

Children's Helping Behavior in an Ethnic Intergroup Context:
Evidence for Outgroup Helping

Developmental Psychology, in press

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Abstract

Two studies examined when and why children (10-13 years) help ethnic in-group and out-group peers. In Study 1 (n = 163) children could help an out-group or in-group peer with a word-guessing game by entering codes into a computer. While children evaluated the out-group more negatively than the in-group, they helped out-group peers *more* than in-group peers. Study 2 (n = 117) conceptually replicated the findings of Study 1. Additionally the results suggest that when children endorsed the stereotype that the out-group is 'less smart', this increased their intention to help out-group peers and it decreased their intention to enter codes for in-group peers. The results suggest that the specific content of a negative stereotype can guide helping responses towards out-group and in-group members.

Keywords: intergroup relations, helping behavior, stereotypes, ethnicity

Children's Helping Behavior in an Ethnic Intergroup Context:

Evidence for Outgroup Helping

Children show spontaneous helping behavior from 14 months onwards (e.g., Warneken & Tomasello, 2007). There is good reason to expect, however, that children will not help all people equally. Developmental intergroup research shows that children's social cognition and behavior is often selective, depending on the group context (for reviews see Bennett & Sani, 2004; Levy & Killen, 2008). For example, children evaluate aggressive behavior by in-group peers, compared to out-group peers, less harshly (Nesdale, Killen, & Duffy, 2013) and evaluate exclusion as acceptable when it concerns a peer who does not support the in-group (Abrams, Rutland, Pelletier, & Ferrell, 2009). While much is known about children's cognitions about negative intergroup behavior, very little research has focused on children's *positive* intergroup behavior in actual peer encounters.

In the current research, we focus on helping behavior in an ethnic group context. Children grow up in increasingly ethnically diverse environments, and understanding how the ethnic group of a recipient affects children's helping behavior is critical for designing interventions to promote prosociality across ethnic group boundaries. Because empirical studies of children's actual ethnic intergroup helping are scarce, the major goal of the present research is to examine whether the ethnic group context influences children's (10-13 years) actual helping and intention to help. In addition, we examine potential mechanisms that may explain why the ethnic group context influences majority status children's intergroup helping.

Intergroup helping

Adults' prosocial behavior is often influenced by group membership of the recipient. As a case in point, a recent meta-analysis on cooperation in economic games showed a small to medium effect size for adults' tendency to cooperate more with in-group compared to out-group members (Balliet, Wu, & De Dreu, 2014). However, research also shows that adults

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often do not discriminate against ethnic out-group members in their helping. Group based biases seem to emerge particularly when there is little opportunity for controlling prejudice or when the situation allows for rationalization of prejudiced responding, such as when an emergency occurs or when the costs of helping are high (for a meta-analysis see Saucier, Miller, & Doucet, 2005). While much research has focused on adults (for an overview see Van Leeuwen & Zagefka, 2017), research that examines children's ethnic intergroup helping is scarce. Some research has focused on children's reasoning about ethnic intergroup helping, and these studies show that children expect others to feel better about helping an ethnic in-group member compared to an ethnic out-group member; this was true across helping tasks in which the helping behaviors ranged from assisting with minor needs (e.g., sharing a new video game) to high needs (e.g., helping a hurt child) (Weller & Lagattuta, 2013). Moreover, in instrumental helping tasks (e.g., finding a lost key), children evaluate the refusal of ethnic intragroup help as more blameworthy compared to intergroup help refusal (Sierksma, Thijs, & Verkuyten, 2014a). Thus, these studies suggest that children might help ethnic in-group peers more than out-group peers.

To our knowledge, however, there is only one study that has examined children's ethnic intergroup helping in an actual encounter. Katz, Katz, and Cohen (1976) assessed White children's (5-6 and 9-10 years) intergroup helping by asking them whether they wanted to help a Black or White experimenter set up materials for the next participant (i.e., sorting cards into containers). They showed that while children's decision to help or not was not influenced by the experimenter's group membership, children who chose to help the experimenter helped more and for longer if the experimenter was White than if the experimenter was Black. However, when Bigler, Jones, and Lobliner (1997) examined to what extent children (6-9 years) were willing to help in-group and out-group peers in an artificial group setting (i.e., using t-shirt color), they showed that children helped in-group

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peers as much and as long as out-group peers with stringing together a pile of plastic squares. This was found despite the fact that children showed in-group bias on a range of other measures, such as when they evaluated hypothetical peer behavior or when they were asked to rate peers. On one hand, this may indicate that a context with artificially created groups elicits distinct outcomes in children's attitudes and behaviors compared to an ethnic group context. On the other hand, the paucity of studies prevents strong conclusions on children's ethnic intergroup helping.

