

## Development of Intra- and Intergroup Judgments in the Context of Moral and Social-Conventional Norms

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Children and adolescents evaluated group inclusion and exclusion in the context of generic and group-specific norms involving morality and social conventions. Participants ( $N = 381$ ), aged 9.5 and 13.5 years, judged an in-group member's decision to deviate from the norms of the group, whom to include, and whether their personal preference was the same as what they expected a group should do. Deviating from in-group moral norms about unequal allocation of resources was viewed more positively than deviating from conventional norms about nontraditional dress codes. With age, participants gave priority to group-specific norms and differentiated what the group should do from their own preference about the group's decision, revealing a developmental picture about children's complex understanding of group dynamics and group norms.

In childhood, the motivation to present one's in-group positively sets the stage for intergroup prejudice, defined as negative attitudes toward members of an out-group (Killen & Rutland, 2011; Nesdale, 2004). As with adults, children demonstrate intergroup bias and are motivated to enhance group distinctiveness by favoring their own group (e.g., in-group) and disliking other groups (e.g., out-groups; see Abrams & Rutland, 2008; Levy & Killen, 2008; Nesdale, 2007). Yet age-related changes in childhood regarding group affiliation and group identity reveal a developmental picture regarding intergroup bias not present in the adult literature, and one that provides an important window into the emergence of such attitudes. Developmental intergroup research has shown that children's group affiliations are often

positively motivated (Nesdale et al., 2010), that children and adolescents refer to fairness when evaluating intergroup exclusion (Killen, Margie, & Sinno, 2006; Verkuyten & Slooter, 2008), and that age-related changes in group identity are related to judgments about preference and exclusion (Rutland, Killen, & Abrams, 2010). These research findings derive from an approach that focuses on the majority and minority perspective on intergroup attitudes, as well as the negative and positive forms that intergroup attitudes take in childhood and adolescence.

The theoretical framework for the approach taken in this study was derived from social domain theory (Killen et al., 2006) and developmental subjective group dynamics (Abrams & Rutland, 2008), which is a variant of social identity theory (Tajfel & Turner, 1979). Research guided by social domain theory has demonstrated that individuals use moral (fair and equal treatment of others), societal (social conventions, traditions), and psychological (personal choice) reasons when evaluating social events, reflecting distinct domains of social knowledge (Nucci, 1981; Smetana, 2006; Turiel, 1983). Research on social exclusion and intergroup attitudes has found that children often use moral reasons to evaluate the wrongfulness of exclusion based on group

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membership (gender, race, ethnicity), but employ social-conventional expectations and personal choice when justifying intergroup exclusion (why it is okay to exclude on this basis; Mulvey, Hitti, & Killen, 2010). Subjective group dynamics research has revealed that, at times, children prefer out-group members to in-group members, especially when the out-group member helps to preserve the in-group norm and the in-group member deviates from the norms of the group (Abrams & Rutland, 2008).

It would be fruitful to know whether decisions about group dynamics are motivated by moral, social-conventional, or psychological reasons. Moreover, what is not known is exactly what types of norms justify excluding an in-group member who deviates from the norm, or what it is about this deviance that makes children reject deviant in-group members. To address these questions, the current study analyzed intergroup attitudes about exclusion in the context of moral norms about allocation of resources, and social-conventional norms about club traditions.

Investigating evaluations of social norms requires a clear explication about what constitutes a social group norm, which is fundamental to this study. Theoretically, social psychological research identifies two levels of norms, a generic level (what the larger societal group supports) and a group-specific level (what a specific group supports). Generic norms are defined as rules and values that are not only acknowledged by a specific group but hold greater weight within the larger society, whereas group-specific norms are those that are particular to the local group and may not be ascribed to by the larger society (Abrams, Rutland, Ferrell, & Pelletier, 2008; Nesdale & Lawson, 2011). By the definition of norms outlined in social psychological research, both generic and group-specific norms can fall within either the social-conventional or the moral domains (Abrams et al., 2008). As mentioned, most research on group dynamics has focused on social-conventional group norms rather than moral ones.

Central to subjective group dynamics research has been the age-related finding that, with age (from 6 to 11 years), children dislike in-group members, who deviate from in-group norms, a form of group disloyalty (Abrams & Rutland, 2008). In fact, in an effort to maintain positive in-group identity, children are willing to exclude an in-group member who deviates from the norms of the in-group (typically reflected by norms such as group identity with a national team or club). At the same time, however, children favor an out-group member who supports their in-group norm. What is not known

is whether this dislike of in-group members who deviate from the group norm will hold for moral norms as well as social-conventional norms. Is group disloyalty about moral norms viewed the same by children as group disloyalty about social-conventional norms?

There are two ways to investigate this question. First, a group may have a social-conventional norm that is consistent with generic norms about group traditions (e.g., groups should wear an assigned club shirt). For example, a group may have a norm about wearing a club shirt that is expected at the generic level ("We like to wear our club shirt"). In this case, an in-group member who deviates from the group norm would espouse a nontraditional viewpoint ("I don't like to wear the club shirt"), which would reflect a form of group disloyalty. Second, a group may have a group-specific norm about not wearing club shirts ("We don't like to wear the club shirts"), and in this case, deviance from the norm would entail rejecting a group-specific norm ("I like to wear the club shirt"), and would also reflect the generic norm about clothes that identify group membership. Although the latter decision would reflect a form of group disloyalty, it would also reflect consistency with a larger generic norm.

Conversely, the same comparisons can be created for moral norms, in which a group norm is consistent with the generic norm ("We like to divide up resources equally") with deviance from the group norm ("I like to divide up resources unequally with our group getting more") reflecting disloyalty regarding the group norm and rejection of the generic moral norm. Alternatively, a group may have a group-specific norm about not dividing up resources equally ("We like to divide up resources unequally with our group getting more"), which would mean that deviance (or group disloyalty) would, in fact, be consistent with the generic norm about equal distribution.

The implication of this analysis is to demonstrate that disloyalty to a group can have positive or negative motives. Our prediction is that the domain of the norm is an important source of information regarding how children understand and evaluate different acts of deviance within group contexts. Moreover, these are fairly sophisticated set of judgments, which provide a window for how children weigh different considerations when making decisions about inclusion and exclusion, and it is important to investigate how these competencies change with age. Do children's judgments about group disloyalty reflect an understanding of the distinction between group

identity and different types of group norms, and does this change with age?

In addition, a central aspect of what may change with age is how children differentiate their judgments about what a group may do from their own individual preference about what a group should do. This ability is a form of "theory of group mind" or "theory of social mind" (Abrams, Rutland, Pelletier, & Ferrell, 2009), which has not been analyzed with respect to how children evaluate group dynamics in the context of moral and social-conventional norms. While "theory of mind" abilities involve thinking about what another individual knows, as distinct from what the self knows (or has access to), theory of mind about groups involves the ability to understand that groups often make decisions that would counter one's own individual preference about the best course of action (Mulvey, Hitti, & Killen, in press).

In the present study, group dynamics referred to processes, roles, and judgments. *Intragroup dynamics* here refer to judgments about in-group members who enhance group identity by upholding group norms in comparison to in-group members who do not (and deviate from the group norms). In contrast, *intergroup dynamics* here refer to judgments about exclusion (or inclusion) of out-group members who threaten (or enhance) group identity. The importance of these comparisons lies in determining the conditions in which in-group bias or out-group negativity is manifested. What is not known is the following: (a) how this ability changes after ages 9 years of age, (b) exactly what types of norms justify excluding an in-group member who deviates from the group norms, and (c) when children are able to differentiate their individual preferences about in-group deviance from what they expect groups to do.

Furthermore, in the moral realm, it has been argued that social change comes about by resisting group norms that violate moral principles of fairness or justice (Turiel, 2002). Children are often confronted with groups that hold norms that might not be widely accepted or might be inconsistent with moral norms. For instance, as an extreme example, gangs might hold group norms that espouse violence that violate a widely accepted norm of not harming others. In this case, deviance from the group (rejecting the norm of harm) reflects a rejection of the group norm, but adherence to a larger generic moral norm about avoiding harm to others. Thus, from a social domain viewpoint, not all forms of deviance from norms are the same, and investigating children's ability to evaluate different forms of group disloyalty is a window into their viewpoint about resisting peer group norms that are harmful or unfair.

In this study, then, we investigated children's evaluations in the context of generic norms (when groups have norms that are consistent with societal norms, such as equality or traditions), and group-specific norms (when a club has a norm that is either consistent with the generic level or counter to it; see Figure 1). We asked participants to compare this decision with their personal preference, and we predicted age-related changes from 9 to 14 years of age.

