Context Differences in Children's Ingroup Preferences

Kelly Lynn Mulvey
University of South Carolina

Aline Hitti
Tulane University

Adam Rutland
Goldsmiths, University of London

Dominic Abrams
University of Kent

Melanie Killen
University of Maryland

Ingroup preferences when deciding who to include in 2 distinct intergroup contexts, gender and school affiliation, were investigated. Children and adolescents, in the 4th (9–10 years) and 8th (13–14 years) grades, chose between including someone in their group who shared their group norm (moral or conventional) or who shared their group membership (school affiliation or gender). With age, children displayed a greater ability to balance information about ingroup norms and group membership. Younger children were more likely to include an outgroup member who supported equal norms than were older children. Accompanying the choices made, there was a greater use of fairness reasoning in younger rather than older participants, and increased references to group identity and group functioning for school identification. There were no differences in ingroup preferences in the school and gender contexts for groups involving moral norms. Desires for equal allocation of resources trumped differences related to ingroup preference. For social-conventional norms, however, there was a greater ingroup preference in a school intergroup context than in a gender intergroup context. Thus, the results demonstrate the importance of context in the manifestation of ingroup preference and the increasing sophistication, with age, of children's and adolescents' group decision-making skills.

Keywords: ingroup preference, social cognition, moral development, group dynamics

Developmental psychology research on peer relations has focused on the role of groups in social development (Brechwald & Prinstein, 2011; B. B. Brown, 2004; B. B. Brown & Dietz, 2009;

Horn, 2003), as well as identifying how schools provide important contexts for development (Eccles & Roeser, 2013). Much of the research on adolescent peer groups focuses on dyadic friendships in a larger group setting (Burr, Ostrov, Jansen, Cullerton-Sen, & Crick, 2005; Rubin, Bukowski, & Parker, 2006). Prior to adolescence, however, children begin to affiliate with groups, and as they gain this experience, they often encounter negative intergroup attitudes (Killen, Mulvey, & Hitti, 2013). In fact, children face bias, discrimination, and prejudice stemming from intergroup peer encounters from an early age.

The current developmental research on prejudice and bias has primarily focused on the emergence of prejudice (Dunham, Baron, & Carey, 2011; Kinzler & Spelke, 2011; Nesdale, 2008). Due to its focus on early childhood, much less is known, however, about changes over the course of development from childhood to adolescence regarding ingroup preferences. A recent meta-analysis of research on prejudice concluded that as children approach adolescence, prejudice becomes increasingly context and domain specific, manifesting as a complex and multifaceted construct (Raabe & Beelmann, 2011). Understanding developmental patterns in children's social evaluations in complex intergroup contexts is critical for ensuring healthy social development. Recent findings highlight the prevalence of ingroup bias in a range of different contexts, and in both minimal groups, which are novel groups developed for the purpose of the study (Atkin & Gummerum,

2012; Dunham et al., 2011), as well as in authentic groups, which are present prior to the start of the study, including gender (Susskind & Hodges, 2007), race/ethnicity (Nesdale, 2008), nationality (Verkuyten, 2001), and school group (Abrams, Palmer, Rutland, Cameron, & Van de Vyver, 2013; Abrams, Rutland, Cameron, & Marques, 2003).

The developmental subjective group dynamics model (Abrams & Rutland, 2008) reveals that young children often prefer outgroup members who support ingroup norms over ingroup members who deviate from them. For instance, children prefer a member of a different summer school who says positive things about the participant's school more than a member of their own summer school who says positive things about both their own and the outgroup schools (Abrams et al., 2003). Developmental subjective group dynamics research has focused primarily on group norms involving social conventions (however, for an exception, see Abrams, Rutland, Ferrell, & Pelletier, 2008), but the model also emphasizes that children hold norms about a range of different behaviors and practices. The model therefore embraces the important conceptual distinction between moral norms and those governed by social conventions (Smetana, Jambon, & Ball, 2014; Turiel, 1983).

When making decisions about including or excluding others, for example, children often condone exclusion by referencing social conventions (citing smooth group functioning or past customs or traditions) (Killen, 2007). In contrast, children reject exclusion using the moral domain, identifying the harm to others that exclusion can cause and the unfair nature of some forms of exclusion (Killen & Rutland, 2011). This distinction between the moral and conventional domains was explicitly tested in the present research by measuring how children decide whether to include or exclude individuals from the ingroup or outgroup in the context of both moral and social-conventional norms.

Recent research has shown that when making inclusion decisions in contexts where groups hold different norms, the type of group norm matters. Children prefer peers who adhere to moral or social-conventional generic societal norms, for instance, being equal or adhering to social customs about wearing group t-shirts, over peers who resist these norms, for instance, by being unequal or rejecting social customs (Killen, Rutland, Abrams, Mulvey, & Hitti, 2013). What has not been done is to examine these distinctions for two types of intergroup contexts: gender and school affiliation. In the present study, we focused on inclusion decisions because they are common occurrences in children's lives and often involve intergroup evaluations.

Thus, with the present research, we aimed to fill a gap in developmental research on intergroup attitudes in three ways by (a) charting age-related differences from childhood to adolescence; (b) directly testing intergroup attitudes for two sources of group membership, gender and school affiliation; and (c) directly comparing how individuals evaluate two types of norms, moral and conventional, for the contexts of group membership. Examining both childhood and adolescence is critical, as research indicates that whereas prejudice in childhood follows stable patterns and demonstrates systematic age-related differences, research with adolescents indicates that context becomes increasingly important (Horn, 2003). Research with adolescents has yet to demonstrate differences on the basis of age regarding group identification across multiple salient contexts, such as gender and school affiliation. This is a limitation given that both gender and school

identity play a significant role in how children and adolescents achieve and succeed in school (Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006).

Groups can hold norms about a range of different behaviors, principles, and beliefs, including those involving moral issues, such as those involving harm to others, and those involving conventional issues, such as traditions, and customs specific to a group. Research on social exclusion with adults has shown that group identity itself reflects both group affiliation and the norms that the group holds (R. Brown, 2000). Only recently has this been demonstrated in childhood. In gender intergroup contexts, children and adolescents are more likely to give priority to equality norms (moral) than to conventional norms or group identity (Killen, Rutland, et al., 2013); however, in this study, only one type of identity was measured (gender). What is missing from this research is a comparison of different types of norms, moral (treatment of others) and conventional (modes of dress to mark group membership), across two forms of group identification, gender and school affiliation. Thus, the present study was novel by varying the type of norm for two different forms of group identity.