In contrast to the dearth of research on intergroup helping in childhood, children's ethnic intergroup *sharing* behavior has received somewhat more attention in the field. While sharing involves different considerations compared to helping with regard to for example resources, effort and (moral) rules, both are considered prosocial behavior (see Dunfield, Kuhlmeier, O'Connell, & Kelley, 2011; Sierksma & Thijs, 2017). The findings for children's ethnic intergroup sharing are, like intergroup helping, somewhat mixed. Children often share more with their ethnic in-group. For example, children aged 3 to 5 years shared more with ethnic in-group peers than with ethnic out-group peers (Renno & Shutts, 2015) as was found for preschool children up to 5th graders (Zinser, Rich, & Bailey, 1981). Another study showed that children (2.5 year old's) preferred to give more to a native speaker than to the foreign speaker (Kinzler, Dupoux, & Spelke, 2012). However, when 2,5 to 3 year old children were asked to give away a toy, they did not differentiate between ethnic in-group and out-group adults (Kinzler & Spelke, 2011). In contrast, one older study involving preschoolers and 2nd and 3rd graders found that older children shared more with Black and Indian recipients compared to a White recipient, whereas younger children did not differentiate (Zinser, Perry, Bailey, Lydiatt, 1976). In sum, these studies suggest that children sometimes show in-group bias in their sharing but that this might depend on their age, and how group membership is communicated to them (i.e. language versus visual information). Moreover, there seem to be

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circumstances under which young children might also consider giving more to ethnic out-group peers, but what these circumstances are is not well understood. Also, to our knowledge, no studies have been conducted on older children's ethnic sharing behavior.

Taken together, the results on how an ethnic group context influences children's prosociality are mixed and suggest that intergroup prosocial behavior is a complex phenomenon that is likely affected by moderating variables, and thus requires further empirical attention. Therefore, the primary aim of the present research was to examine whether children help ethnic in-group and out-group peers differently. Additionally, to better understand the mechanisms underlying children's intergroup prosociality, we also explored potential moderators of children's ethnic intergroup helping by studying several variables that might explain individual differences. We discuss these individual difference factors each in turn.

Mechanisms underlying children's intergroup prosociality

First, in-group favoritism is considered: simply liking in-group members more than out-group members might underlie differences in helping ethnic in-group versus out-group members. The first instances of explicit out-group prejudice develop when children are 4 to 5 years of age, followed by an increase in middle childhood and a decline in late childhood, with no systematic development after the age of 10 (Raabe & Beelman, 2011). However, for indirect and implicit ethnic out-group prejudice little or no change is found across age (e.g., Dunham, Baron, & Banaji, 2006; McGlothlin & Killen, 2006), suggesting that on a less deliberate level, children's out-group prejudice remains.

Liking someone is a powerful predictor of helping behavior both in adults (Fehr & Gächter, 2002) and in children as young as 3 years old (Vaish, Carpenter, & Tomasello, 2010). This might mean that the more children like the ethnic *in-group*, the more they help in-group peers compared to out-group peers. However, other studies show that children's in-

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group bias in sharing is unrelated to children's intergroup attitudes, both in an ethnic group context (Renno & Shutts, 2015) and when novel social categories are used (Rhodes, Leslie, Saunders, Dunham, & Cimpian, 2017). This suggests that children's intergroup liking could also be unrelated to their helping behavior (see also Warneken, 2011).

Second, ethnic identification might influence children's intergroup helping. Social Identity Theory (SIT; Tajfel & Turner, 1979) postulates that people are motivated to maintain a positive social identity, which is established by positively differentiating the in-group from relevant out-groups, the so-called intergroup bias. According to SIT, those who more strongly identify with their in-group demonstrate a heightened concern about the status and value of the in-group relative to those who do not strongly identify with their in-group. In support of this, intergroup helping relations in adults and high school students have been shown to depend on the strength of in-group identification (e.g., Nadler & Halabi, 2006; Nadler, Harpaz-Gorodeisky, & Ben-David, 2009). Developmental research suggests that children begin to identify with their ethnic in-group around the age of 4 to 5 (Nesdale, 2004). Moreover, children's level of ethnic identification influences how they evaluate third party intergroup helping (Sierksma et al., 2014a). Therefore, children who express stronger in-group identification may be more motivated to enhance and maintain a positive ethnic identity and consequently help in-group peers more than out-group peers; however, this hypothesis has yet to be tested experimentally.

The third mechanism that will be explored herein is the perceived descriptive in-group norm about the out-group. Specifically, we test to what extent children's intergroup helping is influenced by how they perceive their in-group to evaluate the out-group. The Developmental Model of Subjective Group Dynamics (Abrams, Rutland, Cameron, & Marques, 2003) argues that with age children go from simple in-group preferences to a more complex understanding of intergroup relations due to their experience with groups and their understanding of group

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norms. For example, children expect others to behave in line with in-group norms and to exclude deviants (Abrams, Rutland, Ferrell, & Pelletier, 2008). In addition, children's expression of ethnic prejudice has been shown to depend on the perceived in-group norms (Nesdale, Maass, Durkin, & Griffiths, 2005).

