Parochial Compliance: Young Children’s Biased Consideration of Authorities’ Preferences Regarding Intergroup Interactions

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Prosocial behavior is arguably influenced by an interaction between intrinsic dispositions (e.g., group bias) and extrinsic factors (e.g., institutional regulations). The current study investigated this interaction developmentally. Preschoolers (3- to 4-year-olds) and kindergarteners (5- to 6-year-olds; N = 111) participated in a resource distribution task in which they had to consider both the recipients’ group membership (minimal color-based groups), and their own teachers’ preferences regarding how to distribute (give “all” or “none”). The results revealed that only kindergarteners were influenced by the experimental factors and differently across genders. Specifically, when the recommendation was to give “none,” girls followed it indiscriminately toward in- and out-group recipients, but boys did so only toward out-group recipients. Thus, boys exploited an authority’s legitimization to act antisocially, according to a parochial bias.

From fairly early on in development, and in a variety of scenarios, research has been revealing that children evince intergroup biases, favoring in-group members over out-group ones (Abrams, Rutland, Cameron, & Marques, 2003; Killen & Smetana, 2015; Kinzler & Spelke, 2011). Already during infancy, there are indications that children show preferential bias toward those familiar to them (Hamlin, Mahajan, Liberman, & Wynn, 2013; Kinzler, Dupoux, & Spelke, 2007), and by preschool and kindergarten age such biases get manifested also in the realm of social behavior (Olson & Spelke, 2008). For instance, by age 5 years, children believe one is more obligated to help others of the same racial or gender group (Weller & Lagattuta, 2013, 2014), and they express such expectations even with regard to social interactions between members of novel and minimally established groups (Dejesus, Rhodes, & Kinzler, 2014). Importantly, such intergroup biases also get manifested in children’s actual behaviors. Thus, preschool children favor in-group over out-group members when distributing resources (Dunham, Baron, & Carey, 2011; Fehr, Bernhard, & Rockenbach, 2008), and especially boys capitalize on knowledge about the preferences of out-group recipients to strategically act in spiteful manners (Benozio & Diesendruck, 2015; Buttelmann & Böhm, 2014).

Given this early emergence of intergroup attitudinal and behavioral biases, extensive attention has been devoted to reducing them (for in-depth reviews, see Cameron & Rutland, 2008; Killen, Rutland, & Ruck, 2011). In particular, research has centered on mechanisms prevalent in human societies that might help regulate biased behaviors. These refer to norms (e.g., laws) and institutions (e.g., governments, schools) that define behaviors according to the mutual values and best interests of a community as a whole and authorities (e.g., judges, teachers) legitimized to promote and enforce such behaviors (Henrich, 2006; Tomasello, Carpenter, Call, Behne, & Moll, 2005). The goal of the present study was to assess the effectiveness of such normative forces in reducing children’s intergroup bias. In particular, we ask how young children behave when statements given by an institutional authority concur or contrast with group-based biases.

Minding Authority

The effect of authority figures on people’s social behavior dates back, at least, to Stanley Milgram’s (1963) classic work. Milgram’s studies revealed that...
a high percentage of adults, when encouraged by an experimenter (an authority), delivered substantial harm to another person (a confederate). Although the situation was framed as a technique to improve learning, the personal preferences of the confederate were quite explicit—screaming after an electric shock, banging on the walls of the rooms, and mentioning his heart condition (Blass, 1999). Thus, under certain scenarios, adults ignored another’s preference, choosing instead to blindly follow the instructions of an authority. Developmental follow-ups to Milgram’s work found analogous results among 6- to 16-year-olds (Shanab & Yahya, 1977). Moreover, when participants were questioned about the reasons for delivering the shocks, the majority of boys justified their actions as to be beneficial for learning, whereas the majority of girls justified their actions as mere compliance to the experimenter.