Early in childhood, children begin to interact with others with whom they do not share group membership. Children demonstrate strong support for their ingroup, showing high levels of positivity toward the ingroup, which can directly or indirectly result in manifestations of prejudice, bias, and discrimination against outgroups (Aboud, 1988; Bigler & Liben, 2006; Nesdale, 2008). Yet, children do not affiliate with only one group or express their preferences in exactly the same manner no matter what group is in question. The literature indicates that children perceive themselves as belonging to multiple groups, and the strength of their affiliation with different groups varies (Bennett & Sani, 2008). For instance, research by Shutts, Banaji, and Spelke (2010) revealed that children showed greater ingroup bias when indicating preference for novel objects that were endorsed by either ingroup or outgroup members when the ingroup was based on the categories of gender or age rather than race. Other research, though, revealed no differences in the manifestation of intergroup bias in groups that were randomly assigned and those that were assigned on the basis of hair color (Bigler, Jones, & Lobliner, 1997). These and related studies are an important step toward understanding the way that ingroup bias manifests in different contexts. Moreover, research by Wigfield et al. (2006) has shown that group identity serves as an important factor for successful transition throughout adolescence.

Two important intergroup categories in children's lives are school affiliation and gender identity. These identities are also, however, distinct intergroup categories. For instance, gender is a biologically determined social category, which children understand quite early (Ruble, Martin, & Berenbaum, 2006; Taylor, Rhodes, & Gelman, 2009), and a category that is often associated with bias, prejudice, and discrimination (C. S. Brown, Alabi, Huynh, & Masten, 2011; C. S. Brown & Bigler, 2004). Research with children and adolescents age 9–15 years revealed an increase in mixed-gender affiliations with age (Connolly, Craig, Goldberg, & Pepler, 2004), which suggests that in transitioning from childhood to adolescence, individuals more frequently interact with peers of the opposite gender and have mixed-gender friendship groups. Thus, gender provides a social category membership that has changing social implications throughout childhood and adolescence.

School group membership is generally ascribed or chosen by the family and constitutes an important context for children's lives (Eccles & Roeser, 2013). The obligations for school group membership, however, are reinforced through intragroup processes specific to the particular school. For instance, schools can enhance school belongingness and school identity through school "spirit" activities, which include sports, contests, and the strong emphasis on school markers such as school-based clothing (e.g., shirts), school logos, and websites; the goal is to create a supportive school environment (Cemalcilar, 2010; Eccles & Roeser, 2013; McMahon, Wernsman, & Rose, 2009). Research indicates that stronger school group identity is associated with components of group functioning including perceptions of group support (Bizumic, Reynolds, & Meyers, 2012). Further, school identity may be enhanced as childhood progresses, and children have more opportunities to develop ingroup positivity and outgroup negativity through engagement with school-identified teams, clubs, and sports.

However, research shows that as children enter middle school, their relationships with their teachers decline (Eccles, Roeser, Vida, Fredricks, & Wigfield, 2006; Wigfield, Lutz, & Wagner, 2005), which could lead to a less academically oriented and more socially oriented sense of school group identity. Research also indicates that transitioning from primary to secondary school can shift one's school connectedness or school identity. Specifically, children who have a smoother transition from primary to secondary school report higher levels of school connectedness (Waters, Cross, & Shaw, 2010). Thus, like gender group identity, school group identity may shift developmentally. Both gender and school provide important and pervasive group memberships throughout the school years, and thus are likely to be influential for most children. However, no research has been conducted that compares whether and how ingroup preference manifests differently in these two contexts to better understand under what conditions children prioritize group membership and when they place a priority on group norms, and this was a central aim of the present study.

Design of the Present Study

Participants in the fourth (9- to 10-year-olds) and eighth (13- to 14-year-olds) grades made choices about whether to include someone who shared their group membership (gender or school affiliation) or their group norms (moral and social-conventional). This paradigm asks children and adolescents to make decisions about and provide reasoning for group inclusion choices, pitting two distinct elements of group identity against one another: shared norms and group membership. Assessments of reasoning were conducted to further interpret the underlying basis for participants' choices about who to include (Killen, 2007). Further, this design assessed this conflict in two different group membership contexts (gender and school affiliation) and in the context of four different norms (two moral: *equal* and *unequal* allocation of resources; two social-conventional: *traditional* and *nontraditional* adherence to customs regarding wearing a group t-shirt).

Two age groups, which span middle childhood to adolescence, were sampled to assess age-related differences in ingroup preference across both domains and contexts. We chose 9 years of age because prior research by Abrams and Rutland (2008) has shown that by 8 years of age, children understand subjective group

dynamics, that is, that loyalty to the group-specific norms of a group can be more important than group membership. Thus, we designed the study for children who were conceptually able to differentiate group loyalty from group membership, and to determine what factors children gave priority to as they moved from age 9 to age 14 years.

Hypotheses

Unlike evaluations that involve moral norms, which children find to be generalizable across different contexts (Smetana et al., 2014), it was expected that participants would evaluate social-conventional norms differently across the two intergroup contexts. Given that generally children are encouraged to identify with their school and to exhibit school ingroup positivity, as well as given that research indicates that the majority of adolescents' friends do attend their own school (Witkow & Fuligni, 2010) we expected that (1) in the social-conventional context, greater ingroup preference will be shown in the school context than in the gender context. On the basis of extensive findings from social domain theory (Killen & Rutland, 2011), it was hypothesized that (2) participants will support inclusion of an outgroup member who wants to share equally (when the ingroup norm is to share resources equally) in favor of an ingroup member who wants to keep more resources for the ingroup. Next, we expected that (3) participants would be less supportive of an outgroup member who wants to divide resources unequally (even though the ingroup norm is to divide resources unequally) than an ingroup member who wants to share equally in both the gender and school affiliation intergroup contexts.

Central to our developmental aims, we expected that there would be (4) age-related differences in participants' inclusion of the outgroup members in the moral context. With age, children show greater abilities to balance the tension between group identity and group norms as well as multiple perspectives (Mulvey, Hitti, Rutland, Abrams, & Killen, 2014; Rutland, Killen, & Abrams, 2010). Specifically, given that 9- to 10-year-olds prefer strict equality more often than do 13-year-olds with resource allocation tasks (Almås, Cappelen, Sørensen, & Tungodden, 2010), it was expected that children will be more willing to include an outgroup member who desires equal allocations than will adolescents. Children will focus narrowly on the moral domain in making judgments about who to include when the group norm involves allocation of resources. We do not expect differences in the social-conventional conditions, as research has shown that by 9 years of age, children prefer outgroup members who share their ingroup norm in social-conventional contexts (Abrams & Rutland, 2008).

