



ELSEVIER

Contents lists available at ScienceDirect

Journal of Experimental Child Psychology

journal homepage: www.elsevier.com/locate/jecp

Children's expectations about conventional and moral behaviors of ingroup and outgroup members

Zoe Liberman^{a,b,*}, Lauren H. Howard^{a,c}, Nathan M. Vasquez^{a,d},
Amanda L. Woodward^a

^a University of Chicago, Chicago, IL 60637, USA

^b University of California, Santa Barbara, Santa Barbara, CA 93106, USA

^c Franklin & Marshall College, Lancaster, PA 17603, USA

^d Yale University, New Haven, CT 06520, USA

ARTICLE INFO

Article history:

Available online xxxx

Keywords:

Action attribution

Bias

Convention

Intergroup cognition

Morality

Stereotype

ABSTRACT

Although children demonstrate robust social preferences for ingroup members early in ontogeny, it is not yet clear whether these preferences are based on children generally liking people who are more familiar or on children holding specific biased beliefs about people in their ingroup as compared with people in their outgroup. Here, we investigated the origins of humans' propensity to link ingroup members with positive behaviors and outgroup members with negative behaviors by asking whether linguistic group membership influences children's expectations of how people will act. Our findings indicate that the effect of group membership on children's expectations about other people's actions varies across both domain (moral and conventional) and age. Whereas all children in our study (3- to 11-year-olds) expected ingroup members to be more likely to conform to social conventions and expected outgroup members to be more likely to break conventional rules, only older children (7- to 11-year-olds) used social group membership to form expectations about which people would be more likely to act morally versus immorally. Thus, younger children do not automatically form biased character judgments based on group membership, although they do understand that social group membership is particularly relevant for reasoning

* Corresponding author at: Psychological & Brain Sciences Department, University of California, Santa Barbara, Santa Barbara, CA 93106, USA.

E-mail address: zoe.liberman@psych.ucsb.edu (Z. Liberman).

<http://dx.doi.org/10.1016/j.jecp.2017.03.003>

0022-0965/© 2017 Elsevier Inc. All rights reserved.

about which people will be more likely to act in line with social norms.

© 2017 Elsevier Inc. All rights reserved.

Introduction

The ability to categorize others into social groups is an invaluable tool that allows humans to make myriad inferences about their social world (e.g., Fiske, Cuddy, Glick, & Xu, 2002; Uleman, Adil Saribay, & Gonzalez, 2008; Zebrowitz, Bronstad, & Lee, 2007). Although social categorization can increase an individual's level of self-esteem (e.g., Abrams & Hogg, 1988), and can help people to make important decisions such as who to befriend and with whom to share resources (e.g., Brewer, 1999), social categorization can also lead to negative consequences such as prejudice and discrimination against outgroup members (e.g., Brewer, 1979; Tajfel, Billig, Bundy, & Flament, 1971). In addition to holding stereotypes against and inferring negative qualities for outgroup members (e.g., Doise et al., 1972), adults are more likely to view a single negative behavior done by someone in an outgroup as indicative of a trait-level character flaw of other members of that social group, a bias known as the "ultimate attribution error" (e.g., Hewstone, 1990; Pettigrew, 1979). Here, we investigated the origins of humans' propensity to link ingroup members with positive behaviors and outgroup members with negative behaviors by asking whether children demonstrate a tendency to associate outgroup members with negative actions and character traits.

Although a large body of research suggests that children and infants display explicit and implicit social preferences for people who are similar to themselves (e.g., Aboud, 2003; Baron & Banaji, 2006; Bigler, Jones, & Lobliner, 1997; Dunham, Baron, & Carey, 2011; Dunham, Chen, & Banaji, 2013; Kinzler, Dupoux, & Spelke, 2007; Mahajan & Wynn, 2012), these preferences could arise based merely on familiarity and do not necessarily indicate abstract reasoning that outgroup members have negative qualities. Specifically, it is possible to prefer people who are relatively more familiar, or similar to the self, because they feel socially safe, without expecting people who are dissimilar or unfamiliar to be fundamentally worse people with negative character traits. That is, ingroup love may arise separately from outgroup derogation (e.g., Brewer, 1999). On the other hand, some research suggests that children do form positively biased associations toward their ingroup and negatively biased associations toward the outgroup; they are better at recalling positive actions associated with ingroup members and negative actions associated with outgroup members (e.g., Corenblum, 2003; Dunham et al., 2011), and they are more likely to interpret an ambiguous action as negative when the perpetrator of the action is an outgroup member (e.g., Dunham & Emory, 2014). In these cases, when children are given the same information, group membership appears to bias children's construal of, and memory for, events. However, in all of these instances children were exposed to information about how the ingroup or outgroup members *actually acted*, meaning that these studies do not indicate whether people evaluate the ingroup as positive and the outgroup as negative in the absence of any information.