Peer groups become salient around 9–10 years of age when children interact in social groups at school, identify with different organized groups after school, and then transform into social cliques by 13–14 years of age, when group identity regarding self-chosen groups intensifies (Brechwald & Prinstein, 2011; Hitti, Mulvey, & Killen, 2011a). Previous research on intra- and intergroup judgments has sampled children aged 6–11 years (Abrams & Rutland, 2008).

		Type of Domain	
Level of Norm	Social-Conventional		Moral
Generic Norms	<b>Traditional Norm:</b> Group Wears the Club Shirt		<b>Equal Norm:</b> Group Allocates Equally
Group-Specific Norms	<b>Non-Traditional Norm:</b> Group Does Not Wear the Club Shirt		<b>Unequal Norm:</b> Group Does Not Allocate Equally (Allocates Unequally)

Figure 1. Study design: Domain by level of norm.

Note. Two types of group-specific norms were described to participants, one that was counter to the larger, generic norm, as displayed here in the second row, and one that was consistent with the generic norm, as depicted in the first row.

No prior research has examined evaluations of group dynamics in the context of both moral and social-conventional norms, and at both the generic and group-specific levels, yet research has shown that group functioning becomes a pervasive reason given by participants between the ages of 9 and 14 years to justify peer exclusion (Horn, 2003, 2006). Thus, we have extended the age range up to 14 years of age, to capture children's developing focus on group functioning with age.

To date, developmental subjective group dynamics research has analyzed children's favorability toward the *target* (do they like the deviant child?), but has not yet explored the evaluation of the *act* (is the act of deviance all right or not all right?), which has implications for judgments about social cognitive domains. Nor have any analyses been conducted on the reasons and justifications that children use when responding to deviant members of groups. Assessing reasoning has been shown to provide detailed information about why children make social decisions about exclusion (Killen, 2007). Specifically, analyses of reasoning clarify whether decisions to include an in-group member are based on in-group bias, or whether participants are focusing on other variables, for instance, the behavior or norms of the group member. We predicted that children and adolescents will use different forms of reasoning when evaluating acts of deviance that support generic norms from those that reject generic norms.

Furthermore, research has not yet examined whether children will accept or reject an in-group member's decision to deviate from norms about equality or inequality when groups are organized by gender (such as boys' groups and girls' groups). Thus, to address this issue the current study focuses on how children reconcile their desire to enhance their gender group identity in contexts in which in-group members (boys or girls) violate group norms related either to equality (e.g., distribution of resources) or group traditions (e.g., maintaining group conventions about clothing that defines the group).

#### *Design of the Present Study*

What made this design novel, then, was the context of three factors: *domain of the norm* (moral, social-conventional), the *level of the group norm* (generic or group-specific), and *gender group membership* (boys, girls). We measured participants' *intragroup* judgments, which required evaluating members of the group who deviated from the

norm. We also measured participants' *intergroup* judgments, which required that participants choose between an in-group deviant member or an out-group member who supported the in-group norm. When children and adolescents make social decisions, they frequently balance information about both moral and group identity concerns when evaluating intragroup and intergroup dynamics, and one goal was to determine the age-related changes in this ability. Therefore, there were two age groups in the present study: fourth graders (9- to 10-year-olds) and eighth graders (13- to 14-year-olds).

It was hypothesized that acts of deviance that endorse generic norms such as equal allocation of resources, and adhering to traditional norms related to dress code, would be judged more positively than acts of deviance that endorse group-specific norms (i.e., unequal allocation and rejection of school expectations about dress code). Our overall domain of the norm hypothesis was that participants would more positively evaluate acts of deviance supporting equal allocation of resources (moral domain) than those that support traditional norms about dress code (social-conventional domain). Moral acts involve a victim; social conventional acts do not (but involve a disruption of group functioning).

Age-related differences would appear in how participants evaluate norms that might be viewed as benefiting the group, such as giving one's in-group more money than an out-group, with adolescents weighing these benefits more so than children. Furthermore, we hypothesized that, with age, participants would expect groups to focus more on in-group bias than they would do so when asked about their own individual preference.

## Method

### *Participants*

Children ( $N = 381$ ) from the suburbs of a metropolitan mid-Atlantic city in the United States participated in this study. The sample consisted of two age groups: 122 (73 girls) fourth graders (9- to 10-year-olds;  $M = 9.76$  years,  $SD = 0.35$ , range = 9.00–11.58) and 259 (141 girls) eighth graders (13- to 14-year-olds;  $M = 13.56$  years,  $SD = 0.39$ , range = 12.88–15.14). The participants attended public elementary and middle schools serving a middle- to middle-low-income population. Ethnicity was reflective of the U.S. population, with approximately 30% ethnic minority participants (10% African American, 15%

Latino, 5% Asian American). Parental consent was obtained for all participants.

### Design and Assessments

An interview was designed (administered as a survey for eighth-grade participants) that measured participants' evaluations of intragroup and intergroup exclusion, and included three factors, each with two levels: (a) *gender group membership* (in-group vs. out-group), (b) *domain of the group norm* (social-conventional vs. moral), (c) *level of the norm* (generic or group specific). We also included age, 9.5 and 13.5 years (fourth and eighth grades), and gender (male and female) as variables of interest.

Pilot testing confirmed that there were no order effects; therefore, all participants received the social-conventional scenarios before the moral scenarios to reduce the complexity of the administration. Furthermore, there were no differences for adolescent responses to interviews or surveys (which were identical). A preliminary examination of the data indicated that adolescents wrote out lengthy reasoning statements for the open-ended probes; thus, surveys were administered for the older sample. As an additional check, we conducted analyses of children's and adolescents' justifications and found that there were no differences in the quantity of responses. A subset of the codable responses (excluding simple repetition of the story and irrelevant details) for each age group was compared, revealing that children's codable responses ( $M = 16.31$  words, range = 5–32 words) was similar to adolescents' codable responses ( $M = 15.26$  words, range = 6–34 words).

All participants assessed four stories, two that referenced social-conventional group norms (generic: *traditional norm*, wearing an assigned group shirt; group-specific: *nontraditional norm*, not wearing an assigned group shirt) and two that referenced moral group norms (generic: *equal norm*, dividing money equally between one's own group [\$50] and another group [\$50]; group-specific: *unequal norm*, dividing money unequally between one's own group [\$80] and another group [\$20]). It is important to note that for the traditional and nontraditional group norm, participants were told that this norm had longevity within the school. Participants were told that the school provides club shirts for the groups and that they are expected to wear them to the school assemblies so that everyone knows to which group they belong. Thus, the traditional group norm reflected adherence to a

generic school norm of following the traditions of the school that indicate that groups should wear their group shirts, whereas the nontraditional group norm reflected resistance to the generic school norm and adherence to a group-specific norm of not following the school tradition about dress code.

There were two versions of the protocol given. The order of the presentation of the norms within each version varied (e.g., in Version 1 participants received the traditional norm and then the nontraditional norm, and in Version 2 participants received the nontraditional norm and then the traditional norm). In addition, the type of norm assigned to either a girls group or a boys group varied by version. See Figure 1 for the design and Figure 2 for an example of an illustration that accompanied the survey.

As shown in Figure 2, brightly illustrated pictures of children were displayed along with each assessment, depicting members of the group along with icons representing the norms. For example, a \$100 dollar bill was shown for allocation of resources and t-shirts were displayed for the social-conventional group norm (t-shirt with a red circle around it); see Figure 2 for the social-conventional example. A warm-up measure was administered to familiarize participants with the 6-point Likert scale used for different questions (1 = *really not okay*, 6 = *really okay*).

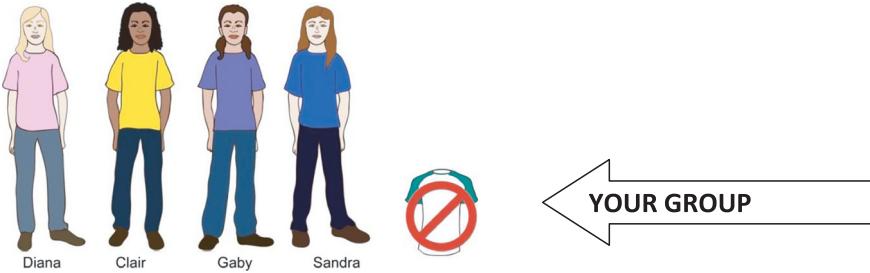
### Group Assignment

Following procedures for establishing group membership (e.g., Nesdale, 2004), participants were told that they belonged to a group of same-gender children as portrayed by a picture of eight same-gender children. To enhance group identity, participants were asked to give their group a name, select an end-of-year event for the group to have (e.g., pizza party or ice cream party), and select a symbol for the group (e.g., star or lightning bolt).