Although prior research indicates that ingroup bias manifests early, research also indicates that, by adolescence, peer group identity (such as affiliation with a particular social group) is stronger than gender group identity (Tanti, Stukas, Halloran, & Foddy, 2011). Therefore, adolescents may show greater ingroup preference in the school membership context than in the gender membership context. However, the salience of the moral and social-conventional norms may eclipse any differences in identification with different groups (school and gender) between children and adolescents. On the basis of the process-based account of moral judgments, which posits that, with age, individuals will be

better able to coordinate information about multifaceted scenarios (Richardson, Mulvey, & Killen, 2012), it is expected that adolescents will be more skilled in coordinating information about the social-conventional and moral domains. Thus, (5) adolescents will reason about inclusion decisions in the moral conditions by referencing the fairness of an equal allocation of resources as well as the benefits to the group when an ingroup member desires to give more to his or her own group than to an outgroup.

Finally, it was expected that (6) participants who choose to include the outgroup member who shares their group norm will use different forms of reasoning than those who choose to include the ingroup member who does not share the group norm, based on prior research on use of social reasoning about inclusion and exclusion (Horn, 2003). For instance, it is expected that participants who choose to include the ingroup member will justify this decision using more references to group membership than will participants who choose to include the outgroup member.

Method

Participants

Participants included children and adolescents ($N = 729$) from the Mid-Atlantic region of the United States. Approximately half the sample assessed the gender intergroup context ($n = 381$) and half assessed the school affiliation intergroup context ($n = 348$). The sample included 53% female participants, and included participants in the fourth grade ($n = 207$, $M = 9.89$, $SD = .49$; range $= 8.58–11.81$) and participants in the eighth grade ($n = 522$, $M = 13.69$, $SD = .44$; range $= 12.64–15.14$). The participants attended elementary and middle schools serving a middle- to middle-low-income population. Ethnicity was estimated on the basis of school-reported demographics and researcher observation and reflected the U.S. population, with 70% ethnic majority (European American) and 30% ethnic minority participants (10% African American, 15% Latino, 5% Asian American). Consent was obtained for all participants.

Procedure

Surveys were administered to eighth-grade participants by trained research assistants in groups of approximately 25–30 participants at the school in a quiet space. Interviews were individually administered to the fourth-grade participants by trained research assistants in a quiet place in the school. Pilot testing revealed no differences for the administration of the instrument in survey or interview format, and statistical analyses of the quality of the responses revealed no differences (e.g., length of responses). The total time to complete the survey or interview was approximately 25 minutes (assessments other than the ones for the present study were also administered).

Design

The survey and interview included four scenarios, which asked participants to determine who should be included in a group, and why. Pilot testing was conducted to determine what factors contribute to inclusion and exclusion issues for children and adoles-

cents, and these data, along with previous research from the literature, provided the basis for the creation of the scenarios.

Participants had to choose between someone who shared the group membership of the group (gender or school affiliation, depending on the version completed) or the norm of the group (moral domain: *equal* or *unequal* allocation of resources, social-conventional domain: *traditional* or *nontraditional* group custom about wearing a group t-shirt). For the social-conventional group norms, the *traditional* norm refers to wearing an assigned group shirt, and the *nontraditional* norm describes a norm of not wearing an assigned group shirt. Participants were told that this norm was established as a tradition at the school: The schools expected that students in the different groups at school wear an assigned group shirt to group meetings. For the moral group norms, the *equal* norm describes dividing money equally between one's own group ($50) and another group ($50), whereas the *unequal* norm references dividing money unequally between one's own group ($80) and another group ($20). The protocols for the gender and school intergroup contexts were identical except for the membership of the groups portrayed; see Figure 1 for an example of the images shown to participants. Brightly illustrated pictures accompanied the assessment of the questions during the protocol.

For each intergroup context (gender and school), there were two versions of the protocol to create the between-subjects factors as depicted in Figure 2. For example, Figure 2 depicts the design for the gender context and shows the within-subjects variables; all participants received four stories (with a norm and a choice). The between-subjects variables were reflected by the order of the ingroup/outgroup norm. Thus, for Version 1, shown in Figure 2, the first story is the Girls' Group with the equal group norm, and the choice is between the *unequal ingroup* (girl) or the *equal outgroup* (boy). For Version 2, the first story is the Girls' Group with the unequal group norm, and the choice is between the *equal ingroup* (girl) or the *unequal outgroup* (boy). The school study design was identical except that instead of assessing boys and girls groups, they were assessing groups from their own school or another local school.

Thus, half the participants in each intergroup context (gender and school affiliation) assessed a story about their own ingroup (gender or school affiliation), which had a norm of being equal, and an outgroup (gender or school affiliation), which had a norm of being unequal. Half the participants assessed a story about their own ingroup (gender or school affiliation), which had a norm of being unequal, and an outgroup (gender or school affiliation), which had a norm of being equal. Each participant completed a story about a group that held each norm (two moral, two social-conventional), and two of these stories were about their own ingroup, whereas two were about the outgroup. All participants evaluated their actual ingroup (by gender or school) as well as their actual outgroup (by gender or school).

For each story, pictures illustrated the groups with symbols reflecting the group norms (see Figure 1). Below is an excerpt from the survey, as an example of a social-conventional story (nontraditional norm) in the school intergroup context (female participant):

> The groups need to decide who can join their club. There is only room for one more member. They have to choose who to invite to join. Remember, your group at your school usually does not wear their green and white club shirts to the assembly. Who should this group

A. School Identification Context, Ingroup, Nontraditional Group Norm

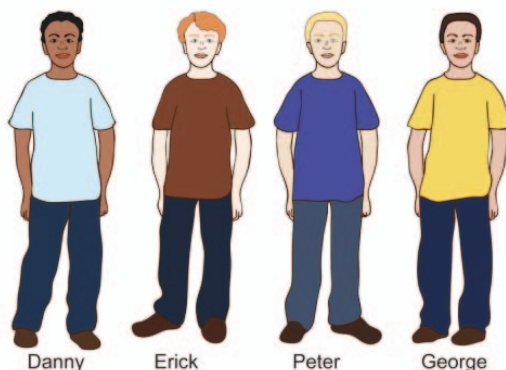Remember, your group at **YOUR** School...

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usually **does not wear their green and white club shirt**.

B. Gender Context, Ingroup (for Male Participants), Unequal Group Norm
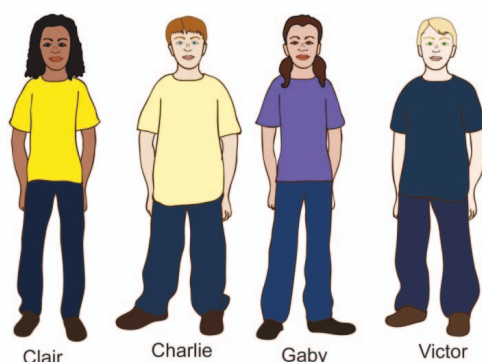
Remember, your group

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usually votes to give **$80 to your own group and $20 to the other group**.