We know that adults take into account how their helping is perceived by others (e.g., Leary & Kowalski, 1990; Hoffman, McCabe, Shachat, & Smith, 1994) and follow in-group norms when helping in an intergroup context (e.g., Tarrant, Dazeley & Cottom, 2009). Moreover, previous work shows that children's public helping intentions toward a national out-group are guided by how children expect their in-group to evaluate the out-group (Sierksma, Thijs, & Verkuyten, 2014b). This might mean that when children consider helping an out-group peer, they take into account how in-group peers evaluate out-group peers. Children who, for example, perceive that their in-group is relatively positive about the out-group might show less intergroup bias in their helping, whereas children who perceive that in-group peers are very negative about the out-group might be less inclined to help out-group peers because they fear in-group disapproval if they do so.

Finally, in Study 2 we also examine how children's endorsement of ethnic stereotypes may affect intergroup helping. In social psychology, stereotypes refer to cognitive beliefs and expectations about social groups (e.g., Amodio & Devine, 2006). Whereas the development of affective intergroup responses (i.e. positive, negative) has been studied extensively in children, how and when children come to understand the content of stereotypes has received less attention. Influential work on stereotyping in adults has shown that warmth and competence are central dimensions in guiding group perception (i.e. the stereotype content model; Fiske, Cuddy, Glick & Xu, 2002). Based on these two dimensions, four types of groups can be distinguished: Those that elicit pity (i.e., incompetent, warm), envy (i.e.,

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competent, not warm), admiration (i.e., competent, warm), and contempt (incompetent, not warm).

A recent study showed that children's (aged 6 and 9-10 years) perception of groups is also guided by warmth and competence, although not as independent dimensions. Moreover, children were found to prioritize competence over warmth in their perception of various groups (Roussos & Dunham, 2016). Whether warmth and competence might guide children's perception of ethnic groups is less clear. However, starting at age 6 children are familiar with various positive and negative stereotypes about ethnic out-groups (Pauker, Ambady, & Apfelbaum, 2010; Rowley, Kurtz-Costes, Mistry, & Feagans, 2007). Developmental Intergroup Theory (Bigler & Liben, 2007) postulates that children actively and passively learn about these stereotypes, such as through explicit statements made in their environment (e.g., by parents) and implicit associations between social categories and attributes (e.g., ethnic group and wealth). Consequently, the content of specific stereotypes, instead of general affective preferences for in-group and out-group peers, might also guide children's intergroup helping behavior. In this research we specifically focus on how children's endorsement of stereotypes about competence influence their intergroup helping.

The present research

To examine whether the ethnic group context influences children's helping behavior, we studied Dutch children's helping of Dutch in-group peers and Surinamese out-group peers. As a former colony, the Surinamese are one of the three largest non-western immigrant groups in The Netherlands (Statistics Netherlands, 2014). Surinamese people are therefore likely a familiar ethnic out-group to Dutch children. We focused on children aged 10 to 13 years because children this age have a complex understanding of intergroup relations (e.g., Killen & Rutland, 2011). Importantly, older children are able to weigh moral and group norms simultaneously whereas younger children are more likely to prioritize one over the other

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(Hitti, Mulvey, Rutland, Abrams, & Killen, 2014; Mulvey, Hitti, Rutland, Abrams, & Killen, 2014). At the same time, there is still considerable development at this age and beyond in ethnic in-group preferences, identification and group norm understanding (Raabe & Beelman, 2011; Nesdale, 2004). Therefore, children aged 10 to 12 years form an interesting group to examine how intergroup relations influence helping behavior. Interventions aimed at children of this age can appeal to children's sophisticated knowledge of groups, but also take advantage of the fact that their perceptions of out-groups and intergroup relations are still developing.

Across two studies, children were given the opportunity to help a Surinamese out-group or a Dutch in-group peer (between-subjects) by entering codes into a computer. Children were told that this peer had to guess words and that for each five codes they entered the other child would receive one letter. Study 1 assessed children's ethnic helping behavior and explored a range of possible individual differences described above¹. The second confirmative study examined children's ethnic intergroup helping intentions and children's endorsement of out-group stereotypes to better understand the findings of Study 1.

Study 1

Method

Participants.