More generally, one of the first comprehensive attempts to capture the impact of authority figures on children’s social behavior was presented by the “moral domain theory” (Turiel, 1983). Broadly, Turiel proposed that children’s behavioral judgments reflect a balance among three simultaneous considerations, representing a personal domain (e.g., attending to someone’s preferences), a social domain (e.g., complying with an authority), and a moral domain (e.g., avoiding harm). Studies following Turiel’s conceptualization indeed revealed a nuanced behavioral pattern among children (e.g., Laupa, Turiel, & Cowan, 1999). First, it was found that children do not consider any arbitrary adult to be a legitimate authority and instead tend to rely mainly on teachers and parents, at least until adolescence (Darling, Cumsille, & Martínez, 2008; Kim, 1998). Second, children were found to be sensitive to the valence of the act authorities encouraged them to perform. Thus, already by age 4 years, children rejected requests to harm another person, even when such requests came directly from a parent (Damon, 1977). Moreover, children reported that they would only follow an authority figure who aimed to do the morally “right” thing (i.e., avoid harm), for instance, a teacher who requested to stop a fight rather than a teacher who encouraged such harmful acts (Laupa & Turiel, 1986). Third and finally, children were also found sensitive to the domain of the behavior authorities attempting to regulate. Specifically, Lagattuta, Nucci, and Bosacki (2010) found that 4- to 7-year-olds judged that story characters would comply with an authority when the authority’s restriction regarded the moral domain (e.g., doing harm) but would protest when the restriction was aimed toward the personal domain (e.g., forbidding wearing a favored shirt). Using similar contexts, Smetana et al. (2014) note, children seem to answer in one manner when asked what others will do (i.e., protest) but differently when asked what others should do (i.e., comply). Clearly, then, already by preschool age, authorities impact children’s behavioral expectations, in the direction of both harming and helping another person. The question of interest here was whether authorities can also have such an impact on children’s behavior in the context of intergroup interactions.

In this regard, a number of studies have examined the power of institutional norms in altering school-aged children’s behaviors toward others. For instance, Nesdale and Lawson (2011) found that school-level norms endorsing “inclusiveness” (e.g., “be friendly to members of other teams”), positively changed attitudes toward out-group members among 7- and 10-year-olds. However, when such norms were pitted against “exclusive” in-group norms (e.g., “you must not like any members of the other teams”), then only 10-year-olds abided by the school-level norms, whereas 7-year-olds’ stuck by their in-group norms (Nesdale & Lawson, 2011). Interestingly, when focusing on the dynamic within a group, 9–13 years old children were willing to exclude a member who violated norms about fairness but were less willing to exclude a member who violated norms about a dress code (Hitti, Mulvey, Rutland, Abrams, & Killen, 2014). Using similar “dress code” scenarios in an intergroup context, Rutland, Hitti, Mulvey, Abrams, and Killen (2015) introduced 10- to 16-year-olds to in- and out-group individuals who violated either a “societal-level” generic norm (e.g., “children wear shirts for school-affiliated clubs”) or a group norm (e.g., wearing a club shirt while the other group members do not). One of their main findings was that children judged an in-group member who violated a group norm more harshly than an out-group member who did the same. The authors suggested that this pattern could be the result of children perceiving an in-group member’s violation of a group norm as a possible “threat” to the group identity.

In summary, preschool-aged children are not obedient by default, but rather consider multiple contextual factors in deciding on the appropriateness of a behavior, such as the legitimacy of the authoritative figure, the valence of the instructions
given, and the domain of reference. Orthogonally, in an intergroup context, school-aged children may feel somewhat obligated to follow, and protect, their group norm and interest (see Killen & Smetana, 2015 for a recent review). In the present study, we target younger children, and rather than focusing on group or institutional norms as potential regulators of intergroup biases, we assessed the impact of an authority on children’s actual behavior toward others.

To that end, we presented children with dilemmas that pitted their putative favoritism toward the in group and antagonism toward the out group, against an institutional authority’s (i.e., their kindergarten’s teacher) explicit recommendation to act either pro- or antisocially. Specifically, children were introduced to a “Sticker game,” in which they were allocated 10 stickers and then saw a brief movie showing their (prerecorded) teacher’s preferences as to whether to give all or none of the allocated stickers. They were finally introduced to the potential recipient (viewed on video), who was described as either belonging to the child’s minimally defined in or out group. We targeted kindergarten and preschool children in order to focus on ages in which behavioral group biases have been found to emerge (Benozio & Diesendruck, 2015) and in which changes in distributional patterns have been found, from adherence to strictly selfish considerations to incorporating also social–contextual and moral ones (e.g., Blake & Rand, 2010; Fehr et al., 2008; Lagattuta et al., 2010). We believed that using explicit recommendations by a familiar authority as a regulatory factor—rather than more general norms—and employing a game-like distributive task—rather than evaluative judgments—would make the task simple enough so as to allow assessing the pertinent dynamic within these age groups. Based on the literature described earlier (e.g., Benozio & Diesendruck, 2015; Buttelmann & Böhm, 2014), our hypothesis was that boys, particularly, would be sensitive to recipients’ group membership.