Figure 1. Examples of visual materials for ingroup school identification context and gender context. A: school identification context, ingroup, nontraditional group norm. B: gender context, ingroup (for male participants), unequal group norm. These images were drawn by Joan M. K. Tycko for the purposes of this research. Copyright 2011 by Joan M. K. Tycko.

invite? Lilly, from your school wants to be in the group and would wear the green and white club shirt to the school assembly, or Mary, from their school, who wants to be in the group and would not wear the green and white club shirt to the school assembly?

Below is an excerpt from the survey, as an example of a moral story (unequal norm) in the school intergroup context:

The groups need to decide who can join their club. There is only room for one more member. They have to choose who to invite to join.

Remember, your group (a boy's group) usually votes to give $20 to their group and $80 to your group. Who should this group invite? Kevin, who wants to be in the group and would say that your group should get $50 and their group should get $50, or Sarah, who wants to be in the group and would say that their group should get $20 and your group should get $80?

In the school context, the names of the participant's actual school and another school in the area were used. Groups were told that the

Scenarios (all participants evaluate four scenarios)	Design of the Protocol
Scenario 1: *Girls' Group*	**Group Norm: Equal**
	Choice:
	Ingroup (Girl): Unequal
	or
	Outgroup (Boy): Equal
Scenario 2: *Boys' Group*	**Group Norm : Unequal**
	Choice:
	Ingroup (Boy): Equal
	or
	Outgroup (Girl): Unequal
Scenario 3: *Boys' Group*	**Group Norm: Traditional**
	Choice:
	Ingroup (Boy): Nontraditional
	or
	Outgroup (Girl): Traditional
Scenario 4: *Girls' Group*	**Group Norm: Nontraditional**
	Choice:
	Ingroup (Girl): Traditional
	or
	Outgroup (Boy): Nontraditional

Figure 2. Example of the design for the gender context. The school context was identical to the gender context. Equal = equal allocation; Unequal = unequal allocation (more for the ingroup); Traditional = wear the t-shirt; Nontraditional = refuse to wear the t-shirt; Choice = whom to pick between one of two peers.

resources were going to be divided between groups at their school and at other schools for the school context. For the gender context, the money was to be divided between the group of girls and group of boys.

Assessments

Participants were given two assessments: (a) *Group Inclusion:* should the group include a deviant ingroup member or a normative outgroup member (e.g., Who should the group invite? 1 = *outgroup member who shares group norm*, 0 = *ingroup member who does not share group norm*) and (b) *Justification for Inclusion:* a justification for that choice (e.g., Why?). For the group inclusion question, for example, when the gender intergroup context (female version) included a norm of wearing their club shirts, participants were asked who the group should invite: the ingroup girl (gender ingroup member) who does not want to wear the club shirt, or the outgroup boy (gender outgroup member) who wants to wear the club shirt.

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: (a) *Fairness* (Moral) (e.g., "It is fair to share the money with the other group" or "It would not be fair if he was not allowed to join the group"); (b) *Group Functioning* (Societal) (e.g., "He does not agree with the group"); (c) *Group Identity* (Societal) (e.g., gender context: "She fits in because she is a girl"; school affiliation context: "Well, he also goes to my school"); and (d) *Larger Societal Norm* (Societal) (e.g., "The rule is that you are supposed to wear the t-shirt"). Justification analyses were conducted using the three most frequently used justifications, which were all used more than 10%. Justifications were coded as 1 = *full use of the category*; .5 = *partial use*; 0 = *no use of the category*, and analyses were conducted on proportional usage. Because participants could use all, partial, or none of the justification codes, the data were independent for coding purposes, and concerns about interdependence of the data were not present.

The coding was conducted by coders blind to the hypotheses of the study. For the gender context, based on 25% of the interviews ($n = 96$), Cohen's κ = .87 for interrater reliability. For the school context, based on 25% of the interviews ($n = 87$), Cohen's κ = .86 for interrater reliability. Less than 5% of participants used more than one code.

Data Analytic Plan

Initially, chi-square tests were used to assess whether inclusion choices differed from chance. Repeated measures analyses of variance (ANOVAs) were used to test hypotheses regarding inclusion choice and use of justifications. When sphericity was violated, the Huynh-Feldt adjustment was used to interpret results. Follow-up analyses included pairwise comparisons for between-subjects effects (univariate ANOVAs) and interaction effects (Bonferroni *t* tests). Univariate analyses included intergroup context (gender, school), gender of participant, and age of participant. For comparisons across conditions, the repeated measures factor was inclusion choice for different conditions (equal, unequal, traditional, and nontraditional), and between-subject factors included gender, age group, and intergroup context (gender, school). For the reasoning analyses, the repeated measures factor was type of justification. Analyses included intergroup context (gender, school) and inclusion choice (ingroup member or outgroup member). "Condition" represented the group norm. For example, "equal condition" indicates that the group has a norm of distributing money equally and is deciding whether to choose to invite an ingroup member who wants to distribute money unequally or an outgroup member who agrees with the group and wants to distribute money equally.

ANOVAs were used to analyze proportions because of our repeated measures designs, which are not appropriate for logistic regressions. Repeated measures designs are effectively analyzed using ANOVAs because other data analytic procedures (for instance, log-linear models) do not respond well to empty cells. However, repeated measures analyses adjust for empty cells (see Posada & Wainryb, 2008, for a fuller explanation and justification of this data analytic approach).

Results

Inclusion Choice

In order to assess whether participants were responding at chance or not, chi-square analyses were conducted for each condition for the gender and the school context. For the gender context, participants responded above chance, choosing to include an outgroup member who shares the group norm in all conditions except the unequal condition: unequal, $\chi^2(1, N = 372) = 0.39, p = .53$; equal, $\chi^2(1, N = 374) = 161.81, p < .001$; traditional, $\chi^2(1, N = 354) = 168.18, p < .001$; nontraditional, $\chi^2(1, N = 373) = 43.34, p < .001$. For the school context, participants responded above chance in the equal and traditional conditions: unequal, $\chi^2(1, N = 345) = 0.01, p = .96$; equal, $\chi^2(1, N = 343) = 110.86, p < .001$; traditional, $\chi^2(1, N = 342) = 92.64, p < .001$; nontraditional, $\chi^2(1, N = 343) = 3.57, p = .059$.