Recent work has asked children to make action attributions in the absence of concrete evidence in order to more directly ask whether children inherently attribute positive features to ingroup members and negative features to outgroup members. In these paradigms, children are introduced to an ingroup target and an outgroup target, are told that one of the targets engaged in a valenced (e.g., positive or negative) activity, and are then asked to guess which target was involved in the activity (e.g., "Who helped clean up spilled milk?" [see Baron & Dunham, 2015]). Results suggest that by 6 to 8 years of age, children tend to associate positively valenced information with ingroup members over outgroup members (e.g., Baron & Dunham, 2015; Dunham et al., 2011), whereas younger children (3- to 5-year-olds) are less likely to make these types of behavioral or trait attributions based on group membership (e.g., Patterson & Bigler, 2006; Richter, Over, & Dunham, 2016). However, even in studies where children demonstrate a bias, children were given trials that conflated different types of valenced

information, some of which would be indicative of character judgments (e.g., thinking that members of the outgroup are fundamentally worse people) and some of which would not. For example, in one set of studies, children were equally likely to associate ingroup members with positive actions (e.g., helping a friend with homework) and with positive outcomes (e.g., finding \$5 on the street), suggesting that children could be merely associating the ingroup with general positivity (Dunham et al., 2011) rather than making specific inferences that ingroup members are better people than outgroup members. Even in versions of these studies where all trials involved ascribing intentional actions to targets, researchers did not differentiate between actions that are moral (and therefore relevant to character judgments; e.g., “Who stole some money?”) and actions that are non-moral (and therefore not relevant to character judgments; e.g., “Who spilled some milk?”) (Baron & Dunham, 2015).

Children are able to differentiate between moral (harm-based) and non-moral conventional (rule-based) social norm violations from a young age (e.g., Turiel, 1983). For instance, 3- and 4-year-olds judge moral violations more harshly than conventional violations and rate moral (but not conventional) violations as wrong even in the absence of rules that explicitly forbid them (e.g., Lahat, Helwig, & Zelazo, 2012; Smetana, 1981). Children also understand that moral norms apply more broadly and cannot be circumvented; although they do not condemn someone for breaking a conventional rule after opting out of a game, they continue to condemn immoral behavior even if someone claims he or she is opting out of following the moral rule (Josephs & Rakoczy, 2016). Indeed, children create and transmit social conventional rules (Göckeritz, Schmidt, & Tomasello, 2014), but they know that these created rules are arbitrary and need to be adhered to only when the whole group has agreed to do so (Schmidt, Rakoczy, Mietzsch, & Tomasello, 2016).

More importantly, children understand that group membership can guide whether someone is beholden to a moral or conventional rule. For instance, children expect moral norms to be more likely than social conventional norms to apply to all people regardless of their group membership. By 3 years of age, children protest when either an ingroup or outgroup member breaks a moral rule, but they only protest conventional rule violations from ingroup members, indicating that they understand that conventions are meaningful within a social group but do not necessarily apply to all people (Schmidt, Rakoczy, & Tomasello, 2012). In addition, children think about moral norms differently when moral violations occur within a social group compared with when moral violations occur between social groups; children judge within-group harm as wrong even in the absence of rules, but they judge between-group harm as less wrong when there is no explicit rule against it (e.g., Rhodes & Chalik, 2013; see also Mulvey, 2016). This suggests that children expect members of the same social group to be obligated to avoid harming one another but do not necessarily expect this norm to transcend group lines. Overall, past work suggests that children may use social categories to guide their expectations of others' behavior differently when reasoning about conventions versus moral actions.

In the current study, we investigated whether children's action attributions for conventional and moral actions are differentially guided by group membership. We used an explicit action attribution task (see Dunham et al., 2011, for a similar method) and varied the group membership of the target (linguistic ingroup or outgroup), the domain of the action (moral or conventional), and the valence of the action (positive or negative). We hypothesized that if children understand that group members are beholden to the social conventions created by their group (e.g., Schmidt et al., 2012) but do not expect group membership to fundamentally alter a person's moral character, then children's action attributions would vary as a function of both group membership and action domain. Specifically, children would expect ingroup members to be more likely to follow conventional rules and outgroup members to be more likely to break conventional rules, but children would not use group membership as a basis for attributing moral actions. If, on the other hand, children assume that outgroup members may be fundamentally worse people who are morally suspect, then they might associate both positive conventional and positive moral actions with ingroup members and associate both negative conventional and negative moral actions with outgroup members. Indeed, in line with the ultimate attribution error (e.g., Hewstone, 1990), if participants associate outgroup members with immoral behaviors, then this might lead to downstream prejudice due to participants expecting a negative action by one member of a social group to be indicative of a negative personality trait shared by members of the entire outgroup.

We chose to use language as a cue to social group membership because sensitivity to language as a marker of social group begins early in ontogeny (e.g., Howard, Carrazza, & Woodward, 2014; Kinzler et al., 2007; Liberman, Woodward, & Kinzler, 2016) and because language is a more salient cue to group membership for infants and young children than are other commonly studied group cues such as race (e.g., Kinzler & Dautel, 2012; Kinzler, Shutts, DeJesus, & Spelke, 2009). In fact, children even evidence knowledge of language- and accent-based stereotypes (e.g., Kinzler & DeJesus, 2013a, 2013b), suggesting that they may expect people who come from different linguistic groups to act in different ways. In addition, using language as a cue to group membership enabled us to examine whether children form expectations about a target's likely actions using an unlabeled, ecologically valid cue to group membership. In particular, participants were introduced to targets who spoke their native language versus an unfamiliar language but were not given an explicit group label ("She is an English speaker") or any visual cues to group membership (having the ingroup member always wear an orange or green shirt) (e.g., Dunham et al., 2011).