To have an 80% chance to detect a medium sized effect at an alpha level of .05 we needed at least 65 Dutch children per cell. A total of 229 children (grades 5 and 6) from 10 classrooms from 6 different schools in the Netherlands participated in the study. Because we were interested in children's helping behavior towards ethnic in- and out-group peers, only the data from children who defined both themselves and their parents as native Dutch were selected for the analyses (N = 183). All children came from relatively 'White' schools because the great majority of children self-identified as Dutch across schools (ranging from

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81.5 % to 100 % of all children.). At one school, children failed to keep the experiment a secret at the last day and therefore might have influenced each other. Children tested this day were removed from the sample ($N = 11$). Furthermore, we included children's typing ability as a control variable but at the first day of testing we did not include children's typing experience in the survey yet. Therefore, results of another nine children were also not included in the analysis. This final sample used for the analyses therefore consisted of 163 children, aged between 10 and 13 years ($M = 11.12$, $SD = 0.73$), and 52.8 % were female. Parents were sent a letter about the study and only children with parental permission participated. Ethical approval for this study was obtained from the Radboud University (nr ECSW2015-2206-321, project title 'A helping hand: How the intergroup context shapes children's helping behavior').

Procedure & Materials.

Children were individually tested by one of two female research assistants who were unaware of the hypotheses tested. The experiment took place in a 'mobile lab', which consisted of a room in the back of a van. Each classroom received a general instruction by the first author about the procedure of the study. Here it was explained that we were interested in how children at primary schools think about a variety of things. Helping behavior was never mentioned to avoid social desirability. Children were told participation was voluntary and they could stop at any moment. We emphasized that it was very important children would not talk with each other about the study, because then they could influence each other. Teachers were instructed to closely monitor that children kept the content of the study a secret. After testing, each child again was told to not yet talk about the study to the other children. After all children of a particular school had participated, they were debriefed in their classroom. During the debriefing children were asked what they found most noteworthy about the study and whether they noticed anything about the child they were coupled with. In addition, they

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were asked what other features they had noticed about the study. After this classroom discussion, children were told about the aim of the study and were offered the opportunity to ask questions.

Children's helping behavior was assessed first, followed by survey questions assessing children's ethnic identification, demographics, in-group evaluation, out-group evaluation, and perceived in-group norm about the out-group. At the end, children were presented with a box with small gifts (e.g., stickers, pencils, erasers) from which they could choose one. In addition, teachers received a 12.50 euro gift card.

Cover story. Based on previous studies on intergroup helping in adults (e.g., Nadler & Halabi, 2006; Van Leeuwen & Täuber, 2011) a task was designed to measure children's helping behavior towards a Dutch in-group or a Surinamese out-group peer. Children entered the van and were seated at a table with a laptop. The research assistant explained that the study was also conducted somewhere else and that the participant would be coupled with another child. She said: "I am just going to give the other experimenter a quick call to see if they are ready", she stepped outside the van at hearing distance from the participant and used her mobile phone to ostensibly call the experimenter ("Hi! Are you guys ready? Great, let's start!"). Then children were told they were going to fill in a short form to send to the other child, so he or she would get an impression of with whom he or she was coupled. The experimenter opened a document at the laptop and asked the child for his or her name, gender, age, date of birth and 'group'. The latter was explained by using an example: "some people belong to the Dutch group, others belong to for example, the Turkish or Belgian group, to which group do you belong?". This was done to make children's Dutch in-group identity salient. Importantly, research with adults shows that a salient outgroup is not necessary for group based biases to emerge (Balliet, Wu, & De Dreu, 2014).

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Subsequently children were photographed with the laptop's camera with a white screen behind them as a background. The picture was pasted on to the document and the experimenter told children that the person in front of the bus would send it over to the other child and that she would have a look whether the other experimenter already sent their document. She then came back with the document in which the same information was shown and a picture of the other child (gender matched and ethnic group randomly manipulated between subjects). To make sure children read the information about group membership of the peer they were assigned to, the experimenter then asked to read each profile information piece out loud (what is his or her name? how old is he or she? etc.).

Children were told: "The other child will get an assignment in which he or she has to guess long words. You can help him or her get some letters of those words. I will give you a list of codes that can be entered into the computer. For every 5 codes that you enter, the other child will receive 1 letter. The more letters he or she will have the less work it will be for him or her to guess the words". Children were given the document with the codes. This was a list of 300 codes consisting of letters and numbers generated using random.org (10 digits, e.g., 1kg8sf8g9q). Each code was numbered and a separate column indicated the number of letters the other child received. The research assistant explained to children where to enter the codes and that at the right corner of the screen they could see the number of codes entered. Subsequently they were told: "You don't have to help *name recipient*, it's your own choice. And if you do decide to help, you can decide for yourself how long you want to help. Afterwards there are a couple of other assignments that we will do, but you will not be working with the other child anymore. Feel free to do as you like! If you want to help, you can start to enter the codes. If not, you can enter 'stop' and we will continue with the next assignment."

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The research assistant then turned her back to the child to make sure children would have a sense of privacy in deciding whether and how long they would help. After children finished the helping task, they continued with answering questions at the laptop. The research assistant did not praise or comment on children's helping behavior in any way.