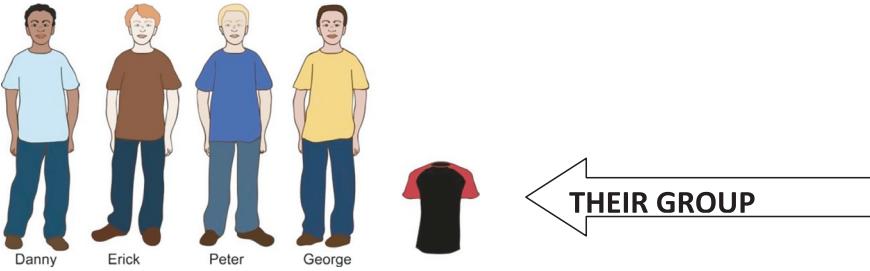
### Group Scenarios

In each of the four scenarios (two moral, two social-conventional), children's in-group norm was identified and they were introduced to their out-group defined by gender, which had an opposite norm. The in-group norms were explained as: "Your group likes to do X" (with picture displaying four members of the group and their norm) and the outgroup norms were explained as: "The other group likes to do Y."

In the past, your group...



...has **not worn** their green and white club shirts because they think it's not "cool."  
In the past, the other group...



...has **worn** their red and black club shirts.

Figure 2. Stimuli used to designate groups.

Note. Group norms are: In the past, your group has not worn their green and white club shirts because they think it's not "cool." In the past, the other group has worn their red and black club shirts. ©Illustration by Joan M.K. Tycko.

Following is an excerpt from the protocol of a social-conventional scenario with a traditional group norm:

These are groups that ... are given special shirts that they wear to the school assembly. This way everybody knows which group people belong to. In the past, *your group has worn their green and white club shirts*. In the past the *other group has not worn their red and black club shirts because they think it's not "cool."*... Stephanie, who is also in your group, wants to be different from the other members of your club. She does not wear her green and white club shirt to the first big assembly of the year.

Following is an excerpt from the protocol of a moral scenario with an equal allocation group norm:

The Student Council ... [has] \$100 to give out to the groups. ... In the past, when *your group has talked about it they have voted to give \$50 to your own group and \$50 to the other group*. In the past,

when the *other group has talked about it they have voted to give \$80 to their own group and \$20 to your group*. ... Sally, who is also in your group, wants to be different from the other members of the club. She says that your group should get \$80 and the other group should get \$20.

Sections with italics are reversed depending on the condition. Participants assessed members of their gender in-group and their gender out-group.

#### Measurement Items

##### Intragroup Dynamics

For each intragroup scenario children responded to two dependent measures: (a) *evaluation of the deviant member's act, Likert*: their own evaluation of the deviant member's act (e.g., How okay or not okay do you think X was for doing what he or she did? 1 = *really not okay* to 6 = *really okay*), and (b) *justification, act evaluation*: a justification for their evaluation (e.g., Why?).

### Intergroup Dynamics

Participants were given three assessments: (a) *group inclusion*: should the group include a deviant in-group member or a normative out-group member (e.g., Who should the group invite?), (b) *justification, inclusion*: a justification for that choice (e.g., Why?), and (c) *individual preference*: their own preference between the two children (e.g., Who do you think you would like better?). For instance, if the girls group had a norm of wearing their club shirts, participants were asked who the group should invite: the in-group girl (gender in-group member) who does not want to wear the club shirt, or the outgroup boy (gender out-group member) who wants to wear the club shirt (the interviewer pointed to the pictures of the children with the corresponding icon—money or shirts).

### Procedure

Trained research assistants individually interviewed fourth-grade participants in a quiet room, with sessions lasting approximately 25–30 min. Surveys were administered by trained research assistants to groups of eighth grade participants in a classroom environment, with sessions lasting approximately 25–30 min. Groups were generally 20–30 participants. The protocol was identical in survey and interview format. Pilot testing revealed no difference for administration of the instrument in survey or interview format to the older sample. Two versions were created to counterbalance whether participants first received traditional or nontraditional scenarios (no order effects were found); participants randomly received Version 1 or Version 2.

### Coding and Reliability

Participants' justifications were coded by using coding categories drawn from social domain theory (Smetana, 1995) as well as based on the results of pilot testing. The coding system comprised five sub-categories of the general codes *Moral*, *Social-Conventional*, and *Psychological*, including: (a) *Fairness* (*Moral*; e.g., "She is being fair by splitting the money equally" or "It is not fair to tell him he cannot be part of the group"), (b) *Group Functioning* (*Social-Conventional*; e.g., "He's going against the group."), (c) *Gender Group Identity* (*Social-Conventional*; e.g., "She fits in because she is a girl"), (d) *Larger Societal Norm* (*Social-Conventional*; e.g., "They were all supposed to wear the shirt because

of the school rule"), and (e) *Autonomy* (*Psychological*; e.g., "She wants to be different and be herself which is okay to do; sometimes you have to go your own way"). For each assessment, analyses were conducted using the three most frequently used justifications, which were all used more than 10%.

We used proportional data for the analyses for the justification data. Justifications were coded as 1 = *full use of the category*, .5 = *partial use*, 0 = *no use of the category*. Because participants could use all, partial, or none of the justification codes, concerns about the interdependence of the data were not an issue (the data were independent for coding purposes).

The coding was conducted by three coders blind to the hypotheses of the study. On the basis of 25% of the interviews ( $N = 96$ ), Cohen's  $\kappa = .87$  for inter-rater reliability. Less than 5% of the participants used more than one code.

### Data Analytic Plan

Univariate analyses of variance (ANOVAs) and ANOVAs with repeated measures were used to test hypotheses pertaining to judgment and justification responses to the assessment (act evaluation). In cases where 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). Analyses included gender of participant and grade of participant. The repeated measures factor was condition (equal, unequal, traditional, and nontraditional). To simplify interpretation of findings, when analyzing the intragroup evaluations, "condition" reflected the deviant act. Therefore, for example, the "equal condition" represented a scenario in which children were evaluating a member who was deviating by advocating equal distribution of the money, when the group had a norm of unequal distribution. When analyzing the intergroup dynamics component of the study, "condition" represented the group norm. Thus, the "equal condition" in this case means the group has a norm of distributing money equally and is deciding whether to choose to invite an in-group member who wants to distribute money unequally or an out-group member who agrees with the group and wants to distribute money equally.

ANOVAs were used to analyze proportions due to our repeated measures design, which are not appropriate for logistic regressions. Logistic regressions

were conducted, however, for *group inclusion* as the dependent variable and age group (fourth and eighth graders), and gender as the independent variables. Results from these logistic regressions matched the findings for the ANOVAs. Thus, for clarity in conveying results we report the ANOVA findings for continuity in data analytic strategy for all proportional data. Repeated measures designs are also effectively analyzed using ANOVAs because ANOVAs are robust to the problem of empty cells, whereas other data analytic procedures (e.g., log-linear models) require cumbersome data manipulation to adjust for empty cells (see Posada & Wainryb, 2008, for a fuller explanation and justification of this data analytic approach). Furthermore, a recent review of analytic procedures for these types of data (covering 10 years in APA psychology journals) indicated that linear models with repeated procedures (particularly ANOVA) are appropriate compared to log-linear analysis for this type of within-subjects design (see Wainryb, Shaw, Laupa, & Smith, 2001, footnote 4).

## Results

### Intragroup Dynamics

#### Evaluation of the Deviant Act

Do children think that it is okay for an in-group member to deviate from the norms of the group, and does it depend on the nature of the norm? To test our hypotheses that children would differentiate between different types of deviance from group norms, four 2 (age group)  $\times$  2 (gender)  $\times$  2 (deviance condition) ANOVAs with repeated mea-

sures on the last factor were conducted. Analyses were conducted that examined differences in act evaluation for the *group level* of the norms: generic norms (equal and traditional) and group-specific norms (unequal and nontraditional). In addition, we tested differences for the *domain of the norm*: moral domain norms (equal and unequal) and social-conventional domain norms (traditional and nontraditional). Analyses were conducted on the 6-point Likert scale for *Act Evaluation* for each condition.

We hypothesized that the domain of the norm would make a difference. A 2 (age group: fourth, eighth graders)  $\times$  2 (gender: male, female)  $\times$  2 (deviance condition: equal, traditional) ANOVA with repeated measures on the last factor confirmed that the domain of the deviance was significant. A main effect was found for condition, revealing that participants evaluated the equal deviant act ( $M = 4.77$ ,  $SD = 1.44$ ) more positively than they did the traditional deviant act ( $M = 4.32$ ,  $SD = 1.37$ ),  $F(1, 376) = 17.52$ ,  $p < .001$ ,  $\eta^2 = .04$  (see Figure 3). Thus, participants distinguished between different forms of deviance, including whether the deviant act reflected a moral or a social-conventional issue.