Method

Participants

Participants were 56 preschool children (3- to 4-year-olds: \( M_{age} = 3.9, SD = 6 \) months; 32% girls) and 55 kindergarten children (5- to 6-year-olds: \( M_{age} = 5.6, SD = 4 \) months; 56% girls), recruited from five different kindergartens in an average socioeconomic status-ranked local council in Israel. All children had signed parental consent. Data were collected from March 2014 through June 2014.

Design

The study had a 2 \( \times \) 2 mixed design, with authority’s preference (Give All, Give None) as a between-participants variable and group membership of the recipient (in-group, out-group) as a within-participants variable.

Materials

Authority Figure

Every kindergarten in Israel includes only one “class” and one primary educator for that class, who is responsible for the daily routine and communication with parents. Thus, in order to capture a legitimate authority figure, we filmed each of the kindergartens’ teachers. Importantly, all participants were familiar with their own teacher for at least 6 months prior to the study. The teacher of each kindergarten was filmed prior to the experiment. In our pre-edited movies, the teacher addressed the “viewer” and stated her explicit preference: either a preference that all stickers should be distributed (give all condition) or a preference that none shall be distributed (give none condition).

Recipients

Recipients were also presented through pre-edited videos, and were age and gender matched and unfamiliar to the participants. Each recipient was presented in a live video for 10 s, during which the recipient maintained a friendly but neutral facial expression facing the camera. After 10 s, the movie was paused to allow the participants to make their distribution. The absence of communication between the participant and the recipient allowed maintaining the anonymity of the participant. Recipients were unfamiliar to the participants in order to avoid possible confounds such as familiarity, friendship, or kin relationship (Fehr et al., 2008; Moore, 2009; Olson & Spelke, 2008).

Resources

As distributive resources, we used moderately attractive stickers, as determined in a pretest with a separate sample of 64 children (matched per age and gender; see Benozio & Diesendruck, 2015, supporting information #1).
Procedure

An unfamiliar female experimenter sat with each child individually in a quiet room in their kindergarten and presented the “Sticker game.” In the sticker game, we have two groups: the Blue group and the Yellow group. You are in the {Blue/Yellow} group, so let’s pin three {Blue/Yellow} stickers to your shirt (the participant had to do it by him/herself). Participants were asked to confirm the group they belong to, and all answered correctly. Following this assignment of minimal group membership, children were introduced to the set of 10 different stickers and were explicitly told that these stickers belong to the entire kindergarten. The experimenter counted the stickers with the children and said that in this game they can decide how many of the stickers, which belong to their kindergarten, they want to give to another child. The experimenter took an empty envelope and wrote the name of the kindergarten on it and added, since the stickers belong to the kindergarten, I’ll put undistributed stickers in this envelope and return it later to the kindergarten. This was done in order to reduce the effect of personal interest in accumulating stickers (as in Benozio & Diesendruck, 2015), and underline instead, both the teacher’s authority and the recipient’s group membership. Prior to the presentation of the recipient, the experimenter said, Before you decide how many stickers to give away, let’s see what your teacher has to say about the stickers. The movie segment of the teacher was presented, and in it the teacher made a clear statement about her preference; either I prefer that you GIVE ALL the stickers (capital letters indicate the tonal emphasis made by the teacher) or I prefer that you DO NOT GIVE AWAY ANY of the stickers (give none). Half of the participants were exposed to the give all preference and half to the give none, and the experimenter verified that the participant understood the authority’s preference by asking, What does {teacher’s name} prefer that you do with the stickers?, immediately after the movie viewing. All children answered this question correctly. The movie continued, and a recipient was presented with three colored stickers on his or her shirt to reflect their group membership—either stickers of the same color as the participant (i.e., in-group) or not (i.e., out-group). To ascertain that children noticed and identified the group membership of the recipient, the experimenter explicitly asked children, To which group does Dan/Dana belong? All children answered correctly. Children were then asked to make their choice, Please move the stickers you’ve decided to give toward Dan/Dana’s picture (i.e., by actually moving stickers rather than just saying a number). Importantly, the experimenter did not make any direct requests or give feedback about children’s distribution choices (e.g., the experimenter simply said Ok after each distribution and placed the stickers in the appropriate envelopes).