Group manipulation. The document that children received introduced the recipient of help. Group membership was manipulated in three ways. First, under 'group' it either mentioned Surinamese or Dutch. Second, a picture was shown of a Dutch or Surinamese boy or girl. Pictures were pretested on age, intelligence, typicality for ethnic group, and happiness. A total of 31 pictures were evaluated by 26 adults. For each gender, a picture was selected for in-group and out-group with the intention of the 4 pictures to not differ significantly on the four aspects. Unfortunately, there were not 2 pictures of girls that were rated equally on happiness, therefore an out-group and in-group girl were selected that were both evaluated as happy with only a small difference on happiness ratings between them. Third, typical Dutch and Surinamese first names were used. The Surinamese names were: Laetitia (girl) and Orlando (boy), and the Dutch names were: Laura (girl) and Peter (boy). The recipient of help was gender-matched to the participant.

Helping behavior. Children's helping was measured in three ways: time spent helping (milliseconds transformed to minutes), number of codes (0-60) entered into the computer and the decision to stop helping during the 10-minute timeframe (yes/no). Piloting showed that children were slow on the first code and sometimes still asked questions while their helping time already started. Therefore, we decided that the first code and the time spent on entering this code was treated as a training phase and removed this data from the analyses. Results are similar when the data for the first code was included. In addition, each code entered was counted as helping behavior, even when the code entered did not precisely match the code in

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the booklet. The maximum time that children could spend helping was set at 10 minutes, but children were not told so in advance.

In-group and out-group evaluation. Similar to previous research (e.g., Sierksma et al., 2014b), children rated how much they liked Dutch people and people from Surinam. Evaluation was measured using a smiley-face scale ranging from 1 (strongly frowning) to 7 (strongly smiling).

Perceived in-group norm about the out-group. Similar to previous research (Sierksma et al., 2014b) children's perception of how in-group peers evaluated out-group peers was measured by asking: "This question is about the children in your class. How do you think that most children evaluate...", followed once by 'Dutch people' and once by 'Surinamese people' and answered on a 7-point smiley-face scale. The order of the measurement of perceived in-group norms and children's personal intergroup evaluations were counterbalanced. Children's perception of how classmates evaluated Dutch people was assessed to establish to what extent children perceived a more negative norm about the out-group compared to the in-group. In the analysis only perceived in-group norm about the out-group is examined.

Ethnic identification. Children's ethnic identification was measured with four items, similar to previous research (Sierksma et al., 2014a). Children were asked whether they liked being Dutch, whether they really felt Dutch, whether they were proud to be Dutch, and whether they found it important to be Dutch. The response format ranged from 1 to 5 (i.e., 'No!', 'No, not really', 'In between', 'Yes, kind off', 'Yes!'). Cronbach's alpha was .65 and the four items loaded on one principal component explaining 50.1% of the variance.

Typing experience. To control for children's ability to type we asked them whether they could touch type ('yes' (1) 'a little bit (2) 'no' (3)) and whether they ever participated in a typing course (yes/no).

Analyses

The data have a hierarchical structure as children were nested in their classrooms. Therefore, we used multilevel analysis to examine children's helping behavior. All analyses were carried out with MLwiN 2.35 (Rashbash, Browne, Healy, Cameron, & Charlton, 2015). The number of codes that children entered and time spent helping was analyzed with multivariate multilevel regression with a two-level structure: individual respondents (level 1, $n = 163$) and classrooms (level 2, $n = 10$). Separate models were run for the number of codes children entered ($n = 163$) and for the time children spent helping (when they decided to stop helping, $n = 117$). The children who stopped during the 10-minute timeframe with entering codes were compared to children who helped the full 10 minutes by using logistic multilevel analysis with the same levels. A binomial distribution was specified with a logit link. The dependent variable was "stop" (1) versus "no stop" (0).

The influence of recipient's group membership was tested with a contrast coded '1' for in-group and '-1' for out- group. We always tested a model including only group membership of the recipient first. Because of power restrictions and strong correlations between most moderating variables, we then tested separate models for each moderator, including the main effect of the group context, the moderator, and the interaction. In all analyses, we controlled for children's experience with typing. For ease of interpretation, all continuous measures were standardized. MLwiN does not provide effect sizes, but the reported standardized betas can be compared to assess effect sizes of the independent variables. Descriptive results can be seen in Table 1 and multilevel results are reported in Table 2.

Results

Preliminary results.

Age and gender. Girls entered more codes compared to boys (respectively $M = 14.72$, $SD = 9.23$ and $M = 11.38$, $SD = 6.68$, $b = -.19$, $p = .005$), no influence of gender was found for

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the remaining dependent and independent variables and no influence was found for children's age. Therefore, data was collapsed across gender and age.

Typing ability. Participation in a typing course resulted in entering marginally more codes ($b = .14, p = .06$) but children's ability to touch type did not ($b = -.08, p = .26$). Neither measure interacted significantly with any of the independent variables. Whether children followed a typing course was included as a control variable in all analyses.