Social-conventional conditions. In order to assess whether, in the social-conventional conditions, greater ingroup preference will be shown in the school context than in the gender context (Hypothesis 1), a 2 (age group: fourth, eighth graders) $\times$ 2 (gender: male, female) $\times$ 2 (intergroup context: gender, school) $\times$ 2 (condition: traditional, nontraditional) ANOVA was conducted, with repeated measures on the last factor. As expected, a main effect for condition was found, $F(1, 682) = 65.26, p < .001, \eta_p^2 = .08$. Across both the school and gender contexts, participants were more supportive of including the traditional outgroup member (who wanted to wear the ingroup t-shirt) into the traditional ingroup ($M = .80, SD = .40$) than of including the nontraditional outgroup member (who would not wear the group shirt) into the nontraditional ingroup ($M = .61, SD = .49$). In both intergroup contexts, participants distinguished between different types of social-conventional norms (see Figure 3).

Although the overall effect for condition by intergroup context was nonsignificant, univariate ANOVAs were conducted in order

Figure 3. Proportion of participants choosing the outgroup member who matches the group norm. In both the traditional and nontraditional conditions, participants in the gender context differed from participants in the school context at ** $p < .01$.

to test expectations that in both the traditional and nontraditional condition, participants in the gender context would show different levels of ingroup preference than participants in the school context. For these analyses, 2 (age group: fourth, eighth graders) $\times$ 2 (gender: male, female) $\times$ 2 (intergroup context: gender, school) univariate ANOVAs were conducted for the traditional condition (ingroup wears the group t-shirt) and nontraditional condition (ingroup does not wear the group t-shirt), separately. The ANOVA for the traditional condition revealed a main effect for intergroup context, $F(1, 688) = 8.69, p < .01, \eta_p^2 = .01$, which showed that participants were more likely to include the outgroup member who shared the ingroup norm (wanting to wear the group t-shirt) in the gender intergroup context than in the school intergroup context ($M_{school} = .76, SD_{school} = .43; M_{gender} = .84, SD_{gender} = .43$) (see Figure 3). Participants were more willing to include someone of a different gender than someone from a different school (when the groups were defined by gender and school, respectively) if that person shared their traditional ingroup norm.

Similarly, the ANOVA for the nontraditional condition included a main effect for intergroup context, $F(1, 708) = 7.91, p < .01, \eta_p^2 = .01$. When the ingroup did not want to wear their group t-shirt (nontraditional), participants were less likely to include the outgroup member who shared the ingroup norm in the school context than in the gender context ($M_{school} = .55, SD_{school} = .50; M_{gender} = .67, SD_{gender} = .47$). Thus, participants exhibited greater ingroup positivity in the school context for both the traditional and nontraditional conditions. In both contexts, however, they preferred the traditional member to the nontraditional member. As expected, there were no age effects when group norms were related to social-conventions.

Moral conditions. In order to assess whether participants were more supportive of including the equal than the unequal member in both the gender as well as the school contexts (Hypotheses 2 and 3), a 2 (age group: fourth, eighth graders) $\times$ 2 (gender: male, female) $\times$ 2 (intergroup context: gender, school) $\times$ 2 (condition: equal, unequal) ANOVA was conducted, with repeated measures on the last factor. As expected, in both the school and gender contexts, participants included the outgroup member who wanted to share equally into the equal ingroup ($M = .81, SD = .39$) more often than they included the outgroup member who wanted to keep more resources for the group into the unequal ingroup ($M = .51, SD = .50$), $F(1, 703) = 182.94, p < .001, \eta_p^2 = .20$. There were no significant differences between the gender and school intergroup contexts for either the equal or unequal conditions, as expected (equal: $M_{school} = .78, SD_{school} = .41; M_{gender} = .83, SD_{gender} = .38$; unequal: $M_{school} = .52, SD_{school} = .50; M_{gender} = .50, SD_{gender} = .50$; see Figure 3).

Further, confirming Hypothesis 4 that there would be age-related differences, there was an interaction between condition (equal vs. unequal) and age group, $F(1, 703) = 21.41, p < .001, \eta_p^2 = .03$, revealing that in both the school and gender contexts, the fourth-grade participants were more willing to include the equal outgroup member ($M = .90, SD = .30$) than were the eighth-grade participants ($M = .78, SD = .42; p < .001$). In the unequal condition, the fourth-grade participants were less willing to include the unequal outgroup member in the ingroup ($M = .42, SD = .50$) than were the eighth-grade participants ($M = .55, SD = .49; p < .01$). Thus, younger children showed a greater preference in support of equal norms than did adolescents for both the school and
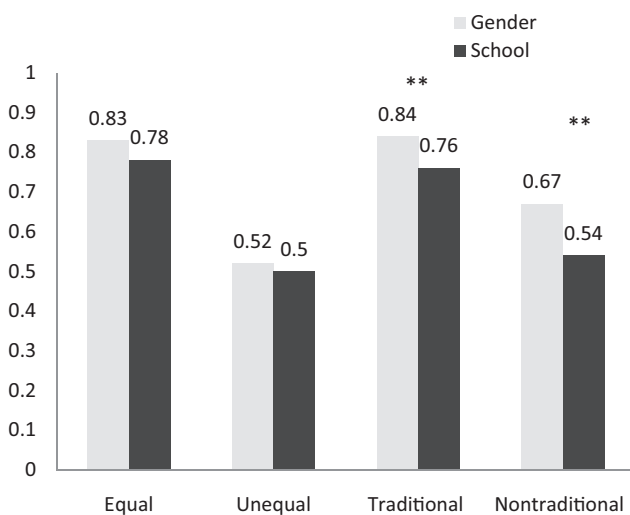
gender contexts (see Figure 4). This finding confirmed expectations that younger children will show a greater concern with strict equality, whereas adolescents will recognize the importance of maintaining the group norm to ensure smooth group functioning.

Similar to the social-conventional conditions, we conducted univariate 2 (age group: fourth, eighth graders) × 2 (gender: male, female) × 2 (intergroup context: gender, school) ANOVA analyses for the equal condition and the unequal condition separately in order to confirm that there were no differences between the school and gender context for the moral conditions. No main effects for intergroup context were found, confirming that morally relevant evaluations were similar across both intergroup contexts (gender identity and school affiliation).

Justifications for Inclusion Choice

In order to test for differences in the justifications used by participants to reason about their choice of the ingroup or outgroup member in the school and gender intergroup contexts (Hypotheses 5 and 6), repeated measures ANOVAs were conducted for each condition. These ANOVAs were conducted for the top three justifications used by participants. In the equal and in the unequal condition, these justifications were fairness, group functioning, and group identity. In the traditional and nontraditional conditions, these justifications were larger societal norm, group functioning, and group identity.