In sum, each participant played two rounds of the sticker game, each with a new and different type of 10 stickers: one round with an in-group recipient and one with an out-group recipient, in counterbalanced order. The dependent variable was the number of stickers the participant distributed.

Results

Analyses of Experimental Factors

We used a generalized linear mixed model analysis (GLMM), in which children were nested within kindergarten. The variables of interest were authority’s preferences (give all/give none), recipient’s group membership (in-group/out-group), age group (3- to 4-year-olds/5- to 6-year-olds), gender, and also the order of recipients’ presentation (in-group or out-group presented first). The data were better fitted in a model with a log-link function and yielded better information criteria (Akaike = 394.92, Bayes = 401.35) than a linear model (Akaike = 979.78, Bayes = 986.22). The figures present raw data.

The analysis revealed a main effect for age group, $F(1, 190) = 7.01$, $p < .01$, meaning that overall, 3- to 4-year-olds distributed more ($M = 38.4\%, SD = 29.5\%$) than 5- to 6-year-olds ($M = 32.7\%, SD = 25.3\%$), and a second main effect for order of presentation, $F(1, 190) = 6.85$, $p < .05$, meaning that when the in-group recipient was presented first, children distributed more ($M = 41\%, SD = 23.4\%$) than when the out-group recipient was presented first ($M = 30\%, SD = 24.3\%$). More importantly, a four-way interaction was found between authority’s preferences, recipient’s group membership, age group, and gender, $F(1, 190) = 4.2$, $p < .05$. No further main effects or interactions were found. The four-way interaction was followed up by conducting separate GLMMs for each age group, with the same setting as the initial model.

Three- to 4-Year-Olds

Three- to 4-year-olds’ average distribution was 40.36% ($SD = 29.8\%$), and no main effects or interactions were found for any of the factors (all $p > .15$; Fig. 1).
Five- to 6-Year-Olds

Unlike 3- to 4-year-olds, among 5- to 6-year-olds there was a main effect for authority’s preferences, $F(1, 102) = 5.168, p < .05$, showing that children’s distribution was higher when the teacher preferred them to “give all” ($M = 37.1\%, SD = 22.6\%$) than when she preferred them to “give none” ($M = 26.2\%, SD = 17.9\%$). Moreover, a three-way interaction was found among authority’s preferences, recipient’s group membership, and gender, $F(1, 102) = 4.857, p < .05$. This interaction was followed up by conducting separate GLMMs for each gender, with the same setting as the initial model (Fig. 2).

The analysis of 5- to 6-year-old girls’ responses rendered no significant effects. In turn, among 5- to 6-year-old boys, a main effect for authority’s preferences was found, $F(1, 44) = 4.25, p < .05$, as well as a two-way interaction between authority’s preferences and recipient’s group membership, $F(1, 44) = 5.39, p < .05$. Post hoc analyses following up on this two-way interaction revealed that boys distributed similar rates to an in-group recipient regardless of the authority’s preferences to “give all” ($M = 37.7\%, SD = 16.8\%$) or to “give none” ($M = 29.2\%, SD = 25.9\%$). In contrast, the authority’s preferences significantly affected boys’ distribution rates to out-group recipients, $t(22) = 3.25, p < .01$, Cohen’s $d = 1.33$. Namely, boys distributed 37% of the resources ($SD = 16.8\%$) when the teacher preferred them to “give all” but distributed only 16% of the resources ($SD = 15.0\%$) when the teacher preferred them to “give none,” that is, a decrement of 56%.