Descriptives for moderators. Children evaluated the in-group more positively compared to the out-group ($t(162) = 8.82, p < .001$). In addition, children perceived a less positive norm about the Surinamese out-group compared to the Dutch in-group (respectively, ($M = 5.23, SD = 1.52; M = 6.60, SD = 0.73$), $t(162) = 10.48, p < .001$) and identified strongly with the Dutch in-group, above the neutral midpoint of the scale ($t(162) = 21.72, p < .001$).

Helping behavior.

Number of codes. Children entered on average 13.14 codes ($SD = 8.27$, range 0-34), with only three children who did not enter any codes at all. The first model resulted in a main effect for group membership of the recipient of help ($p < .001$), showing that children entered more codes for out-group peers compared to in-group peers. When models were run that additionally included in-group evaluation, out-group evaluation, ethnic identification or children's perceived in-group norm about the out-group, no main or interaction effects were found.

Time spent helping. We first analyzed time spent helping across all participating children ($M = 6.10$ minutes, $SD = 3.09$) and no effects were found for recipient's group membership or any of the moderators. However, this group included children who helped the full 10 minutes and because this sample of children did not vary on the outcome variable, we also ran a model in which these children were excluded ($n = 117, M = 4.75$ minutes, $SD = 2.57$). Group membership of the recipient of help, resulted in a significant main effect ($p =$

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.02). This suggests that when children decided to stop helping, they did so more readily when helping an in-group peer compared to an out-group peer.

The models that additionally included the recipient's in-group evaluation, out-group evaluation and ethnic identification did not yield significant effects. When children's perception of the in-group norm about the out-group was included, a main effect was found ($p = .028$), with a more positive norm about the out-group being related to more time spent helping. However, no interaction was found with the recipient's group membership.

Stop vs. No stop. During the 10-minute timeframe, 117 children decided to stop helping, whereas 46 children helped until the end of the timeframe (10 minutes). Logistic multilevel regression showed that recipient's group membership did not influence children's decision to stop helping nor did in-group evaluation, out-group evaluation, ethnic identification, and in-group norm about the out-group play a role in children's decision whether or not to stop helping.

Discussion

The main goal of Study 1 was to examine children's actual ethnic intergroup helping. The descriptive results suggest that children felt comfortable to stop helping when they wanted to because 70.5 % did not help the full 10 minutes. Moreover, our impression of the debriefing made clear that the cover story was successful. The results show that children's intergroup helping was influenced by group membership of the recipient of help. Even though children evaluated the out-group less positively compared to the in-group, they entered more codes and helped longer when the recipient of help was a Surinamese out-group peer rather than a Dutch in-group peer. Compared to earlier findings on intergroup helping (Bigler et al., 1997; Katz et al., 1976) as well as findings on reasoning about ethnic intergroup helping (Weller & Lagattuta, 2013; Sierksma et al., 2014a), this is a surprising and novel result.

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To our knowledge, only one study reported an out-group bias in children's prosocial behavior, showing that White children preferred to share more with Indian and Black recipients compared to White recipients (Zinser et al., 1976). Children have also been found to intend to help national out-group peers more than in-group peers in a high need private helping context (Sierksma et al., 2014b). Results further show that children's decision to stop or continue helping was not influenced by whether the recipient of help belonged to the in-group or out-group. This is in line with previous research on intergroup helping that showed children's explicit decision to help was not influenced by whether the recipient was Black or White, but only the time they spent helping and the amount of help offered (Katz et al., 1976).

In Study 1 we also examined what mechanisms identified in the developmental intergroup literature are related to individual differences between children's intergroup helping. Children's in-group evaluation, out-group evaluation, and ethnic identification were not related to their intergroup helping. A more positive perceived descriptive in-group norm about the out-group was related to more time spent helping, but did not influence the time children spent helping an in-group or out-group peer differently.

Study 2

We conducted a second study to conceptually replicate the results of Study 1 and to better understand why children helped out-group peers more compared to in-group peers. While one study previously reported out-group bias in children's sharing (Zinser et al., 1976), no studies have tested *why* children might help out-group peers more than in-group peers. A potential explanation for our findings may lie within the helping context we studied. A common stereotype about lower status out-groups, and the Surinamese in particular, is that 'they are less smart' or 'underperform academically' (see Kuipers, 2000). It is likely that the helping context might have increased salience of this stereotype because it involved helping the other peer with guessing long words. As a consequence, children who endorse this

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stereotype might want to help out-group peers more than in-group peers because they think that 'the out-group needs more help' and the 'the in-group needs little help' in order to succeed. Therefore, in Study 2 we asked children whether they wanted to help an in-group or out-group peer and additionally measured the extent to which children endorsed specific out-group stereotypes.