The 2 (age group: fourth, eighth graders)  $\times$  2 (gender: male, female)  $\times$  2 (deviance condition: unequal, nontraditional) ANOVA with repeated measures on the last factor that was conducted to test for differences between nontraditional ( $M = 3.29$ ,  $SD = 1.49$ ) and unequal ( $M = 3.32$ ,  $SD = 1.67$ ) was nonsignificant, indicating that domain differentiations were not present for all forms of deviance.

We then examined whether or not children differentiated between the equal and unequal deviant

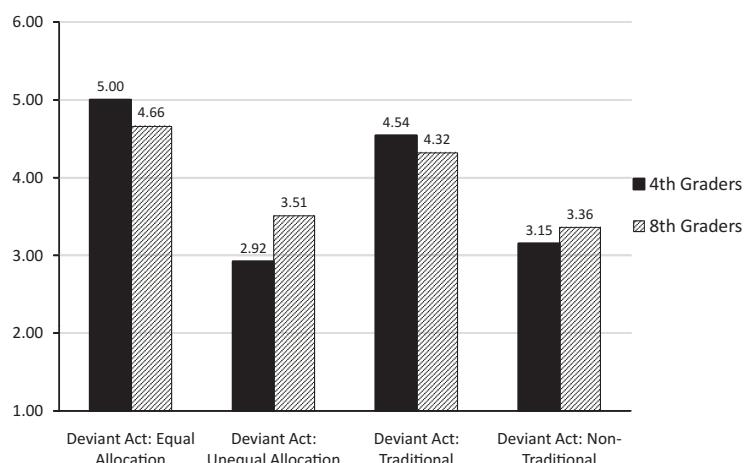


Figure 3. Evaluation of the deviant act by condition and age (1 = *really okay*, 6 = *really not okay*).

acts, in the moral conditions. A 2 (age group: fourth, eighth graders)  $\times$  2 (gender: male, female)  $\times$  2 (deviance condition: equal, unequal) ANOVA with repeated measures on the last factor was conducted. As expected, there was a main effect for condition,  $F(1, 373) = 167.8, p < .001, \eta^2 = .31$ . Participants evaluated the unequal deviant act much less positively than they evaluated the equal deviant act. In addition, there was an interaction effect for Deviance Condition  $\times$  Age,  $F(1, 373) = 13.14, p < .001, \eta^2 = .03$ . As shown in Figure 3, younger participants were more positive about equal deviant acts than were eighth graders, and less positive about unequal deviant acts, both at  $ps < .001$ . Children were more positive about acts that deviated from a group-specific norm, but reflected a generic norm (equality principles) than those that deviated from a generic norm (the unequal norm, which they evaluated less positively even though this act may in fact aid the in-group).

To test the same hypothesis in the social-conventional conditions, a 2 (age group: fourth, eighth graders)  $\times$  2 (gender: male, female)  $\times$  2 (deviance condition: traditional, nontraditional) ANOVA with repeated measures on the last factor was conducted, revealing a main effect for condition,  $F(1, 373) = 217.83, p < .001, \eta^2 = .24$ . Participants evaluated the nontraditional deviant act much less positively than they evaluated the traditional deviant act. Participants evaluated acts that reflected the larger societal (generic) norm of wearing a club shirt as more acceptable than the act that violated the larger norm, even when both acts deviated from the in-group norm. There was no interaction with age.

#### *Justifications for the Evaluation of the Deviant Act*

The top three justifications used by participants to reason about the evaluation of the deviant act were analyzed to test hypotheses regarding differences by condition, age, and gender for participants' reasoning about their evaluation of the deviant act (for the means and standard deviations, see online supporting information Table S1). Analyses for justifications were conducted as a function of whether participants viewed the deviant act as okay or not okay. Okay or not okay act evaluations were based on a midpoint split of 3.5 for responses to a Likert scale ranging from 1 = *really not okay* to 6 = *really okay*. Follow-up tests were conducted with pairwise comparisons, which are reported as well. Four 2 (age group)  $\times$  2 (gender)  $\times$  2 (act evaluation)  $\times$  3 (reasoning) ANOVAs with repeated

measures on the last factor were conducted for each deviance condition separately (equal, unequal, traditional, nontraditional).

*Moral conditions.* To test hypotheses that participants who thought that the equal deviant act was okay would use different reasons than participants who thought that the equal deviant was not okay, a 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female)  $\times$  2 (act evaluation: okay, not okay)  $\times$  3 (reasoning: fairness, group functioning, autonomy) ANOVA was conducted with repeated measures on the last factor. Confirming our hypotheses, an interaction effect was found revealing that participants who evaluated the deviant act of espousing equality as okay (91% of fourth graders and 76% of eighth graders) used different justifications than participants who evaluated the act as not okay,  $F(2, 704) = 47.62, p < .001, \eta^2 = .11$  (see Figure 4a).

As shown in Figure 4a, participants who evaluated the act as *okay* used *fairness reasoning* ("Because she wants to give the same amount to each group to be fair to the other group") significantly more than group functioning and autonomy reasoning,  $ps < .001$ , and autonomy significantly more than group functioning,  $p < .001$ . Participants who evaluated the act as *wrong* used mostly *group functioning* reasons ("It would disrupt the group"),  $ps < .001$ . Thus, children and adolescents used different forms of reasoning to evaluate deviance from a group. Those participants who supported challenging the unequal group norm viewed it as fair, but those who were critical of challenging the group stated that it was because the in-group member should go along with the group. There were no age differences.

Similarly, to test for differences in reasoning in the unequal condition, a 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female)  $\times$  2 (act evaluation: okay, not okay)  $\times$  3 (reasoning: fairness, group functioning, autonomy) ANOVA was conducted with repeated measures on the last factor, revealing an interaction effect for Act Evaluation  $\times$  Reasoning,  $F(2, 694) = 54.43, p < .001, \eta^2 = .13$  (see online supporting information Table S1). Participants who evaluated the act to promote unequal allocations as not okay used primarily fairness ("He is just being greedy, which is not fair") in their reasoning ( $ps < .001$ ). In contrast, participants who evaluated the act as okay (31% of fourth graders and 49% of eighth graders) used more group functioning ("They would like how she wants her group to get more money") and autonomy ("He has his personal opinions";  $p < .05$ ) than fairness ( $p < .01$ ) in their reasoning (see Figure 4a).