Another important feature of this study is that we were able to recruit a large sample of children from a wide age range (3–11 years) in order to examine nuanced changes in group action attribution across development. Specifically, we first examined age as a continuous variable in our analysis to see whether there was gradual change over time in children's action attributions, and we then investigated differences between groups of younger (3–6 years) and older (7–11 years) children. This age split represents a time when children seem to undergo important changes both in reasoning about morality and in reasoning about social group membership, each of which is important in the current study. For example, by middle childhood (around 7 or 8 years of age), children's moral judgments become more sophisticated; children begin to rely less on outcome and more on intention (e.g., Costanzo, Coie, Grument, & Farnhill, 1973; Farnhill, 1974; Piaget, 1932; Zelazo, Helwig, & Lau, 1996). In addition, at around this same age, children begin showing more evidence of outgroup hate by choosing to selectively assign negative rewards to outgroup members rather than to ingroup members or to no one (Buttelmann & Bohm, 2014). By collecting a large sample of participants over quite a large age range, we were able to investigate how moral and conventional action attribution based on group membership changes across development.

Method

Participants

Participants were 287 children between 3 and 11 years old ($M = 7$ years 1 month, range = 3 years 2 months to 11 years 1 month; 162 girls) recruited from a large science museum in the U.S. Midwest. Due to variability in the daily number of visitors, we set our stopping criterion for data collection as the end of the day on which there were at least 40 participants in each of two age bins (younger: 3–6 years; older: 7–11 years) in each of the possible combinations of valence and domain (e.g., conventional positive). A legal guardian provided informed consent for each child before participating. According to demographic forms completed by parents, approximately 85% of participants were White. Because the study included language as a cue to group membership, with English speakers serving as ingroup members and French speakers serving as outgroup members, the sample included only participants who were exposed to English at least 90% of the time and who had no regular exposure to French. An additional 39 participants were tested but excluded from the final sample due to side bias (choosing the same side on all test trials).¹

Procedure

A single experimenter tested each participant on the museum floor, outside of a popular exhibit. Participants sat at a table next to the experimenter in front of a laptop and wore headphones

¹ In developmental studies, it is common to exclude participants who demonstrate such a side bias (e.g., Olson, Dunham, Dweck, Spelke, & Banaji, 2008). However, in the supplementary material we present the data analysis including all of these side bias children. The patterns of all the main effects hold when all children are included in the analyses.

throughout the study. Participants were randomly assigned to one of four conditions that varied in terms of domain (moral vs. conventional) and valence (positive vs. negative). We used a between-participants paradigm, where participants were presented with repeated trials of only one question type (e.g., moral positive). We chose this design because positive and negative intergroup judgments may develop on distinct trajectories (Aboud, 2003; Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001) and because we wanted to avoid task demands that could bias the results (e.g., we thought that providing children with behaviors of clearly contrasting valence, such as positive and negative moral actions, would make it easier for children to guess that we expected them to associate different groups with different types of actions).

Experimental stimuli were presented in Microsoft PowerPoint. On each trial, participants were shown still pictures of two same-gender children's faces side by side and were given information that one of the children spoke English and the other spoke French (see Fig. 1). Specifically, the experimenter pointed to each child one at a time, and the participant heard prerecorded instructions saying, "This kid sounds like this," which was followed by a voice clip of a child speaking in either fluent English or fluent French (child faces and voice clips were normed in past studies about social preferences for people based on linguistic group membership: Kinzler et al., 2007, 2009). Two trials featured pairs of male children, and two trials featured pairs of female children.

After being introduced to the languages spoken by the two target children, on each trial the experimenter asked the participant which of the two children did a particular action. For example, in the moral positive condition, a participant would hear, "Today, one of these girls helped somebody on the playground. Can you point to the girl who helped somebody on the playground?" The child's response was recorded as which target child he or she pointed to in response to the question (ingroup English speaker = 1, outgroup French speaker = 0). The participant was given four trials of the same type (moral positive, moral negative, conventional positive, or conventional negative), with each trial consisting of a different set of target children and a different valenced action. Therefore, each child could choose the ingroup on anywhere between zero and four trials. Moral and conventional vignettes were adapted from past studies (Danovitch & Bloom, 2009; Lahat et al., 2012), with moral actions being defined as actions that involved helping or harming other people and conventional actions being defined as actions that involved following or breaking non-harm-based rules (see Appendix B for all vignettes). Whether the English or French speaker was positioned on the left on the first trial and whether English or French was played first were counterbalanced across participants; after the first trial, the sides of speakers of each language switched on every trial.

Results

Preliminary analyses revealed no effect of the first language introduced (English vs. French) or the side of the English speaker on the first trial ($p_s > .71$), so subsequent analyses on children's choice of ingroup or outgroup targets were collapsed across these factors.