Method**Participants.**

A total of 141 children from 6 classrooms participated in the study (2 schools, grade 5 and 6), of which 117 children indicated they were born in the Netherlands and that their father and mother were Dutch. Therefore, 117 children were included in the final analyses. Similar to Study 1 children came from relatively white schools (96.97 % to 85.71% self-identified as Dutch across schools), were aged between 10 and 13 years ($M = 11.28$, $SD = 0.78$) and 53% were female. Parental permission for almost all children was obtained and only those with permission participated.

Procedure & Materials.

The experiment was programmed in Inquisit 4 (2015) and children completed the questionnaire in their classroom on small laptops. Data collection was supervised by two female research assistants and was part of a larger survey, which took approximately 20 minutes. Children first answered questions about in-group and out-group evaluation and in-group and out-group stereotypes. After an unrelated measure for the present study, children were asked about their helping intentions. Afterwards, as in Study 1, children were debriefed in their classroom and the research assistant shortly talked about what children thought about the study. In addition, children were told to not yet talk about the study to the other children at their school.

Cover story. The cover story was similar to Study 1. At the first page children read:

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“This research also takes place somewhere else and we were wondering if you would like to participate again next week. For this task you will be coupled to another child. This child needs to do an assignment in which he or she has to guess long words. You can help him or her get some letters of those words. The computer will now select who you will be coupled with. Click on ‘next’ to see who it is!”. At the second page children were told that they were coupled with the other child and shown the identical profiles used in Study 1. At the third page the procedure was explained, which was also identical to Study 1. Children were shown 3 examples of the codes they could enter. Again, they were told that they were free to choose as they liked, that they did not have to help, and that if they agreed to help next week they could do so as long as they wanted. In addition, they read; “You can indicate whether you would like to help or not, and we will contact you today to schedule when you can help next week”.

Group manipulation. The same photos and information was shown to children as in Study 1. Group membership was again randomly varied between subjects. Profiles of the recipients of help were gender-matched.

Intention to help. Intention to help was measured asking ‘Would you like to help next week?’, answered on a 3-point scale (1 = ‘No’, 2 = ‘Maybe’, 3 = ‘Yes’). Time spent helping was measured by asking “And if you would like to help, for how long approximately? Indicate the number of minutes, between 0 and 30”. Number of codes was measured by asking: “How many codes would you like to enter? (5 codes are equal to 1 letter)”. For the last two questions, children who did not want to help were instructed to enter 0.

Stereotypes. To assess children’s endorsement of the stereotype that Surinamese are less smart, they were asked two questions: ‘I think most children from Surinam are smart’, ‘I think most children from Surinam do well in language’. In addition, a third question was added to assess whether another stereotype about people from Surinam (‘lazy’), which was

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not related to academic performances, could also explain out-group bias in helping (see Kuipers, 2000): 'I think most children from Surinam work hard' (tested in a separate exploratory model, see below). Answers were given on a 5-point scale, ranging from 'No, not at all!' to 'Yes, absolutely!'. Therefore, a lower score indicates stronger endorsement of the stereotype. For ethical reasons, stereotypes were formulated positively. Subsequently, the participating children also answered the same questions for Dutch children, to examine how endorsement of out-group stereotypes differed from children's in-group evaluation about these characteristics. However, children's endorsement of in-group stereotypes was not included in the models. Children's endorsement of Surinamese children's language and academic performance correlated strongly ($r = .51, p < .001$) and we therefore computed a mean score. Analysis for each of these questions separately resulted in similar but less strong effects.

In-group and out-group evaluation. Children's evaluation of Surinamese and Dutch people was measured with the same items as in Study 1, to assure that the Study 2 sample did not differ in how children evaluated out-group and in-group peers from the Study 1 sample.

Analyses

All analyses were conducted using MLwiN 2.35 (Rasbash et al., 2015). Children's intention to help was analyzed using multilevel regression analysis using a 2-level structure (level 1 = individual children ($n = 117$), 2 = classrooms ($n = 6$)). The number of codes and time children intended to spend helping was analyzed in one multivariate multilevel regression model that only included children who intended or maybe intended to help ($n = 76$), using a three-level structure. Such a model is similar to MANOVA, because in this model within-subject responses can be examined and compared by treating them as observations nested within individuals (see Snijders & Bosker, 1999). A three level structure was specified for the two types of help. Level 1 referred to helping ($n = 152$), level 2 denotes the individual

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respondents ($n = 76$) and level three the classrooms ($n = 6$). Again, all continuous measures were standardized and effect sizes can be inferred from the standardized betas. Multilevel results can be seen in Table 3.