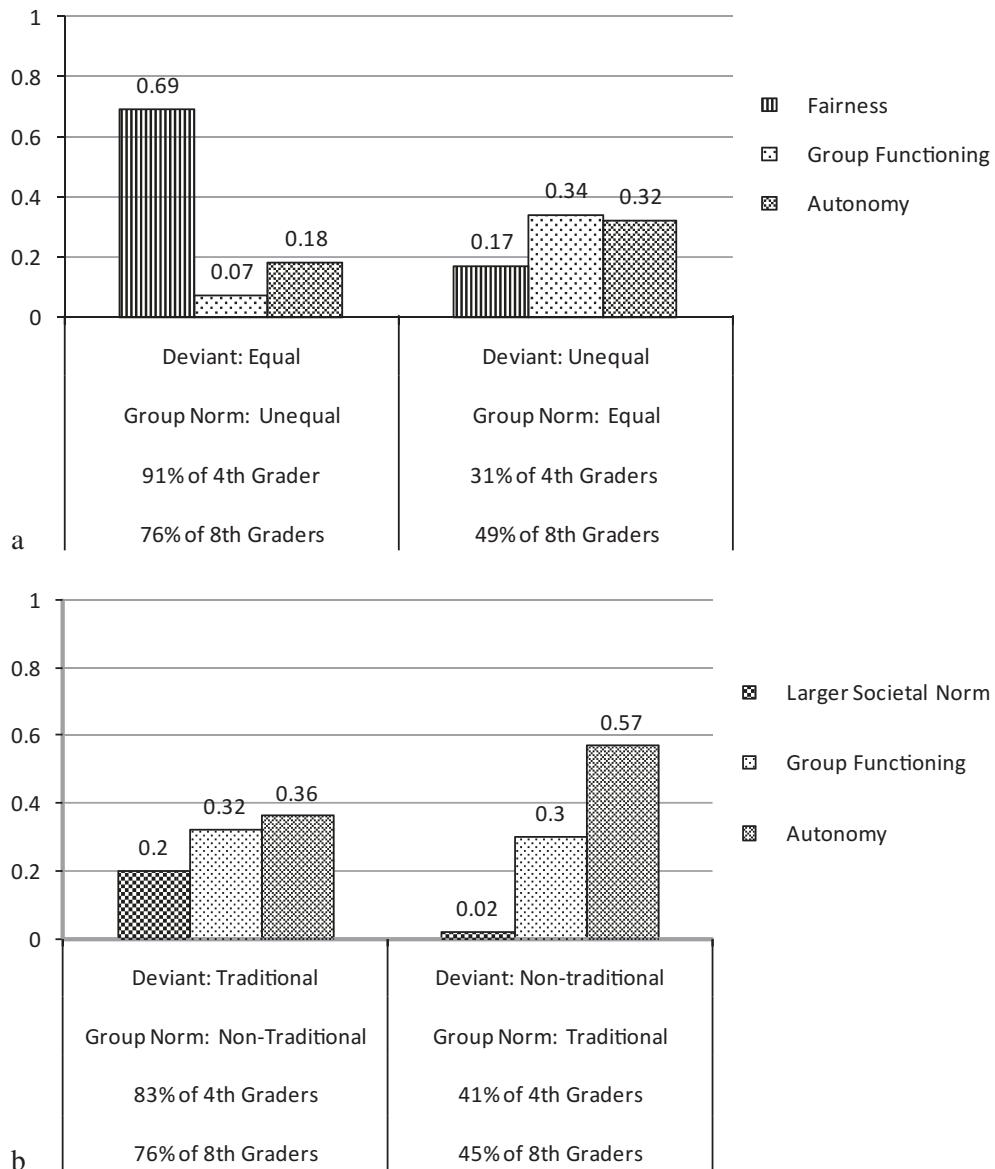


Figure 4. Proportional use of justifications for evaluating the deviant act as okay for (a) moral condition and (b) social-conventional condition.

Note. Percentage of participants reflects the sample that viewed the act as okay.

*Social-conventional conditions.* What reasons did children and adolescents use to evaluate a group member who deviated from the dress codes of the group? Similarly, to test for differences in reasoning in the traditional and nontraditional condition, 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female)  $\times$  2 (act evaluation: okay, not okay)  $\times$  3 (reasoning: larger societal norm, group functioning, autonomy) ANOVAs were conducted with repeated measures on the last factor for both the traditional and nontraditional conditions (two separate ANOVAs). Participants who thought that it was wrong to wear the shirt when the group norm was to not wear

it used mostly group functioning reasons,  $F(2, 726) = 13.75, p < .001, \eta^2 = .03$ , whereas participants who thought that it was okay (83% of fourth graders, 76% of eighth graders) to wear the shirt used all three forms of reasoning (see Figure 4b).

For the nontraditional deviant,  $F(2, 712) = 71.08, p < .001, \eta^2 = .10$ , participants who evaluated the act as not okay used primarily group functioning ( $p < .001$ ), whereas participants who evaluated the act as okay (41% of fourth graders, 45% of eighth graders) used primarily autonomy ("I like people that do their own thing and do not do what everyone else is doing"; see Figure 4b). Although

participants used primarily autonomy reasoning when they evaluated the nontraditional act as okay, pairwise comparisons revealed all pairs were significantly different,  $p < .001$ . Thus, for both social-conventional norms, when deviation was viewed as unacceptable, this was based on group-functioning reasons.

### *Intergroup Dynamics*

Three assessments were used to analyze participants' inclusion decisions: (a) *group inclusion* (forced choice decision for whom the group should invite: in-group deviant or out-group member supporting the in-group norm), (b) *group inclusion justification* (children's justifications), and (c) *individual preference* (participants' own preference: "Who do you think you would like better?"). Conditions in these analyses represent the norm of the group depicted. Thus, for the group inclusion and individual preference assessments, participants chose between the gender out-group member who supported the norm of the group depicted in the story (assigned a value of 1) and the gender in-group member who deviated from the group's norm (assigned a value of 0). For instance, in the equal condition for a boys group, the group norm was to be equal. The in-group member was a boy who wanted to split the money unequally and the out-group member was a girl who wanted to split the money equally.

For this inclusion assessment, four 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female) ANOVAs were conducted separately for each deviance condition. For the individual preference assessment, four 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female)  $\times$  2 (assessment: group inclusion, individual preference) ANOVAs with repeated measures on the last factor were conducted to compare responses to the group inclusion and individual preference assessment for each condition (for the means and standard deviations, see online supporting information Table S2).

### *Group Inclusion: Moral Conditions*

Did participants think their group should include an in-group member who wants to divide resources unequally (i.e., giving more to the in-group and less to the other group) or an out-group member who wants to divide equally? To answer this question when the group norm was equal distribution, a 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female) ANOVA was conducted. Main effects for

age,  $F(1, 370) = 12.72, p < .001, \eta^2 = .03$ , and gender,  $F(1, 370) = 4.02, p < .05, \eta^2 = .01$ , were found. Younger children chose the moral equal out-group member more than did adolescents (see Figure 5a). The younger children overwhelmingly viewed it as a better choice to invite the gender out-group member who also wanted an equal allocation, over a gender in-group member who wanted an unequal allocation, although adolescents were less willing to invite the equal out-group member (younger:  $M = 0.93, SD = 0.25$ ; older:  $M = 0.78, SD = 0.42$ ). Furthermore, female participants were more likely than male participants to decide that the group should invite the moral equal out-group member (girls:  $M = 0.87, SD = 0.34$ ; boys:  $M = 0.78, SD = 0.42$ ).

To analyze the norm condition in which the group espoused an unequal distribution, we conducted a 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female) ANOVA, which revealed a main effect for age in the unequal condition,  $F(1, 368) = 6.78, p = .01, \eta^2 = .01$ . Consistent with our theoretical models, older participants more often than younger children chose an unequal *out-group* member over an equal in-group member (younger:  $M = 0.41, SD = 0.49$ ; older:  $M = 0.57, SD = 0.50$ ; see Figure 5a). This decision resulted in a mixed-gender group but maintenance for the in-group norm (more resources for the in-group). To this extent, adolescents were more focused on the in-group benefits for the allocation of resources than were younger children.

### *Group Inclusion: Social-Conventional Conditions*

We also conducted a 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female) ANOVA for the traditional and nontraditional group norms. In contrast to the moral conditions, no gender or age differences were found for the traditional and nontraditional dress code norms. The majority of all children wanted the person who would match the group norm about the dress code more than the person who would match the gender identity (whether the group wanted to wear the shirt or not wear it, participants chose to pick the out-group member who went along with the group; see Figure 5b). Overall, social-conventional group norms were more important than gender group membership.

### *Group Inclusion Justification*

The top three justifications used by participants to reason about their inclusion decisions were analyzed

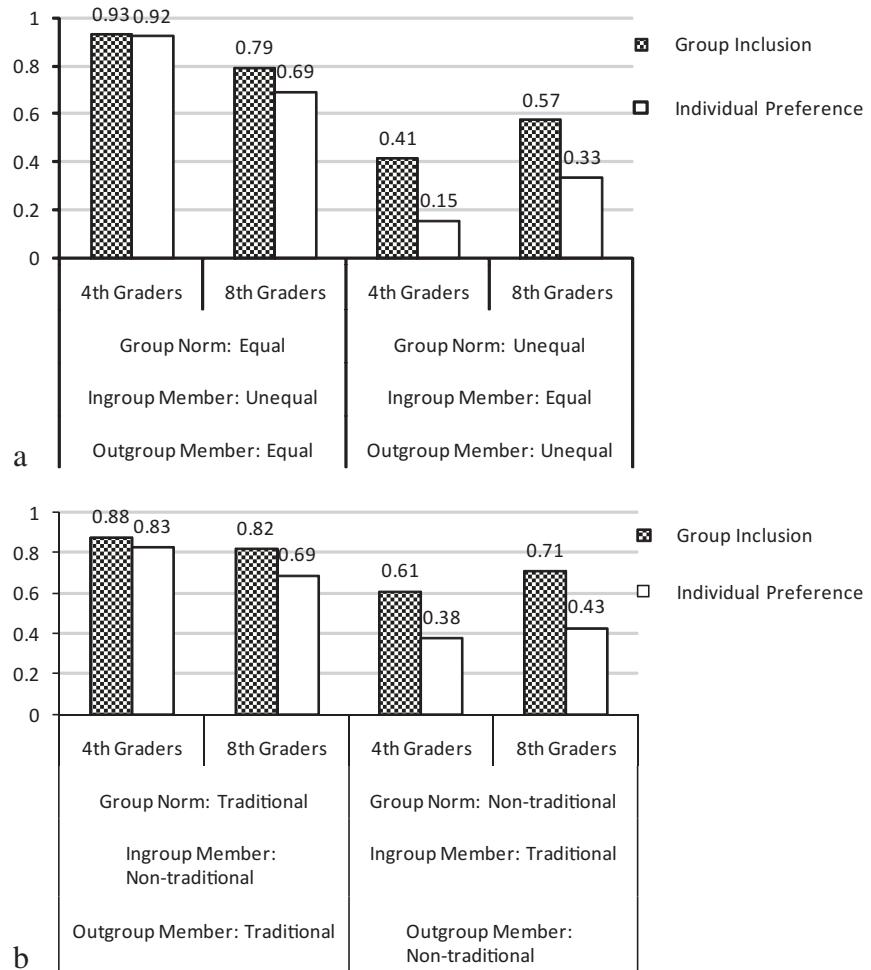


Figure 5. Proportion of participants choosing or preferring the out-group member who matches the group norm, by age group for (a) moral condition and (b) social-conventional condition.