A multilevel mixed-effects logistic regression analysis was run to investigate whether group membership influenced participants' expectations about the types of actions people would likely perform. The model predicted choice of the ingroup target (binomial effect with ingroup = 1 and outgroup = 0) with domain (moral vs. conventional), valence (positive vs. negative), gender (male vs. female), and age (continuous, in months) as fixed factors and participant as a random factor (because each participant engaged in four repeated trials). The model revealed a significant interaction between valence and domain, likelihood ratio $\chi^2(1, N = 279) = 4.69, p = .030, \beta = -.654, SE = .302, p = .030$, suggesting that the effect of valence was different between the moral domain and the conventional domain. Although there was a main effect of valence, likelihood ratio $\chi^2(1, N = 279) = 15.96, p < .001$, it could not be clearly interpreted given the interaction between domain and valence, so we do not discuss it further. No other main effects reached significance (see Table 1 for details). These effects held when controlling for demographic variables, including potential exposure to a non-English language, household income, and population density of the child's neighborhood (see online supplementary material for model details).

The significant interaction between action domain and action valence suggests that children do not uniformly associate positive actions with ingroup members and negative actions with outgroup



Fig. 1. Example stimuli from the moral condition. Participants were shown PowerPoint slides featuring two same-gender children. An experimenter pointed to each child separately and played a sound clip of the child speaking in either English or French. When the experimenter was pointing and the sound clip was playing, the child was highlighted with a green box. Then, the same sequence happened for the second child, who spoke in the opposite language. After hearing both target children speak, participants were asked which child they thought performed a particular action. Which child spoke first (side) and the language the child used (English or French) were counterbalanced across participants and across trials.

Table 1

Mixed effect regression: Overall model.

Fixed effect	β	SE	p
Intercept	-.672	.294	.022
Condition (moral)	.323	.216	.136
Valence (positive)	.957	.222	<.001*
Age	<.001	.003	.941
Gender (male)	.148	.153	.333
Condition:Valence	-.654	.302	<.030*

* $p < 0.05$.

members. To further understand the meaning of the interaction between domain and valence, we conducted separate mixed-effects logistic regressions for each of the domains with valence (Positive vs. Negative), gender (male vs. female), and age (continuous, in months) as fixed factors and participant as a random factor. For the conventional domain, there was significant main effect of valence, likelihood ratio $\chi^2(1, N = 136) = 18.36, p < .001$, due to participants being more likely to choose the ingroup English speaker on positive conventional trials ($M = .58$) than on negative conventional trials ($M = .36$), $\beta = .963, SE = .224, p < .001$. This suggests that children predict that ingroup members are more likely to conform to conventional rules than outgroup members. No other effects were significant predictors of participants' responses in the conventional domain (all $ps > .61$; see Table 2). For the moral domain, none of the factors significantly predicted children's responses (all $ps > .15$; see Table 3). Of particular interest, children were not significantly more likely to select the ingroup English speaker on positive

Table 2
Mixed effect regression: Conventional domain.

Fixed effect	β	SE	<i>p</i>
Intercept	-.823	.401	.040*
Valence (positive)	.963	.224	<.001*
Gender (male)	.097	.227	.669
Age	.002	.004	.614

* $p < 0.05$.

Table 3
Mixed effect regression: Moral domain.

Fixed effect	β	SE	<i>p</i>
Intercept	-.234	.368	.525
Valence (positive)	.301	.207	.147
Gender (male)	.180	.208	.385
Age	-.001	.003	.738

moral trials ($M = .51$) than on negative moral trials ($M = .44$), $\beta = .300$, $SE = .207$, $p = .15$, suggesting that children did not significantly use group membership to make character judgments about which people would be more likely to act morally or immorally.

We next asked whether participants' expectations about which target performed the positive and negative actions differed reliably from chance (.50), that is, whether children demonstrated a consistent bias for ingroup targets or against outgroup targets. Attributions of both positive conventional actions ($M = .58$, $SE = 0.06$), $t(70) = 2.17$, $p = .033$, Cohen's $d = 0.52$, and negative conventional actions ($M = .36$, $SE = 0.07$), $t(66) = -4.20$, $p < .001$, Cohen's $d = 1.03$, differed from chance-level expectations, demonstrating that children consistently expected ingroup members to be more likely than outgroup members to follow social norms and expected outgroup members to be more likely than ingroup members to break social norms (see Fig. 2). On the other hand, whereas children's judgments about negative moral actions differed marginally from chance ($M = .44$, $SE = .03$), $t(73) = -1.91$, $p = .060$, Cohen's $d = 0.45$, with children trending toward expecting outgroup members to be more likely to violate moral norms than ingroup members, children's positive moral attributions did not differ reliably from chance ($M = .51$, $SE = .04$), $t(74) = 0.37$, $p = .71$, Cohen's $d = 0.09$. And according to an independent-samples t test, children's tendency to attribute positive moral actions and negative moral actions to ingroup members did not differ, $t(147) = 1.40$, $p = .16$, Cohen's $d = 0.23$, again suggesting that group membership differentially influences children's attributions of moral actions compared with conventional actions.