Absolute Distribution Patterns

In order to assess children’s absolute distribution rates, in addition to the GLMMs, we also compared children’s distribution rates in each condition to the theoretically relevant rate of egalitarian distribution (i.e., 50\% as in third-party judgments tasks). Notably, because a typical kindergarten includes approximately 30 children, it is reasonable to assume—though perhaps worth of future studies—that participants perceived their “kindergarten” as one single “entity” and did not use proportional thinking to calculate how to distribute between the recipient (i.e., “Dan/Dana”) and other 30 potential recipients (e.g., Hook & Cook, 1979). Overall, 16 one-sample $t$ tests were performed (one for each cell of the design including Authority’s Preferences $\times$ Gender $\times$ Recipient’s Group Membership $\times$ Age Group), and the significance level was adjusted to .0031 (Bonferroni correction). Of the 16 comparisons, only three significantly differed from an egalitarian distribution, all of them among 5- to 6-year-olds, and with large effect sizes. First, 5- to 6-year-old girls distributed significantly less than 50\% only when the authority’s preference was to “give none,” both to in-group recipients, $t(15) = 3.6, p < .003$, Cohen’s $d = 1.55$, as well as to out-group...
ones, $t(15) = 4$, $p < .001$, Cohen’s $d = 2.07$. Second, 5- to 6-year-old boys distributed significantly < 50% only when the authority’s preference was to “give none” and the recipient was an out-group member, $t(12) = 8.12$, $p < .001$, Cohen’s $d = 4.69$.

**Discussion**

The current work aimed to address the effect of a legitimized institutional authority’s recommendation on young children’s social behavior. Specifically, we aimed to estimate to what extent appeals made by an authority figure would affect 3- to 4-year-olds’ and 5- to 6-year-olds’ disposition to distribute resources to others, especially when such appeals conflicted with the group membership of recipients. Overall, the variation in children’s distribution patterns shed light on the weight young children attribute to each of these considerations.

The findings revealed age-related differences in considering authorities’ preferences and group membership. Specifically, 3- to 4-year-olds did not favor in-group over out-group recipients and were also indifferent to the authority in this behavioral context. Instead, 3- to 4-year-olds consistently distributed in an egalitarian fashion. This pattern replicates previous findings, reiterating that when no personal gain is involved (i.e., when undistributed resources do not go to the child), 3- to 4-year-olds do not show group-biased behavior, and their distribution approaches egalitarianism (~40%, Benozio & Diesendruck, 2015). Thus, it seems that 3- to 4-year-olds might treat such situations as “third party” ones and thus strongly maintain the pattern found already among infants of avoiding unequal distributions (Geraci & Surian, 2011). In such scenarios, 3- to 4-year-olds do not follow statements that encourage unequal treatment toward others, in alignment with judgment tasks regarding compliance (Damon, 1977).

In contrast, 5- to 6-year-olds’ behavior was affected by both authority’s preferences and recipients’ group membership and was differentiated across the genders. Namely, whereas girls somewhat modulated their behavior according to the authority’s preferences, boys modulated their behavior opportunistically vis-à-vis intergroup biases. In particular, boys treated an authority’s recommendation to “harm” (i.e., the give none condition) an in-group recipient as invalid, and thus rejected it, but adopted the very same recommendation when it was aimed toward an out-group recipient.

These findings reveal that although children may be generally prone to judge in favor of compliance with an authority (Lagattuta et al., 2010; Smetana et al., 2014), actual compliance can be modulated by age and group affiliation. In this latter regard, the results are also consistent with the general findings regarding 5-year-olds’ biased attitudes (Nesdale & Flesser, 2001), expectations (Dejesus et al., 2014), and behaviors (Dunham et al., 2011) toward in and out groups, and with recent findings showing manifestations of “out-group hate” among 3- to 8-year-old boys but not girls (Benozio & Diesendruck, 2015; Buttelmann & Böhm, 2014).

What is most surprising about the present results, and particularly the interaction described above, is that rather than promoting prosocial behavior, an authority’s recommendation was only effective for licensing antisocial behavior. An optimistic outlook is that, by the early teen years, children seem to stop privileging in-group loyalty over infringements of moral norms such as equal distribution of resources (Killen, Rutland, Abrams, Mulvey, & Hitti, 2013; Mulvey, Hitti, Rutland, Abrams, & Killen, 2014). It will thus be valuable to keep tracing the developmental impact of authorities on children’s social behavior. In this context, it is also possible that the actual presence of an authority figure may partly account for the age differences we found with regard to compliance. We have growing evidence that 5- to 6-year-olds act differently when they are being observed by neutral or in-group peers (Engelmann, Herrmann, & Tomasello, 2012; Engelmann, Over, Herrmann, & Tomasello, 2013), but we have less information about the possible impact of the presence of an authority figure. In other words, it could be that whereas 5- to 6-year-olds can comply even when an authority is absent (e.g., girls comply completely, boys only toward out-groups), 3- to 4-year-olds cannot.