to test hypotheses regarding differences by condition, age, and gender. What was of interest were the type of justifications used as a function of whether participants chose the gender in-group member of the group who went against the group's norm or chose the gender out-group member who supported the group's norm. Follow-up tests were conducted with pairwise comparisons, which are reported as well. Four 2 (age group)  $\times$  2 (gender)  $\times$  2 (gender group membership)  $\times$  3 (reasoning) ANOVAs with repeated measures on the last factor were conducted for each condition separately (equal, unequal, traditional, nontraditional). In this case, condition represented the norm of the group depicted (for the means and standard deviations, see online supporting information Table S3).

*Moral conditions.* Unlike evaluating deviance, participants often used *gender group identity* when justifying which group member they would choose

to include. Thus, this analysis revealed how in-group bias played a role in children's choices. For the moral equal norm condition (i.e., group had a norm of equality), a 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female)  $\times$  2 (gender group membership: in-group, out-group)  $\times$  3 (reasoning: fairness, gender group identity, group functioning) ANOVA was conducted with repeated measures on the last factor, and revealed a gender group Membership  $\times$  Justification interaction,  $F(2, 702) = 12.113, p < .001, \eta^2 = .03$ . Participants who chose the unequal in-group member used gender group identity (26%) to justify their response more often than fairness (6%), and this pattern was reversed for those who chose the equal out-group member (see Figure 6a). When choosing someone who was part of the in-group, but preferred to distribute unequally the reasons for choosing the in-group member were related to gender identity

("Keep the group all boys") as well as group functioning.

In contrast, when the same ANOVA was conducted for the unequal group norm condition, a significant Justification  $\times$  Gender Group membership interaction,  $F(2, 698) = 494.45, p < .001, \eta^2 = .58$ , was found. Participants who chose the equal in-group member used fairness reasoning, and significantly more so than using group functioning and gender group identity reasoning (see Figure 6a). Thus, some participants chose to include an in-group member, who was deviant, by focusing on maintaining gender group membership. When the in-group member espoused equal distribution participants rarely referenced gender group identity; instead, they focused on fairness. This finding indicated that a decision that may appear to have been driven by in-group bias (choosing a girl for a girls group) may, in fact, have been related to the norms which that

in-group member espoused, and *not* solely by that member's identity as an in-group member.

*Social-conventional conditions.* Children and adolescents again focused on *gender group identity* in their reasoning about traditional norms. A 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female)  $\times$  2 (gender group membership: in-group, out-group)  $\times$  3 (reasoning: fairness, gender group identity, group functioning) ANOVA was conducted with repeated measures on the last factor for both the traditional and nontraditional group norm conditions. An interaction effect in the traditional group norm condition for Gender Group Membership  $\times$  Justification,  $F(2, 686) = 176.22, p < .001, \eta^2 = .33$ , indicated that participants who chose to invite the nontraditional in-group member used more gender group identity reasoning ( $ps < .001$ ), whereas those who chose to include the traditional out-group member used primarily group functioning to

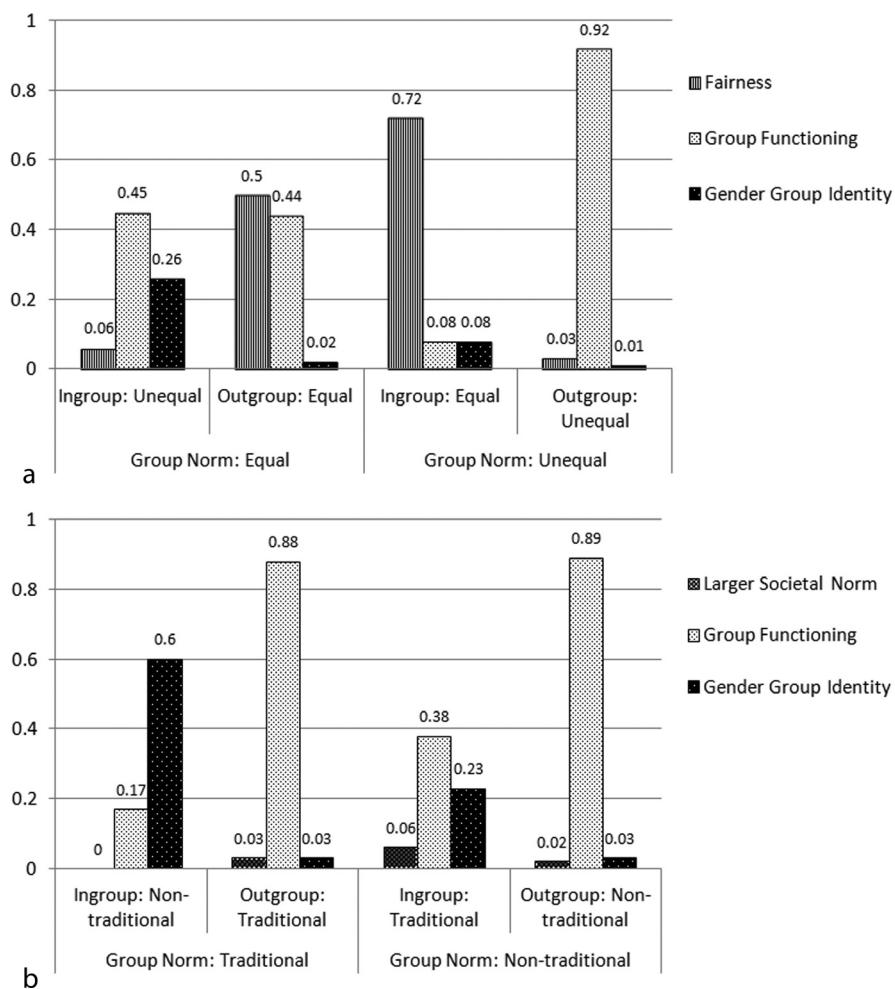


Figure 6. Proportional use of justifications for inclusion choice for (a) moral condition and (b) social-conventional condition.

justify their choice (see Figure 6b). Those who chose the out-group member used significantly more group functioning reasoning than gender group identity and larger societal norm,  $ps < .001$  (see Figure 6b).

The ANOVA conducted for the nontraditional group norm condition revealed an interaction effect for Gender Group Membership  $\times$  Justification,  $F(2, 704) = 10.288, p < .001, \eta^2 = .23$ . Participants who chose to include the out-group member mostly used group functioning ( $ps < .001$ ) to reason about their choice (see Figure 6b). Follow-up tests revealed that participants who chose the in-group member used group functioning significantly more than both gender group identity,  $p < .05$ , and larger societal norm,  $p < .01$ . Children and adolescents were willing to pick a member who was part of the gender in-group gender even when they were nontraditional regarding the dress norm for the group.

#### *Group Inclusion Versus Individual Preference*

To test the hypothesis that children's and adolescents' individual preferences for the potential group members would differ from their decisions about who they thought the group should include, four 2 (age group: fourth, eighth)  $\times$  2 (gender: male, female)  $\times$  2 (measure: group inclusion, individual preference) ANOVAs were conducted with repeated measures on the last factor (one for each group norm condition). Main effects for this assessment were found for all conditions: equal,  $F(1, 363) = 5.66, p < .05, \eta^2 = .01$ ; unequal,  $F(1, 364) = 72.05, p < .001, \eta^2 = .16$ ; traditional,  $F(1, 343) = 10.17, p < .01, \eta^2 = .02$ ; and nontraditional,  $F(1, 359) = 52.31, p < .001, \eta^2 = .12$  (see Figures 5a and b). The norms that did not reflect generic principles, unequal and nontraditional, showed the largest effect sizes. For the equal group norm condition, although participants overall thought the group should invite the equal out-group member, they were less likely to support this decision from their own individual perspective (group inclusion:  $M = 0.83, SD = 0.38$ ; individual preference:  $M = 0.77, SD = 0.42$ ). This finding was driven by the adolescents' judgments: Eighth graders expected the group would prefer the equal out-group member more than they would individually prefer to include this member,  $F(1, 363) = 13.15, p < .001, \eta^2 = .03$ . There were no differences for fourth graders between their judgments about what the group would do and their own individual preference for the condition in which the group espoused equal allocation of resources. For the unequal allocation evaluations, both age groups expected that the groups would

prefer the unequal member ( $M = 0.52, SD = 0.50$ ) more than they would do so ( $M = 0.27, SD = 0.44$ ).