Although there was no significant overall effect of the continuous age variable in the model, previous research suggests developmental differences in intergroup reasoning, including increasing stereotype knowledge with age (e.g., Kinzler & DeJesus, 2013a, 2013b; Martin, Wood, & Little, 1990), higher rates of associating the ingroup with more positive actions than the outgroup by 6–8 years of age (e.g., Baron & Dunham, 2015; Dunham et al., 2011; Richter et al., 2016), and higher levels of outgroup derogation (as indicated by assigning the outgroup a negative reward) in 8-year-olds than in 6-year-olds (Buttelmann & Bohm, 2014). Therefore, to further explore possible age differences in children's action attributions we divided our data based on age to create a group of "younger children" (3- to 6-year-olds) and a group of "older children" (7- to 11-year-olds). Because of the null results in the moral condition of our study when looking at age as a continuous variable, we were particularly interested in whether there was a developmental difference such that older children would be more likely than younger children to use group membership when making inferences about moral actions in addition to conventional actions.

Younger children's pattern of responses mirrored the responses seen in the overall model; whereas they were more likely to choose the ingroup when asked who had performed a positive conventional action ($M = .56$, $SE = .05$) compared with when asked who had performed a negative conventional

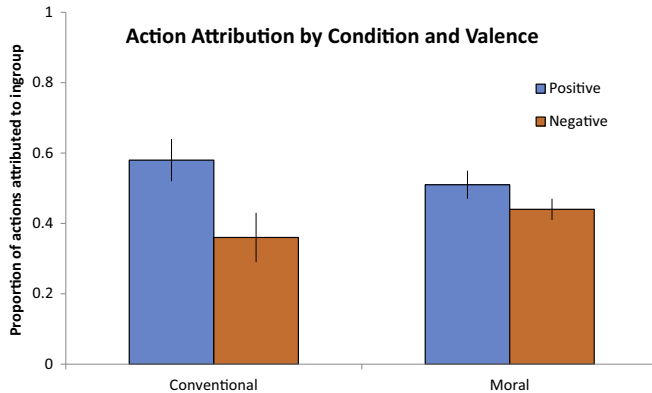


Fig. 2. Results collapsed across age. Each bar shows the mean, and error bars indicate 1 standard error of the mean. The proportion of actions children attributed to the ingroup differed from chance (.50) in both the conventional positive and conventional negative conditions, but it did not differ from chance in either moral condition.

action ($M = .39$, $SE = .05$), independent-samples $t(64) = 2.26$, $p = .027$, Cohen's $d = 0.57$, they were equally likely to choose the ingroup when asked who had performed a positive moral action ($M = .48$, $SE = .05$) and when asked who had performed a negative moral action ($M = .51$, $SE = .04$), independent-samples $t(69) = 0.47$, $p = .642$, Cohen's $d = 0.11$. Older children, on the other hand, were more likely to associate the ingroup members with positive actions than with negative actions in both the conventional domain (positive: $M = .60$, $SE = .05$; negative: $M = .35$, $SE = .04$), independent-samples $t(70) = 3.90$, $p < .001$, Cohen's $d = 0.93$, and in the moral domain (positive: $M = .54$, $SE = .05$; negative: $M = .38$, $SE = .04$), independent-samples $t(76) = 2.48$, $p = .015$, Cohen's $d = 0.57$. Older children's differentiation based on group membership in the moral domain was driven by the fact that older children were below chance at choosing the ingroup when asked who had performed a negative moral action, one-sample $t(37) = 2.85$, $p = .007$, Cohen's $d = 0.94$, whereas they did not differ from chance between choosing the ingroup and choosing the outgroup when asked who had performed a positive moral action, one-sample $t(38) = 0.80$, $p = .429$, Cohen's $d = 0.26$. Thus, with age, children become more likely to expect that outgroup members are more likely than ingroup members to violate moral norms.

Discussion

Children are able to think in nuanced ways about the differences between moral and conventional behavior (e.g., Schmidt et al., 2012; Turiel, 1983). Here, we found that children do not form blanket associations that the ingroup is fundamentally more positive or that the outgroup is fundamentally more negative; rather, children's predictions about which types of people are more likely versus less likely to perform which actions varied based on whether the action was in the moral or conventional domain. In particular, by 3 years of age, children expected someone from their own linguistic group to be more likely than someone from an unfamiliar linguistic group to act in ways that were in line with the social conventions of their culture, such as staying quiet in the library, and they expected someone from an unfamiliar linguistic group to be more likely than someone from their own linguistic group to act in ways that were inconsistent with the social conventions of their culture, such as breaking the rules of a game. Thus, young children understand that group membership is relevant for reasoning about social conventions. Future research is needed to ask whether children expect ingroup members to be more likely to follow conventions because they think that ingroup members are more beholden to group norms (e.g., Schmidt et al., 2012) or because they think that outgroup members do not have knowledge about the conventions.