Regarding the gender difference, one possible explanation has to do with boys’ and girls’ responsiveness to authorities in particular. For instance, in the replication of Milgram’s experiments among 6- to 16-year-olds, Shanab and Yahya (1977) found that whereas boys justified their compliance as subservient to the experiment’s “goal” (i.e., teaching), girls justified it as sheer obedience. In this light, perhaps here too, whereas girls deviated from equal distribution when told to do so, boys did so only when the recipient was an out group—that is, a presumed “justifiable” goal. A second, more mundane, explanation for the gender difference may have to do with the fact that although the authority figures used here were arguably equally valid for
both genders (Laupa & Turiel, 1986, 1993), they were all women and thus potentially had differential effects as role models for boys and girls (see for instance, Smetana, Schlagman, & Adams, 1993). Importantly, neither of these two explanations can account for boys’ selective compliance to the authority. One possible account of that selectivity has to do with arguably different socialization processes, which might encourage indiscriminate caring for others in girls and group loyalty in boys (Rose & Rudolph, 2006), or individual differences in cooperation-competition situations that involve personal gain (Knight & Kagan, 1981). An alternative explanation derives from evolutionary models, arguing that boys have traditionally been more vested in intergroup conflict and thus more sensitive to group membership in their behavioral decisions (McDonald, Navarrete, & Van Vugt, 2012). Future studies, with even younger children, may help elucidate this issue.

A final set of issues the present findings speak to is the standing of authorities, group interests, and morality in governing children’s social behavior. Although there is increasing agreement regarding the relevance of group-oriented considerations (e.g., group loyalty) in children and adults’ attitudes and behaviors, their linkage with the moral domain is debatable (Shweder, Mahapatra, & Miller, 1987; Turiel, Hildebrandt, Wainryb, & Saltzstein, 1991). According to one perspective, there is a principled distinction between universal moral rules (e.g., avoid harm, promote equality) and group-specific conventional norms (Killen & Smetana, 2008; Rutland, Killen, & Abrams, 2010). For instance, although conventional norms can be changed (e.g., by a group authority), moral rules cannot (Nucci & Turiel, 1978). Consistent with this perspective, it has been suggested that group loyalty and obedience to authority are subservient to moral concerns, such as prevention of harm (Gray, Young, & Waytz, 2012).

A contrasting perspective, originally motivated by cultural and evolutionary psychology, suggests that concerns about harm and fairness represent only a subset of the moral domain (Snarey, 1985) and may carry an equal weight to considerations based on group membership and authority (Haidt, 2012; Shweder, Much, Mahapatra, & Lawrence, 1997). From the perspective of evolutionary game theory, discriminatory treatment of in-group and out-group members contribute to success in intergroup conflicts (“parochial altruism”; Bernhard, Fischbacher, & Fehr, 2006; Choi & Bowles, 2007), as well as within-group flourishing (“altruistic punishment”; Fehr & Gächter, 2002). According to this approach, whatever the “default weights” of these distinct considerations, cultures may differentially emphasize them, to the point that group-oriented considerations even override concerns for harm and fairness toward an individual agent (Graham et al., 2013; Shweder, 2012).

Our findings show that already by 5–6 years of age, boys biasedly weighted the above considerations, complying with an authority’s recommendations when it was aimed at harming an out group, but not when it was aimed at harming an in group. From a “moral domain” perspective, it could be said that considerations regarding group interests and authorities joined forces to override a moral predicament not to distribute unequally. Alternatively, from a “moral foundations” perspective, boys and girl weigh individual-oriented considerations (e.g., harm) and group-oriented considerations (e.g., group membership, authority) differently, thus potentially manifesting different “moral tendencies.” Either way, it remains an open question whether this pattern is a manifestation of a default weighting of these considerations, or is it already a product of children’s enculturation.

References