For the traditional norm, children's own preferences were not different from their expectation of the groups, but adolescents were more likely to disagree with the group, with more adolescents preferring the in-group nontraditional member,  $F(1, 343) = 19.09, p < .001, \eta^2 = .05$ . All participants expected that groups would prefer a nontraditional out-group member more than they would individually, as their own preference would be for the in-group member who differed from the group norm of being nontraditional (group inclusion:  $M = 0.67, SD = 0.47$ ; individual preference:  $M = 0.42, SD = 0.50$ ).

In addition, a Gender  $\times$  Assessment interaction showed that females' evaluations were more differentiated regarding their group inclusion decision and individual preference choices for the nontraditional out-group member than were those of boys,  $F(1, 361) = 14.24, p < .001, \eta^2 = .03$  (group inclusion:  $M_{\text{female}} = 0.63, SD = 0.48, M_{\text{male}} = 0.71, SD = 0.46$ ; individual preference:  $M_{\text{female}} = 0.33, SD = 0.47, M_{\text{male}} = 0.55, SD = 0.50$ ).

## Discussion

The findings of this study provide novel information about children's and adolescents' intragroup and intergroup judgments by demonstrating that group loyalty takes a different form depending on whether the norm of the group is about morality (allocation of resources) or about social conventions (traditions about club shirts). Furthermore, group identity was not defined solely by group membership (gender). In fact, overall, the domain of the norm, along with the level of the norm (generic or group specific), were the most important factors weighed by participants. These findings indicate that, contrary to extensive theorizing about intergroup attitudes, group identity and group norms have to be understood in terms of the social context; not all forms of deviance from groups are viewed the same by children.

Furthermore, children and adolescents support peers who deviate from the norms of the group when the norms of the group are viewed as unequal or nontraditional, and they view deviance as even more legitimate when the group norms are about morality than about social conventions. Surprisingly, while in-group bias based on gender was documented in conditions in which participants had to choose between an in-group and out-group member, even this bias appeared to be in the service of preserving

group norms. Thus, group membership, such as gender, is often not the most salient factor for children when making decisions about inclusion and exclusion, contrary to extensive theorizing about group identity defined as group membership.

In line with the subjective group dynamics model, age-related changes in group dynamics knowledge were revealed, with younger children more focused on the generic norms of equality and traditions than on group-specific norms in contrast to adolescents (Abrams & Rutland, 2008). Adolescents considered group-specific norms to be more important than did younger children, and gave priority to preserving group-specific norms in both the moral and social-conventional contexts. The findings indicated that social inclusion and exclusion decisions are contextualized by children and adolescents who take the type of norm of the group as well as group membership (i.e., their own group identity) into account. Moreover, with age, adolescents focus on group-specific norms that younger children do not take into account in the same way. We interpret this finding as reflecting adolescents' increasing knowledge about group dynamics and group functioning (Rutland et al., 2010). Furthermore, with age, adolescents become focused on the specific norms that their social groups generate (Horn, 2006), which leads them to reject deviance that challenges in-group norms, even when the norms are consistent with larger generic ones.

### *Intragroup Dynamics*

Intragroup dynamics referred to evaluations of in-group members who deviated from group norms. The question was whether children and adolescents would negatively or positively evaluate individuals who rejected the norms of the group, and whether this varied by the domain of the norm or the level (generic or group-specific). In the past, subjective group dynamics has shown that, with age, children dislike in-group deviants who reject group norms (Abrams & Rutland, 2008). As expected, children disliked in-group deviants in the social-conventional context, when the norm pertained to club shirts. However, participants were supportive of in-group deviants in the moral context when the norm pertained to allocation of resources. Individuals negatively evaluated deviants who rejected equal allocation norms and espoused inequality.

Yet, with age, adolescents were more positive toward the deviants espousing inequality due to their view that there were in-group benefits resulting from the allocation that favored the in-group. This finding

is supported by behavioral economics research, which has found that 9-year-old children are strong proponents of equal allocations, which declines by age 13 (Almås, Cappelen, Sørensen, & Tungodden, 2010). The present study, however, extends the study by Almås et al. (2010) in new directions since children and adolescents were asked about two types of deviant acts, equal (generic) and unequal (group-specific) allocation, challenging group norms in both directions. Analyses for social reasoning revealed that explanations for the support of equal allocation were based on fairness reasoning ("He is just being greedy which is not fair") and explanations for the support of unequal allocation were based on group functioning ("She wants her group to get more money and they would like that"). Importantly, though, adolescents still approved of the equal deviant more than the unequal deviant act.

Children and adolescents were willing to support deviant acts that endorsed equal allocation and group traditions, but the reasoning for these two types of deviant acts was different. When asked about a lone deviant who challenged the traditions of a group by wearing a club shirt when the group rejected it, children were supportive, but used different reasoning to explain their judgments from allocation decisions. Instead of fairness reasoning, which was used heavily in supporting the equal deviant, children and adolescents primarily explained their view based on group functioning, with participants who supported the decision to not wear the shirt also relying on considerations about assertion of autonomy. These findings show that children's intragroup judgments are more complex than is often characterized in the literature, particularly regarding decisions about in-group favoritism.

### *Intergroup Dynamics*

Intergroup dynamics referred to the decisions about the relative priority of group norms and group identity. When asked who the group should pick, an in-group member who deviated from the group norms or an out-group member who supported the in-group norms, children and adolescents weighed multiple variables. In contrast to the prevailing literature about in-group preferences, children and adolescents chose out-group members (over in-group members) who supported group norms about equal allocation and group traditions.

Overall, the generic level of the norms was salient for children and adolescents; thus, they were more likely to choose out-group members who

supported generic norms than in-group members who deviated from the norms, subordinating considerations of group identity based on gender. This is quite different from any other findings in the literature because it reveals the complexity of children's knowledge and priority of group identity in the context of exclusion decisions. Participants were willing to integrate the group on the basis of gender (including a boy into a girls group, or vice versa) in order to preserve group norms about equality and traditions.

Furthermore, consistent with our developmental expectations, age-related patterns were observed with participants' individual preferences. These findings revealed that older participants showed significant differences between their group expectations and individual preferences. Adolescents were more likely than children to choose an out-group member, over an in-group member, who advocated an unequal distribution of resources in line with their in-group's norm. Yet, only one third of the adolescents preferred the unequal out-group member when asked for their own preference (as opposed to who the group would choose). This finding indicated that although adolescents are becoming aware of how social groups work, they are still concerned about fairness and morality when expressing their own personal intergroup judgments. These findings also reveal the development of a "theory of mind about groups" (Mulvey et al., *in press*) in adolescence (also referred to as "theory of social mind"; see Abrams et al., 2009) in that, with age, adolescents differentiated between their own perspective and the perspective of the group. For the equal and traditional conditions, children's judgments about individual preferences were not significantly different from their view about who the group would include. In contrast adolescents differentiated between their own individual preferences (about whom to include) from their view about the group's decision about whom to include. Extending this finding in new ways to contexts that vary by group membership and type of moral or social-conventional norm would be quite fruitful and revealing of the pervasiveness of age-related changes regarding individual preferences and group expectations.

Although developmental age-related patterns were found in this study, it is important to remember that our findings showed that social group decisions by both children and adolescents were still informed by participants' moral priority. This was evidenced by their choice of an out-group member who supported equal allocation over an in-group member who endorsed unequal allocation. Not only

did children and adolescents support acts of deviance by in-group members who upheld a moral principle but they went so far as to pick a member of an out-group to maintain the equal allocation principle. Thus, both male and female participants preferred to include a boy in a girls' group (or a girl for a boys' group) to maintain consensual support for the in-group norm of equal allocation. In addition, girls were even more willing than boys to pick the out-group member who endorsed equality, which reflects previous findings that girls are, at times, more inclusive than are boys (Killen, Sinno, & Margie, 2007). In general, children were more focused on issues of strict equality, although older participants showed more evidence of balancing concerns about equity, group identity, and group functioning.