Interestingly, although young children clearly demonstrate social preferences for linguistic ingroup members (e.g., Kinzler et al., 2007), they did not form biased character judgments based on linguistic group membership. That is, regardless of valence, young children's ascriptions of moral behaviors,

which are relevant to forming character judgments, were not guided by whether the target was a member of the ingroup or outgroup. Specifically, younger children did not use group membership to guide their expectations about who would be more likely to act in a morally good versus morally bad way; they were equally likely to pick the linguistic ingroup member as someone who would conform to a moral norm, such as sharing toys, as well as someone who would break a moral norm, such as stealing cookies. In fact, although older children did select the outgroup member at greater than chance levels when asked about who broke a moral norm, which could suggest biased character judgments against the outgroup, they were equally likely to expect ingroup and outgroup members to perform morally good actions, indicating that they thought people from both social groups were equally capable of behaving positively.

There are a few main reasons why older children may have chosen the outgroup member at above chance levels when asked about immoral behaviors while not holding expectations linking ingroup members to positive moral behaviors. First, it is possible that older children believe that outgroup members are actually likely to violate moral norms. Under this view, older children may have gained awareness of cultural stereotypes about linguistic outgroup members or may have begun to develop xenophobia, which could lead them to expect linguistic outgroup members to perform bad actions or to take any individual negative experience with an outgroup member as evidence that outgroup members more generally have negative personality traits (in line with the ultimate attribution error). On the other hand, older children may have instead formed particularly strong expectations that ingroup members should not or would not behave in immoral ways, which (based on the forced-choice procedure) could lead them to choose the outgroup member as violating the moral norm because he or she is the only alternative option available. Future research can elucidate whether children actually expect the outgroup to behave badly by including “both” and “neither” options in the current paradigm, by pairing neutral characters (members of neither the ingroup nor the outgroup) with the ingroup or outgroup in a similar forced-choice paradigm, or by using scale judgments asking how likely single individuals (from both the ingroup and the outgroup) are to perform immoral actions (e.g., from *not at all likely* to *very likely*).

By testing a wide age range and using a between-participants design, this study adds to our understanding of how children begin to attribute actions to ingroup members compared with outgroup members. In line with past research, children were generally more likely to associate positive actions with ingroup members and negative actions with outgroup members (e.g., [Baron & Dunham, 2015](#); [Dunham et al., 2011](#)). However, whereas past studies with 3- to 5-year-olds have not found biased action or trait attributions based on group membership (e.g., [Patterson & Bigler, 2006](#); [Richter et al., 2016](#)), we found that even young children used group membership when attributing *conventional* and *unconventional* behaviors. Thus, conventional violations may be especially linked to group membership at an early age (e.g., [Schmidt et al., 2012](#)). However, more research is needed to investigate children's inferences linking the ingroup to conventional behavior, specifically surrounding the role of harm. Although the conventions we chose in this study involve less help and harm than the moral vignettes, some of them, such as making a mess, may involve a level of harm (e.g., by thwarting other people's goals; [Dahl & Kim, 2014](#)).² By creating scenarios that vary the level of harm along a continuum of harm, future studies can ask whether children are reasoning about harm when making inferences about who will follow versus violate conventions. If children are able to link conventional behaviors to group membership earlier than moral behaviors because they have a baseline expectation that all people should avoid harming others, then it is possible that they would form especially strong associations between group membership and conventional actions that cause no harm.

These findings open interesting questions about the link between group membership and inferences about people's actions, behaviors, and character. For example, although we focused on language

² The pattern of results across individual vignettes was relatively consistent, and the strength of children's likelihood to link an action to the ingroup in the conventional conditions did not seem to vary based on how much harm (if any) the conventional violation would cause. Because all children were given the vignettes in a fixed order, differences between vignettes could be due to content of the vignettes or to their order of presentation, so we do not consider them in detail in the article. However, children's responses to each vignette (proportion choosing the ingroup as more likely to perform the action) can be seen in the supplementary material.

as a marker of social category, there are many social groups that are relevant to children's lives, including gender, race, and even minimal groups (e.g., Dunham, Baron, & Banaji, 2008; Dunham et al., 2011; Shutts, 2015). Past research suggests that group labels (e.g., Baron & Dunham, 2015; Bigler et al., 1997; Patterson & Bigler, 2006) and generic language about social groups (e.g., Rhodes, Leslie, Bianchi, & Chalik, 2017; Rhodes, Leslie, & Tworek, 2012) can influence children's reasoning about the importance of those groups. Thus, it is possible that children's inferences concerning the influences of social group membership on conventional and moral actions depend on the social group in question. Indeed, past research on action attribution to members of a novel minimal group suggests that labeling the group, and reminding children of their own group affiliation verbally, increases the amount to which children attribute positive actions to ingroup members (e.g., Baron & Dunham, 2015). Because in the real world many social groups (e.g., language, race) are not explicitly labeled on each encounter, we chose a paradigm that did not include any group labels (e.g., "English speaker") or any discussion of the children's own social group. Even without group labels, we found that children used social group membership to determine who would be more likely to perform conventional versus unconventional actions. However, it is possible that highlighting the social groups—for instance, with labels—would lead children to assume the group marking was more relevant and, therefore, potentially make inferences about how group membership should influence moral and immoral actions. The role of labels is particularly important because some groups, such as gender, are regularly labeled and discussed in generic terms in our society. If labeling increases attention to group boundaries, thereby increasing the subsequent use of group membership to make action predictions, this would have strong implications for whether and how people should use group labels.

