetuated by groups holding these negative norms. Our novel findings were that for groups with unequal allocation group norms, and with relational aggression norms, participants strongly advocated for including individual members who did not share that norm and would challenge the group's norm.

For groups that hold physical aggression norms, however, participants were much less willing to include someone who did not want to be physically aggressive. This finding provides another call for addressing the complexities of enabling children to resist group norms that



The present findings suggest that children and adolescents think very differently about the types of unacceptable behavior that groups are condoning and that they recognize that challenges to these different types of norms may lead to more or less serious consequences for those who do stand-up to the group norm. While this risk is warranted to promote equality and impartial treatment of others, children and adolescents may perceive the risk of retaliation to be higher in a physical aggression context, and thus, they may be less likely to support someone who wants to interact positively with others from joining a physically aggressive group.

Additionally, children and adolescents demonstrated sophisticated social-cognition. Including an ingroup member who deviates from the norm and challenges the physically aggressive norm is discouraged, but not so for including someone who challenges unequal distributions or relational aggression. This may be because youth also recognize that the consequences for physical aggression are irreversible such as the intrinsic pain experienced by someone who is physically harmed. Perhaps taking the risk of exposing a new member to this kind of retaliation is judged too costly. There is prior research that indicates that children and adolescents support resisting transgressors' demands, but that they recognize that peers may comply with demands for reasons of self-protection (Shaw and Wainryb 2006). Additionally, previous research has found that children and adolescents were more likely to support someone who is already part of the group who wants to deviate from group norms involving relational aggression than someone who wants to deviate from group norms condoning physical aggression (Mulvey and Killen 2016). What the new findings suggest is that children and adolescents differentially evaluate whether they should include someone new who might resist inequality by challenging the group norm into groups that hold both aggression norms and norms which perpetuate resource inequality.

Interestingly, age-related differences were also found. In line with previous research demonstrating that adolescents are more concerned with group loyalty and protecting group functioning (Horn 2003, 2006; Rutland et al. 2015), in the



current study children were more supportive of including challengers into these groups with negative norms than were adolescents. Additionally, adolescents were more likely to use group functioning reasoning to justify their decisions in the resource allocation condition, in line with previous research that notes an increased reliance on group functioning reasoning among adolescents (Mulvey 2016). These findings are novel, as prior research on resisting transgressors demonstrated that youth in middle childhood and adolescence all recognize the importance of standing up to transgressors (Shaw and Wainryb 2006), while the current findings suggest developmental differences in supporting challenging transgressors.

It is also interesting that children and adolescents differed in their evaluations of inclusion for the resource allocation condition in particular. Previous research suggests that by 7 or 8 years of age children demonstrate a preference for equality when evaluating allocation of resources (Blake and McAuliffe 2011; Fehr et al. 2008), which might suggest that both the children (ages 9-10 years) and adolescents (ages 13–14 years) in our study should support a challenger who advocates for equal allocation of resources. However, research from subjective group dynamics demonstrates that by around the same age children also recognize that groups will not like members who do not agree with the group norm (Abrams et al. 2003b). Thus, it may prove difficult for youth to evaluate contexts where they must weigh concerns over the group's potential reaction to a challenging member and the potential for that member to be able to work to rectify inequality and change the norm of the group. For instance, while children and adolescents both recognize that it is important to support equal allocation of resources, with age participants may begin to question how effective introducing a challenging member into the group may be. They may begin to focus more on the group's potential negative reaction to this new member who does not agree with the norm than on the potential for this member to encourage the group to act equitably.

This may explain the findings for the unequal allocation condition where children were more willing to support including the challenger than were adolescents. Further, the current findings reflect prior research that found that children were more supportive of group members who dissented from group norms surrounding unequal allocation than did adolescents (Killen et al. 2013). However, it is interesting that similar age-related differences were not documented in the aggression conditions. It may be that there is still more to understand about developmental change in responding to group decisions regarding resource allocation. It may be that adolescents perceive resource allocation norms differently than do children: perhaps they recognize that it may be easier to rectify inequality in allocation of resources than to rectify inequality perpetuated

by aggression. For instance, if you distribute resources inequitably in one instance, you may compensate the next time you distribute resources and differentially provide more resources to those who were victimized by the allocation previously. In concert with the current findings, recent research suggests that youth recognize the importance of rectifying inequality perpetuated by unequal resource allocations (Elenbaas et al. 2016) and ERP data demonstrates developmental differences in how children and adolescents' make complex social decisions regarding resource allocation (Meidenbauer et al. 2016).