Future research to determine the various benefits to the group that are viewed as legitimate for these types of decisions would be fruitful. In addition, it would be interesting to test whether an altruistic allocation of resources (20/80 instead of 80/20) would be chosen by children or adolescents. Our decision point was strict equality (50/50) or a benefit to the in-group (80/20). There may be contexts in which an altruistic decision would be preferred by participants and warrants empirical examination.

In this study, children's intergroup evaluations were not always driven by group membership (e.g., gender in this study). It would be interesting to test this model with other group memberships that vary in salience for children, by general groups such as ethnicity, nationality, or religion, for example, or by local groups such as school affiliation or social cliques. Does the larger moral norm take priority with groups structured around different memberships, and are children willing to reject a deviant in-group member in these conditions? Other future directions include varying the type of moral and social-conventional norms for investigation. Nesdale and Lawson (2011) have examined the role of exclusion norms that are supported or rejected by a school, finding that it impacts children's inclusion decisions. Other types of moral norms to examine could include norms about prejudice and cultural membership (Hitti, Mulvey, & Killen, 2011b).

### Conclusions

Overall, the findings contribute to understanding the developmental origins of social knowledge about groups, and specifically about intra- and intergroup judgment in the context of peer encounters. In line

with our expectations, adolescents gave more attention than children to group dynamics and group norms when forming judgments and reasoning, though they still showed evidence of having moral priorities. They were more adept than children at balancing norms at different levels and thinking simultaneously about the expectations of both their social group and the wider community (e.g., school or broader society). Our findings indicate that adolescents, unlike children, recognized that there can be a friction between group-specific and generic norms, especially in the moral domain, and reconciled this tension by showing that concerns about group identity and morality are both important criterion for judgment. These findings are comprehensible from a developmental viewpoint since adolescents have experienced more situations in which the tensions between multiple social group and wider moral concerns need to be worked out (Killen & Rutland, 2011; Turiel, 2002). We would even go so far as to suggest that adolescents show signs of a developing something akin to a "theory of mind about groups" (see Mulvey et al., in press).

One outcome of the developmental picture documented in this study is that new methods and assessments could be applied to studies on intra- and intergroup judgments with adults (Levy, Chiu, & Hong, 2006). If children develop the ability to make judgments that take the group's concerns into account, while also considering generic moral norms, then adults may as well. Yet very little research with adults, using similar methods to those used in the present study, has focused on the interplay between group identity, group norms, and morality when people form intra- and intergroup judgments in multifaceted everyday situations. Developmental intergroup research draws on social psychological theories for formulating hypotheses and the findings, in turn, have the potential to expand research approaches throughout the life span. Issues of inclusion and exclusion are central to social life and are related to social well-being and healthy adjustment to social group contexts such as school, work, and the community. Understanding the complex relations between group identity, group norms, and morality will provide basic knowledge for both reducing prejudice and enhancing social justice over the lifetime.

## References

Abrams, D., & Rutland, A. (2008). The development of subjective group dynamics. In S. R. Levy & M. Killen (Eds.), *Intergroup relations and attitudes in childhood through adulthood* (pp. 47–65). Oxford, England: Oxford University Press.

Abrams, D., Rutland, A., Ferrell, J. M., & Pelletier, J. (2008). Children's judgments of disloyal and immoral peer behavior: Subjective group dynamics in minimal intergroup contexts. *Child Development*, 79, 444–461.

Abrams, D., Rutland, A., Pelletier, J., & Ferrell, J. (2009). Children's group nous: Understanding and applying peer exclusion within and between groups. *Child Development*, 80, 224–243. doi:10.1111/j.1467-8624.2008.01256.x

Almås, I., Cappelen, A. W., Sørensen, E. Ø., & Tungodden, B. (2010). Fairness and the development of inequality acceptance. *Science*, 328, 1176–1178. doi:10.1126/science.1187300

Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence*, 21, 166–179. doi:10.1111/j.1532-7795.2010.00721.x

Hitti, A., Mulvey, K. L., & Killen, M. (2011a). Exclusion in adolescent peer relationships. In R. Levesque (Ed.), *Encyclopedia of adolescence* (pp. 2783–2792). New York: Springer Press.

Hitti, A., Mulvey, K. L., & Killen, M. (2011b). Social exclusion and culture: The role of group norms, group identity and fairness. *Anales de Psicología*, 27, 587–599.

Horn, S. (2003). Adolescents' reasoning about exclusion from social groups. *Developmental Psychology*, 39, 71–84.

Horn, S. (2006). Group status, group bias, and adolescents' reasoning about treatment of others in school contexts. *International Journal of Behavioral Development*, 30, 208–218.

Killen, M. (2007). Children's social and moral reasoning about exclusion. *Current Directions in Psychological Science*, 16, 32–36.

Killen, M., Margie, N. G., & Sinn, S. (2006). Morality in the context of intergroup relationships. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 155–183). Mahwah, NJ: Erlbaum.

Killen, M., & Rutland, A. (2011). *Children and social exclusion: Morality, prejudice, and group identity*. New York: Wiley-Blackwell.

Killen, M., Sinn, S., & Margie, N. G. (2007). Children's experiences and judgments about group exclusion and inclusion. In R. V. Kail (Ed.), *Advances in child development and behavior* (pp. 173–218). New York: Elsevier.

Levy, S. R., Chiu, C. Y., & Hong, Y. Y. (2006). Lay theories and intergroup relations. *Group Processes and Intergroup Relations*, 9, 5–24.

Levy, S. R., & Killen, M. (2008). *Intergroup attitudes and relations in childhood through adulthood*. Oxford, England: Oxford University Press.

Mulvey, K. L., Hitti, A., & Killen, M. (2010). The development of stereotyping and exclusion. *Wiley Interdisciplinary Reviews: Cognitive Science*, 1, 597–606. doi:10.1002/wics.66

Mulvey, K. L., Hitti, A., & Killen, M. (in press). Intentionality, morality, and exclusion: How children navigate

the social world. In M. Banaji & S. Gelman (Eds.), *Navigating the social world: What infants, children and other species can teach us*. New York: Oxford University Press.

Nesdale, D. (2004). Social identity processes and children's ethnic prejudice. In M. Bennett & F. Sani (Eds.), *The development of the social self* (pp. 219–245). New York: Psychology Press.

Nesdale, D. (2007). The development of ethnic prejudice in early childhood: Theories and research. In O. Saracho & B. Spodek (Eds.), *Contemporary perspectives on socialization and social development in early childhood education* (pp. 213–240). Charlotte, NC: Information Age.

Nesdale, D., Durkin, K., Maass, A., Kiesner, J., Griffiths, J., Daly, J., et al. (2010). Peer group rejection and children's outgroup prejudice. *Journal of Applied Developmental Psychology*, 31, 134–144. doi:10.1016/j.appdev.2009.11.004

Nesdale, D., & Lawson, M. J. (2011). Social groups and children's intergroup attitudes: Can school norms moderate the effects of social group norms? *Child Development*, 82, 1594–1606.

Nucci, L. P. (1981). The development of personal concepts: A domain distinct from moral or societal concepts. *Child Development*, 52, 114–121.

Posada, R., & Wainryb, C. (2008). Moral development in a violent society: Colombian children's judgments in the context of survival and revenge. *Child Development*, 79, 882–898.

Rutland, A., Killen, M., & Abrams, D. (2010). A new social-cognitive developmental perspective on prejudice: The interplay between morality and group identity. *Perspectives on Psychological Science*, 5, 279–291. doi:10.1177/1745691610369468

Smetana, J. G. (1995). Morality in context: Abstractions, ambiguities, and applications. In R. Vasta (Ed.), *Annals of child development* (Vol. 10, pp. 83–130). London: Jessica Kingsley.

Smetana, J. G. (2006). Social-cognitive domain theory: Consistencies and variations in children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 119–154). Mahwah, NJ: Erlbaum.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks-Cole.

Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, England: Cambridge University Press.

Turiel, E. (2002). *The culture of morality: Social development, context, and conflict*. New York: Cambridge University Press.

Verkuyten, M., & Sloot, L. (2008). Muslim and non-Muslim adolescents' reasoning about freedom of speech and minority rights. *Child Development*, 79, 514–528.

Wainryb, C., Shaw, L., Laupa, M., & Smith, K. R. (2001). Children's, adolescents', and young adults' thinking about different types of disagreements. *Developmental Psychology*, 37, 373–386.

### Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

**Table S1.** Means and Standard Deviations for Proportion of Justifications Used for Evaluations of the Deviant Act.

**Table S2.** Proportions and Standard Deviations for Choosing or Preferring an Outgroup Member with a Matching Ingroup Norm.

**Table S3.** Proportions and Standard Deviations for the Justifications Used for Choosing an Outgroup or Ingroup Member.