Social-conventional conditions. In the social-conventional context, separate 2 (age group: fourth-, eighth-grade participants) × 2 (inclusion choice: ingroup or outgroup) × 2 (intergroup context: gender, school) × 3 (reasoning: larger societal norm, group functioning, group identity) ANOVAs were conducted with repeated measures on the last factor for the traditional and the nontraditional conditions. For the traditional condition, differences were found between participants who chose to include a traditional

Figure 4. Proportion of participants choosing the outgroup member who matches the group norm across both contexts (school and gender) by age group. For the equal condition, fourth graders differed from eighth graders at *** $p < .001$. For the unequal condition, fourth graders differed from eighth graders at ** $p < .01$.

outgroup member (who would wear the group t-shirt) or a nontraditional ingroup member (who would not wear the group t-shirt), showing a reasoning × inclusion choice interaction effect, $F(2, 1348) = 484.85$, $p < .001$, $\eta_p^2 = .41$ (see Table 1). Participants used very few references to the larger norm encouraging one to wear the t-shirt, but did reference this more if they chose the outgroup member ($p < .05$). Participants who chose the ingroup member referenced group identity more than those who chose the outgroup member ($p < .001$).

Participants who chose the outgroup member referenced group functioning more than those who chose the ingroup member ($p < .001$). Thus, group identity played a role in choice of the ingroup member, whereas group functioning featured more prominently in the reasoning of those who chose an outgroup member. There was also an interaction between inclusion choice and intergroup context, revealing differences in reasoning between participants who chose the ingroup versus the outgroup member in the school versus in the gender context, $F(2, 1348) = 3.82$, $p < .05$, $\eta_p^2 = .01$ (see Table 1). For the traditional condition, participants who chose to include the traditional outgroup member focused on group functioning more in the school than in the gender context ($p < .05$). Additionally, those who chose to include the nontraditional ingroup member made much greater references to group identity in the school context than in the gender context ($p < .001$).

For the nontraditional condition, participants who chose to include a nontraditional outgroup member used different forms of reasoning than participants who chose to include a traditional ingroup member, $F(2, 1378) = 252.29$, $p < .001$, $\eta_p^2 = .26$ (see Table 1). Participants used more references to the larger societal norm and to the group membership when they chose the ingroup member who was traditional than if they chose the outgroup member who was nontraditional ($ps < .001$). More references to group functioning were made if they chose the outgroup member who was nontraditional than if they chose the ingroup member ($p < .001$).

Further, there was an interaction between inclusion choice and intergroup context, $F(2, 1378) = 12.13$, $p < .001$, $\eta_p^2 = .01$ (see Table 1). Participants who chose the ingroup versus the outgroup member used different forms of reasoning in the school than in the gender context. Similar to findings in the traditional condition, participants who chose to include the nontraditional outgroup member focused on group functioning in both conditions (school and gender). Yet, those who chose to include the traditional ingroup member made much greater references to group identity in the school context than in the gender context. Further, these participants made more references to the larger societal norm in the gender than in the school context ($ps < .001$). Thus, in the school context more so than in the gender context, group identity was a more focal concern for participants who chose the ingroup member for both the traditional and nontraditional members.

Moral conditions. For both the equal and unequal conditions, separate 2 (age group: fourth-, eighth-grade participants) × 2 (inclusion choice: ingroup or outgroup) × 2 (intergroup context: gender, school) × 3 (reasoning: fairness, group functioning, group identity) ANOVAs were conducted with repeated measures on the last factor. For the equal condition, although differences were found between the types of reasoning used by those participants who chose an ingroup member versus an outgroup member, $F(2, 1368) = 40.34$, $p < .001$, $\eta_p^2 = .05$, no differences were found
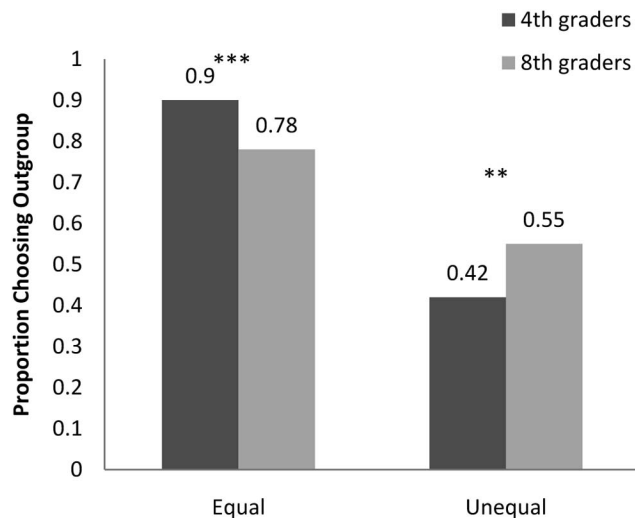
Table 1

Proportions and Standard Deviations for the Justifications Used for Choosing an Outgroup or Ingroup Member in the Gender and School Intergroup Contexts

Variable	Gender context		School context		Total	
	Ingroup	Outgroup	Ingroup	Outgroup	Ingroup	Outgroup
Equal norm						
Fairness	.05 (.23)	.50 (.48)	.08 (.27)	.45 (.48)	.07 (.25)[a]	.47 (.48)[a]
Group functioning	.45 (.49)	.44 (.48)	.44 (.49)	.45 (.48)	.44 (.49)	.47 (.48)
Group identity	.26 (.12)	.02 (.12)	.40 (.48)	.01 (.11)	.35 (.47)[b]	.02 (.11)[b]
Unequal norm						
Fairness	.72 (.44)	.03 (.15)	.64 (.46)	.02 (.14)	.69 (.45)[c]	.02 (.14)[c]
Group functioning	.08 (.26)	.92 (.26)	.10 (.30)	.90 (.30)	.10 (.29)[d]	.92 (.26)[d]
Group identity	.08 (.27)	.01 (.07)	.18 (.37)	.03 (.19)	.13 (.32)[e]	.02 (.13)[e]
Traditional norm						
Larger societal norm	.00 (.03)	.03 (.17)	.00 (.00)	.03 (.18)	.00 (.00)[f]	.03 (.17)[f]
Group functioning	.17 (.38)	.88 (.31)[g]	.14 (.34)	.93 (.29)[g]	.14 (.34)[h]	.91 (.28)[h]
Group identity	.60 (.49)[i]	.03 (.16)	.77 (.41)[i]	.03 (.17)	.73 (.44)[j]	.03 (.17)[j]
Nontraditional norm						
Larger societal norm	.21 (.40)[k]	.00 (.03)	.13 (.32)[k]	.00 (.00)	.16 (.35)[l]	.00 (.00)[l]
Group functioning	.38 (.48)	.89 (.29)	.36 (.47)	.95 (.20)	.36 (.47)[m]	.92 (.26)[m]
Group identity	.23 (.41)[n]	.03 (.17)	.41 (.48)[n]	.02 (.13)	.34 (.46)[o]	.03 (.16)[o]

[f] *p* < .05.   [g] *p* < .05. All other pairs differed significantly at *p* < .001. The top three most frequent types of justification categories were included in this table.

between participants in the gender and school intergroup contexts (see Table 1). Results indicated that participants used more fairness reasoning when they chose the outgroup member and more group functioning reasoning when they chose the ingroup member (*ps* < .001).