Overall, the current study suggests that children have early-emerging expectations about the role of group membership in action attribution. Children expected members of their social group to be more likely to behave in conventionally appropriate ways and to avoid behaving in conventionally inappropriate ways. However, children's expectations about these conventional and unconventional behaviors were not merely due to greater familiarity with the ingroup leading children to have general positivity biases for ingroup members; children did not show a bias toward expecting ingroup members to be more likely to act morally positive. Thus, children not only understand that behaviors can be normative but also understand that which people are more likely to conform to versus break a norm depends on whether the norm is morally relevant or is a social convention. By further investigating links between children's social preferences for ingroup members, their behavioral attributions based on social group membership, and their own interpersonal social interactions with people from diverse backgrounds, we can better understand the human propensity to use social categories to make deep generalizable inferences about the social world.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.jecp.2017.03.003>.

Appendix B: Vignettes

All vignettes followed the form, "Today one of these girls [boys] did [X]. Can you point to the girl [boy] who did [X] today?"

Condition	Valence	Order	Vignette
Conventional	Positive	1	Was quiet in the library
Conventional	Positive	2	Followed the rules of a game
Conventional	Positive	3	Cleaned up their mess
Conventional	Positive	4	Waited their turn
Conventional	Negative	1	Was noisy in the library

Appendix B (continued)

Condition	Valence	Order	Vignette
Conventional	Negative	2	Broke the rules of a game
Conventional	Negative	3	Made a mess
Conventional	Negative	4	Cut in line
Moral	Positive	1	Helped someone on the playground
Moral	Positive	2	Gave a gift to a friend
Moral	Positive	3	Shared toys with their classmates
Moral	Positive	4	Made somebody smile
Moral	Negative	1	Pushed someone on the playground
Moral	Negative	2	Stole someone's cookie
Moral	Negative	3	Broke a friend's toy on purpose
Moral	Negative	4	Made somebody cry

References

- Aboud, F. E. (2003). The formation of in-group favoritism and out-group prejudice in young children: Are they distinct attitudes? *Developmental Psychology*, *39*, 48–60.
- Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology*, *18*, 317–334.
- Baron, A. S., & Banaji, M. R. (2006). The development of implicit attitudes: Evidence of race evaluations from ages 6 and 10 and adulthood. *Psychological Science*, *17*, 53–58.
- Baron, A. S., & Dunham, Y. (2015). Representing “Us” and “Them”: Building blocks of intergroup cognition. *Journal of Cognition and Development*, *16*, 780–801.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*, 323–370.
- Bigler, R. S., Jones, L. C., & Lobliner, D. B. (1997). Social categorization and the formation of intergroup attitudes in children. *Child Development*, *68*, 530–543.
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive–motivational analysis. *Psychological Bulletin*, *86*, 307–324.
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues*, *55*, 429–444.
- Buttelmann, D., & Böhm, R. (2014). The ontogeny of the motivation that underlies in-group bias. *Psychological Science*, *25*, 921–927.
- Corenblum, B. (2003). What children remember about ingroup and outgroup peers. *Journal of Experimental Child Psychology*, *86*, 32–66.
- Costanzo, P. R., Coie, J. D., Grument, J. F., & Farnhill, D. (1973). A reexamination of the effects of intent and consequence on children's moral judgments. *Child Development*, *44*, 154–161.
- Dahl, A., & Kim, L. (2014). Why is it bad to make a mess? Preschoolers' conceptions of pragmatic norms. *Cognitive Development*, *32*, 12–22.
- Danovitch, J., & Bloom, P. (2009). Children's extension of disgust to physical and moral events. *Emotion*, *9*, 107–112.
- Doise, W., Csepeli, G., Dann, D., Gouge, C., Larsen, K., & Ostell, A. (1972). An experimental investigation into the formation of inter-group representations. *European Journal of Social Psychology*, *2*, 202–204.
- Dunham, Y., Baron, A. S., & Banaji, M. R. (2008). The development of implicit intergroup cognition. *Trends in Cognitive Sciences*, *12*, 248–253.
- Dunham, Y., Baron, A. S., & Carey, S. (2011). Consequences of “minimal” group affiliations in children. *Child Development*, *82*, 793–811.
- Dunham, Y., Chen, E. E., & Banaji, M. R. (2013). Two signatures of implicit intergroup attitudes: Developmental invariance and early enculturation. *Psychological Science*, *24*, 860–868.
- Dunham, Y., & Emory, J. (2014). Of affect and ambiguity: The emergence of preference for arbitrary ingroups. *Journal of Social Issues*, *70*, 81–98.
- Farnhill, D. (1974). The effects of social-judgment set on children's use of intent information. *Journal of Personality*, *42*, 276–289.
- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, *82*, 878–902.
- Göckeritz, S., Schmidt, M. F. H., & Tomasello, M. (2014). Young children's creation and transmission of social norms. *Cognitive Development*, *30*, 81–95.
- Hewstone, M. (1990). The “ultimate attribution error”? A review of the literature on intergroup causal attribution. *European Journal of Social Psychology*, *20*, 311–335.
- Howard, L. H., Carrazza, C., & Woodward, A. L. (2014). Neighborhood linguistic diversity predicts infants' social learning. *Cognition*, *133*, 474–479.
- Josephs, M., & Rakoczy, H. (2016). Young children think you can opt out of social–conventional but not moral practices. *Cognitive Development*, *39*, 197–204.