The findings of the current study also reveal interesting differences in social reasoning about these inclusion decisions. Specifically, participants who wanted to include the challenger into the resource allocation group were more likely to use moral reasoning than were those who did not want to include the challenger, which suggests that those participants who were inclusive were considering the ways in which including this person into the group could lead to the group acting in more fair and equitable ways. Interestingly, in terms of moral reasoning, participants used relatively low rates of moral reasoning when considering including a challenger into these groups. In general, participants focused more on group functioning than on another person's welfare for the aggression conditions. This is in line with prior exclusion research demonstrating that participants rely on group functioning reasoning when thinking about if someone is likely to be included or excluded and use more moral reasoning when considering if it would be acceptable to exclude someone from a group (Mulvey et al. 2016b). Further, this supports the idea that participants may have been concerned about the potential repercussions for the challenger if they included this individual into the group. Specifically, participants' group functioning reasoning often focused on the group's potential negative reaction to someone who did not agree with them and explicit references to the idea that the group liked to engage in aggression. Future research might examine whether the group norm itself influences youth reasoning provided, as it may be that the group's support for aggression is why participants used more group functioning reasoning than moral reasoning.

Surprisingly, our results demonstrated high rates of support for including challengers into the group, regardless of whether the group was the participant's own group or a gender outgroup. There were no differences found between evaluations of participant's ingroup or outgroup perspectives. On the one hand, we might expect that participants would have been less likely to include a challenger into their ingroup, given research drawing on social identity theory that argues that we strive to protect the distinctiveness of our ingroup and to promote the identity of our ingroup (Bennett and Sani 2008; Tajfel and Turner 1976)



and that our ingroup identification is strong even early in childhood (Dunham et al. 2011).

On the other hand, the importance of upholding moral principles might trump allegiance to the group, especially given prior findings that show that children and adolescents often prioritize moral concerns when they evaluate multifaceted contexts (Richardson et al. 2012; Rutland and Killen 2015). The findings from the present study suggest that attention to moral principles was more important than group identity—participants responded in similar ways regardless of if they were evaluating their own group or a group of peers who were the opposite gender.

Interestingly, while we did not document differences between evaluations of the ingroup and the outgroup, there were gender differences. Specifically, female participants were more willing to include a challenger than were male participants. Prior research has documented that, at times, girls judge exclusion to be less acceptable than do boys (Killen and Rutland 2011). However, this finding extends previous research into a new context: including a challenger. Some research on bystander intervention has indicated that girls are more likely to defend victims and engage in bystander intervention than are boys (Jenkins and Nickerson 2016; Ma 2002). Our novel findings suggest that girls are also more willing to include someone who will challenge the group norm. Further research should examine this gender difference across a range of contexts in order to more fully understand this pattern.

While this research provides important new insights into our understanding of how children and adolescents evaluate including group members who will challenge morally unacceptable group norms, there are some limitations to the current study. First, while the study measured judgments and reasoning about including new members who challenged the group's norms into groups with morally questionable norms, the current data does not indicate that these challengers will actually be effective in rectifying inequities perpetuated by these groups. Although research on bystander intervention suggests that bystanders are effective in reducing rates of bullying in schools (Salmivalli et al. 2011; Trach et al. 2010; Yang and Salmivalli 2015), additional research is still needed to understand whether bystanders who are actually members of the group and not true outsiders can effect change in group behaviors. Moreover, prior research has typically focused on single instances of morally unacceptable behavior, with less attention to changing group norms. The focus of the current study was on the norms, not just isolated behaviors, however, it remains to be investigated whether a single member of the group can change the group's norms. Further research should more closely examine the power of individual group members in effecting change at the group level and should test multiple types of morally unacceptable behavior

characteristic of each norm (for instance physical aggression in a sports context as well as in a school context). Future research might also examine children's and adolescents' prior experiences with victimization as well as their empathy (Abbott and Cameron 2014) and rejection sensitivity (Nesdale et al. 2014).

Conclusion

As youth peer groups frequently hold morally questionable norms, it is important to understand under what conditions youth will support including challengers into the group to effect change. The novel findings of this study were that children and adolescents supported including group members who desired to challenge group norms. Moreover, the findings point to differences based on the specific group norm: participants were much less supportive of including a group member who wanted to challenge group physical aggression than members who desired to challenge relational aggression or unequal allocation of resources. Additionally, the findings revealed age-related changes that documented increased attention to group functioning with age and gender differences with girls advocating for higher rates of inclusion than did boys. The findings of the current study contribute to our understanding of children's and adolescents' social cognition surrounding rectifying inequities perpetuated by groups and suggest a sophisticated understanding of the importance of challenging morally unacceptable group norms and the potential consequences for engaging in such challenges.

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Conflict of Interest The authors declare that they have no competing interests.

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