The repeated measures ANOVA conducted for the unequal condition revealed differences in the types of reasoning used by those participants who chose an ingroup versus an outgroup member, $F(2, 1356) = 681.71$, $p < .001$, $\eta_p^2 = .50$. For the unequal condition, use of each of the three forms of reasoning differed significantly between participants who chose the ingroup versus the outgroup member (*ps* < .001). The pattern found in the unequal condition was the reverse of the pattern found in the equal condition. This finding revealed that, even though the chi-square analyses presented indicated that participants were not responding above chance in the unequal condition, participants were, in fact, systematic in their evaluations. Those participants who chose the ingroup member focused on fairness, whereas those who chose the outgroup member focused on group functioning.

Differences were also documented in reasoning used in the school versus in the gender context by age group, $F(2, 1356) = 5.99$, $p < .01$, $\eta_p^2 = .01$. Specifically, fourth-grade participants in the gender context used more references to fairness ($M = .50$, $SD = .48$) than did eighth-grade participants ($M = .30$, $SD = .46$; $p < .05$), whereas fourth-grade participants made fewer references to group identity ($M = .01$, $SD = .06$) than did eighth graders ($M = .06$, $SD = .23$). These age-related findings reflect the age-related differences documented in participants' evaluations. In the school context, there were no age-related differences documented.

Discussion

In the present study, participants were required to make group inclusion decisions in two important and pervasive intergroup

contexts: school membership and gender. The groups held four distinct norms (two moral: equal and unequal; two social-conventional: traditional and nontraditional), and this design yielded new findings, indicating that ingroup preference manifests differently in these contexts. Specifically, in the social-conventional conditions, participants showed greater ingroup preference in the school context than in the gender context. Further, there were age-related differences in evaluations and reasoning in the moral conditions, revealing increasing sophistication in balancing group identity and group norms with age.

These findings contribute in novel ways to the field of developmental psychology, as well as to developmental subjective group dynamics (Abrams & Rutland, 2008; Killen & Rutland, 2011; Rutland, Killen, & Abrams, 2010), by demonstrating the sophistication of children's and adolescents' social reasoning skills in addition to developmental and context differences in the manifestation of ingroup preference. The findings revealed how adolescents' concerns for group identity were coordinated with their moral judgments about equal treatment and inclusion. On the one hand, they valued equality, but on the other hand, they understood the importance of allegiance to groups. The results revealed the value of supporting one's group; children and adolescents also exhibited ingroup preference, which is a concern given the implications for prejudice and bias.

For researchers focused on improving intergroup relations, our findings revealed that each intergroup context should be approached as distinct given that participants in this study differed in their evaluations of school and gender intergroup scenarios. Further, the results revealed that a preference for fairness trumped differences in ingroup preference. In the moral conditions, participants asserted a strong preference for the equal outgroup member in both the school and gender context. The implication of this finding is that children and adolescents are not solely focused on group membership and that they give strong weight to moral

principles in making judgments. This is important given the frequent assumption that children will always give priority to their own needs and make selfish choices.

The findings for the intergroup school context contribute to the literature on school as a developmental context (Eccles & Roeser, 2013). In the social-conventional conditions, differences in ingroup preference emerged. Participants were more willing to include someone who shared their social-conventional norms (in both the traditional and nontraditional conditions), but did not share their group identity, in the gender context than in the school context. This reveals an important distinction. In the moral domain, ingroup preference (surrounding group membership) did not manifest differently in the school and gender contexts. In the social-conventional domain, however, ingroup preference was more apparent in the school rather than the gender context. This is consistent with findings by Abrams et al. (2008), which revealed that children in a minimal intergroup context showed ingroup preference in a social-conventional context involving loyalty to the group, but did not exhibit such a preference when judging ingroup and outgroup members in the context of immoral peer behavior.

This study expands these findings by revealing that all intergroup contexts do not elicit the same level of ingroup preference. Although school affiliation plays an important role in academic motivation (Wigfield et al., 2006), there may also exist more negative aspects of it by creating ingroup and outgroup differentiations. Participants showed greater ingroup preference in the school than in the gender context. Moreover, these findings also extend previous research on ingroup bias more broadly (e.g., Dunham et al., 2011), indicating the importance of measuring ingroup preference using authentic groups and in multiple contexts. Further, this research extends prior research that revealed that biologically based and randomly assigned groups elicit similar levels of intergroup bias (Bigler et al., 1997), by revealing that there are instances in which different intergroup contexts elicit differing levels of ingroup preference. These findings were supported by the participants' reasoning. Participants more frequently referenced group identity in the school context (for instance, "He goes to my school, so I think he should be in the group"; eighth-grade male) than in the gender context (for instance, "The group should stay all-girls"; fourth-grade female).

In the moral conditions, group membership did not impact participants' choices. In both the gender and school membership contexts, participants chose to include the equal outgroup member over the unequal ingroup member. The salience of the desire to divide resources equally outweighed ingroup preference in favor of either their gender or school group membership. Participants in both the gender and school context supported including an outgroup member who wanted to divide resources equally in the equal group even though this individual did not share the group membership of the rest of the group. This finding reflects previous research documenting preference for outgroup members who abided by the moral principle of equal allocation of resources (Killen, Rutland, et al., 2013). Further, the finding adds to our knowledge by also documenting this in a school intergroup context. In addition, these results highlight the importance of maintaining norms related to equal distribution of resources to children and adolescents, extending much of the prior developmental research on allocation decisions that focuses on young children.

It is important to note that although both children and adolescents supported including an outgroup member who wanted to divide resources equally, an age-related trend was shown as well. Children showed strong support for the equal outgroup member and less support for the unequal outgroup member, focusing narrowly on the moral implications of their inclusion decision when the group norm involved allocation of resources. This finding was supported by age-related differences documented in children's and adolescents' reasoning, which revealed that younger children used more reference to fairness in justifying their evaluations. As an illustration, a fourth-grade girl who chose to include the outgroup member who also wanted to be equal said, "Because the money should be given out equally to both groups. That's fair."