Please cite this article in press as: Liberman, Z., et al. Children's expectations about conventional and moral behaviors of ingroup and outgroup members. *Journal of Experimental Child Psychology* (2017), <http://dx.doi.org/10.1016/j.jecp.2017.03.003>

- Kinzler, K. D., & Dautel, J. B. (2012). Children's essentialist reasoning about language and race. *Developmental Science*, *15*, 131–138.
- Kinzler, K. D., & DeJesus, J. M. (2013a). Children's sociolinguistic evaluations of nice foreigners and mean Americans. *Developmental Psychology*, *49*, 655–664.
- Kinzler, K. D., & DeJesus, J. M. (2013b). Northern = smart and Southern = nice: The development of accent attitudes in the United States. *Quarterly Journal of Experimental Psychology*, *66*, 1146–1158.
- Kinzler, K. D., Dupoux, E., & Spelke, E. S. (2007). The native language of social cognition. *Proceedings of the National Academy of Sciences of the United States of America*, *104*, 12577–12580.
- Kinzler, K. D., Shutts, K., DeJesus, J., & Spelke, E. S. (2009). Accent trumps race in guiding children's social preferences. *Social Cognition*, *27*, 623–634.
- Lahat, A., Helwig, C. C., & Zelazo, P. D. (2012). Age-related changes in cognitive processing of moral and social conventional violations. *Cognitive Development*, *27*, 181–194.
- Liberman, Z., Woodward, A. L., & Kinzler, K. D. (2016). Preverbal infants infer third-party social relationships based on language. *Cognitive Science*. <http://dx.doi.org/10.1111/cogs.12403>.
- Mahajan, N., & Wynn, K. (2012). The origins of “us” versus “them”: Prelinguistic infants prefer similar others. *Cognition*, *124*, 227–233.
- Martin, C. L., Wood, C. H., & Little, J. K. (1990). The development of gender stereotype components. *Child Development*, *61*, 891–904.
- Mulvey, K. L. (2016). Evaluations of moral and conventional intergroup transgressions. *British Journal of Developmental Psychology*, *34*, 489–501.
- Olson, K. R., Dunham, Y., Dweck, C. S., Spelke, E. S., & Banaji, M. R. (2008). Judgments of the lucky across development and culture. *Journal of Personality and Social Psychology*, *94*, 757–776.
- Patterson, M. M., & Bigler, R. S. (2006). Preschool children's attention to environmental messages about groups: Social categorization and the origin of intergroup bias. *Child Development*, *77*, 847–860.
- Pettigrew, T. F. (1979). The ultimate attribution error: Extending Allport's cognitive analysis of prejudice. *Personality and Social Psychology Bulletin*, *5*, 461–476.
- Piaget, J. (1932). *The moral judgment of the child*. New York: Free Press.
- Rhodes, M., & Chalik, L. (2013). Social categories as markers of intrinsic interpersonal obligations. *Psychological Science*, *24*, 999–1006.
- Rhodes, M., Leslie, S. J., Bianchi, L., & Chalik, L. (2017). The role of generic language in the early development of social categorization. *Child Development*. <http://dx.doi.org/10.1111/cdev.12714>.
- Rhodes, M., Leslie, S. J., & Tworek, C. (2012). Cultural transmission of social essentialism. *Proceedings of the National Academy of Sciences of the United States of America*, *109*, 13526–13531.
- Richter, N., Over, H., & Dunham, Y. (2016). The effects of minimal group membership on young preschoolers' social preferences, estimates of similarity, and behavioral attribution. *Collabra*, *2*(1). <<http://www.collabra.org/articles/10.1525/collabra.44/print/>>.
- Schmidt, M. F. H., Rakoczy, H., Mietzsch, T., & Tomasello, M. (2016). Young children understand the role of agreement in establishing arbitrary norms but unanimity is key. *Child Development*, *87*, 612–626.
- Schmidt, M. F. H., Rakoczy, H., & Tomasello, M. (2012). Young children enforce social norms selectively depending on the violator's group affiliation. *Cognition*, *124*, 325–333.
- Shutts, K. (2015). Young children's preferences: Gender, race, and social status. *Child Development Perspectives*, *9*, 262–266.
- Smetana, J. G. (1981). Preschool children's conceptions of moral and social rules. *Child Development*, *52*, 1333–1336.
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, *1*, 149–178.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. New York: Cambridge University Press.
- Uleman, J. S., Adil Saribay, S., & Gonzalez, C. M. (2008). Spontaneous inferences, implicit impressions, and implicit theories. *Annual Review of Psychology*, *59*, 329–360.
- Zebrowitz, L. A., Bronstad, P. M., & Lee, H. K. (2007). The contribution of face familiarity to ingroup favoritism and stereotyping. *Social Cognition*, *25*, 306–338.
- Zelazo, P. D., Helwig, C. C., & Lau, A. (1996). Intention, act, and outcome in behavioral prediction and moral judgment. *Child Development*, *67*, 2478–2492.