Adolescents, however, showed greater skill, in both the gender and school contexts, in coordinating domains. They recognized the moral benefit of equal allocation of resources, while also recognizing the social benefits to group functioning by maintaining the group membership of the group in terms of gender or school identity. As an example, an eighth-grade girl who chose the ingroup member who was equal when the group was unequal stated, "Because she is expressing herself and being fair, but she made the problem harder because she doesn't agree with the group." The present study is the first to document age-related differences in reasoning in making inclusion decisions about groups that hold resource allocation norms.

These results provide support for the recently proposed process-based account of moral judgments, which suggests that with age, individuals will better be able to coordinate the complexity of multifaceted moral judgments (for instance, those where group identity may conflict with moral principles; Richardson et al., 2012) and suggest that continued development in executive functioning skills through adolescence (Crone, 2009) may contribute to age-related differences in children's and adolescents' reasoning about including others. Additionally, throughout adolescence, emotional perspective-taking abilities continue to improve, as demonstrated by research measuring reaction time to judgments involving first- and third-person perspectives (Choudhury, Blakemore, & Charman, 2006). Further, research also reveals that due to continued brain development and improvements in processing social information, adolescents place a particular focus on social evaluation (Somerville, 2013), which may account for our findings documenting that in the moral conditions, adolescents value both group loyalty to their own group and adherence to the group norm.

Though age-related patterns were found in the moral conditions, participants did not distinguish between the school and gender intergroup contexts. In both the school and gender contexts, participants were more supportive of including the equal outgroup member than the unequal outgroup member. In both contexts, they were also more willing to include the traditional outgroup member than the nontraditional outgroup member. This suggests that when considering both school and gender group membership, participants were attuned to differences across the norms in similar ways. They were more willing to include someone who supports a generic social norm (equality and following social customs regarding group t-shirts) than someone who does not, regardless of the group norms (for a more complete discussion of the distinction between generic and group-specific norms, see Abrams et al., 2008; Killen, Rutland, et al., 2013).

This study extends our knowledge of the development of moral reasoning by demonstrating that children differentiate between moral and conventional acts in making intergroup judgments and that there are age-related differences in the focus of children's and adolescents' reasoning. Importantly, these findings bring into question new findings that suggest that children view issues involving harm in a between-group context as only violating conventional rules and that children do not feel intrinsically obligated to outgroup members (Rhodes & Chalik, 2013). Our findings demonstrated that in intergroup contexts, children give priority to moral principles by overwhelmingly including an outgroup member to preserve equal allocation of resources and to avoid intergroup harm. Our findings also demonstrate a very different pattern in a social-conventional context. When no moral principles are at stake, children show varying degrees of intergroup preference, depending on the intergroup context. Thus, the present study indicates that the pattern demonstrated in Rhodes and Chalik (2013) may necessitate further scrutiny, in particular, a second condition in which intergroup dynamics in a social-conventional context are assessed.

The age-related differences that were documented in both the school and gender contexts for the moral conditions should be of interest to cognitive developmental scientists. What changes in adolescents' social cognition that leads them to more precisely balance moral principles with a sense of group loyalty? We argue that this change reflects a developmental process marked by adolescents' increased experience with groups and attention to group norms (B. B. Brown, 2004), as well as the increasing ability with age to balance group identity and morality (Killen & Rutland, 2011; Rutland et al., 2010). Further, this research extends the work of behavioral economists and those studying sharing, fairness, and distribution of resources broadly (Almås et al., 2010; Fehr, Bernhard, & Rockenbach, 2008), as participants' reasoning reflects their strong dedication to an equal distribution of resources, even when given the option to choose a group member who would benefit the group with an unequal allocation.

Finally, these findings are of interest to those studying intergroup relations and group dynamics, as this study demonstrates the importance of measuring these constructs in concert. By asking participants to choose between loyalty to your group membership or your group norm, we showed that children and adolescents do distinguish between different types of intergroup contexts and that they do not approach all intergroup encounters in the same manner. These findings not only reveal the sophistication of children's and adolescents' social judgments but also point to new avenues for developmental research to explore in greater detail the very complex intergroup dynamics that children and adolescents face daily.

Future research should continue to examine ingroup preference in a range of different group membership contexts and with distinct types of group norms, as it is clear that ingroup bias does not always manifest in the same way. The features of outgroup members that are made salient and the stereotypes one holds when evaluating ingroup preferences warrants further systematic examination. Additionally, it would be interesting to further explore the role that intergroup friendships have in these evaluations. It may be the case that participants were more willing to choose a gender outgroup member because they have frequent contact with boys and girls in their everyday lives. They may not have the same degree of outgroup contact with peers from different schools, who

likely live in different neighborhoods. Thus, the greater ingroup preference shown in the school context may be explained by a concern over including a peer from another school because of this peer's relative unfamiliarity. Newcomb and Bagwell (1995) conducted a meta-analysis of children's friendships and noted the lack of research on children's conceptions of outside school friendships. Since that time, some work has shown that the majority of adolescents' friendships are within school but that, with age, children have increasing opportunities to interact with peers outside of school (Witkow & Fuligni, 2010). Further research regarding children's and adolescents' ingroup preference as related to their level of identification with different social groups is warranted.

In addition, documenting developmental change using a longitudinal design would be fruitful, and conducting a study in which children's ingroup preferences are tracked over time would be quite valuable. With an existing database on intergroup judgments and attitudes in childhood and adolescence, such a study could make a significant contribution to the field. Older adolescents, who likely have an even stronger sense of school group identity, may show an even greater preference for school ingroup members. Following children longitudinally would enable researchers to test for the influence of developing social-cognitive skills on children's social evaluations over time.

Future research should also examine an older group of adolescents. In this study, age-related trends confirmed expectations that younger children would exhibit a preference for dividing resources equally, even if this meant including an outgroup member. In addition, adolescents were more willing to maintain the group membership by choosing an ingroup member who would not agree with the group. Differences were not found by age group in the school and gender intergroup contexts, though. An older sample may capture a more complete developmental picture of how intergroup preference manifests, as older adolescents may be more attuned to different intergroup contexts than children or younger adolescents.

These results provide novel contributions to the field of developmental psychology by revealing that ingroup preference varies by group identification and the social context. This study furthers our knowledge of complex forms of group dynamics and provides evidence that research examining intergroup relations must attend to both the nature of the group behaviors (moral or social-conventional) as well as the intergroup context.

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