Results

Descriptives

Children evaluated Suriname people less positive than Dutch people, (respectively, $M = 4.79$, $SD = 1.53$ and $M = 6.58$, $SD = 0.62$), $t(116) = 11.36$, $p < .001$. This suggests that children's attitude towards the in-group and out-group were comparable to Study 1. Children perceived Surinamese children to be less smart compared to Dutch children (respectively, $M = 2.93$, $SD = 0.70$, $M = 3.64$, $SD = 0.62$, $t(116) = 9.32$, $p < .001$). However, children expected Dutch and Surinamese children to work equally hard (respectively, $M = 3.44$, $SD = 0.90$, $M = 3.62$, $SD = 0.92$, $t(116) = 1.35$, $p = .18$).

Of all children, 29.9% indicated they wanted to help, 36.8 % responded 'maybe' and 33.3 % of the children refused to help. The children who intended to help (i.e., 'yes' and 'maybe') indicated they wanted to enter on average 10.55 codes ($SD = 8.14$) and intended to help on average 16.91 minutes ($SD = 8.10$). Children's age was not related to their intention to help. Girls intended to help more than boys (respectively, $M = 2.10$, $SD = 0.78$, $M = 1.82$, $SD = 0.80$; $b = -.22$, $p < .01$), but no associations of gender and age with any of the other dependent or independent variables were found. Therefore, data were collapsed across gender and age.

Intention to help

Similar to Study1, a main effect was found for group membership of the recipient of help ($p = .032$): children intended to help out-group peers more than in-group peers. No main effect was found for children's endorsement of out-group stereotypes ($p = .087$). However, a

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significant interaction emerged between children's endorsement of out-group stereotypes and the group membership of the recipient of help ($p = .022$, see Figure 1).

Simple slope analysis showed that when children endorsed a relatively positive out-group stereotype (i.e., smart; 1 *SD* above the mean), children intended to help in-group and out-group peers equally ($b = .01$, $p = .90$). However, when children endorsed a relatively negative out-group stereotype (i.e., not smart, 1 *SD* below the mean), they intended to help out-group peers more than in-group peers ($b = -.38$, $p = .002$). Furthermore, endorsement of the out-group stereotype being less smart was significantly related to in-group helping ($b = .35$, $p = .003$), but not to out-group helping ($b = -.05$, $p = .70$). Note that a perceived negative out-group stereotype is reflected in a lower score on this scale.²

Number of codes.

Two children indicated they wanted to help but reported an intention of entering 0 codes. These children were removed from the analysis ($n = 76$). No main effect was found for children's endorsement of out-group stereotypes and recipient's group membership. However, a marginal significant interaction for the group context and out-group stereotypes emerged ($p = .050$). Simple slope analysis did not yield significant slopes. But children's endorsement of out-group stereotypes was significantly and negatively related to the number of codes they intended to enter in the out-group condition ($b = -.38$, $p = .012$) but not related to children's intention in the in-group condition ($b = .09$, $p = .30$). This suggests that endorsement of a more negative out-group stereotype was related to increased intention to enter codes for the out-group recipient.

Time spent helping.

No significant main or interaction effects were found for group membership or perceived out-group stereotypes on the time children wanted to spend helping.

Additional exploratory analyses.

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Although children evaluated Surinamese and Dutch children to work equally hard, we also explored how this stereotype of Surinamese children influenced children's intention to help. A significant interaction was found for endorsement of the stereotype about the Surinamese work ethic and recipient's group membership ($b = .26, p = .002$). Simple slope analysis showed that when children expected Surinamese children to work relatively hard, there was no difference in intention to help in the in-group and out-group condition ($b = .094, p = .44$). Whereas when they perceived Surinamese children to work relatively less hard, a stronger intention to help was observed for the out-group condition compared to the in-group condition peers ($b = -.43, p < .001$). Furthermore, children's endorsement of the stereotype was positively related to intention to help the in-group ($b = .28, p = .020$) and marginally negatively related to children's intention to help the out-group ($b = -.25, p = .050$). This suggests that higher endorsement of this negative stereotype was related to a stronger intention to help out-group peers and a less strong intention to help in-group peers. Children's stereotype of the Surinamese work ethic was not related to the number of codes they wanted to enter or the time they intended to help.

Discussion

Study 2 was conducted to conceptually replicate Study 1 and to further understand why children helped out-group peers more and longer compared to in-group peers in the first study. Approximately a third of all children indicated that they wanted to help, another third was unsure, and one third did not want to help. This distribution and the our impression of the classroom discussion during debriefing suggest that the cover story was successful.

Study 2 conceptually replicates an important result of Study 1: although children preferred the in-group over the out-group, they intended to help out-group peers more than in-group peers. Results further suggest that specific negative out-group stereotypes might underlie children's out-group bias in helping. Particularly, when children evaluated

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Surinamese peers to be relatively less smart and to do less well in language, they intended to help in-group peers less compared to out-group peers. Whereas, when children reported relatively less strong endorsement of this negative out-group stereotype, they intended to help in-group peers and out-group equally. Furthermore, endorsement of a negative out-group stereotype seemed to result in a reduced motivation to help in-group peers rather than an increased willingness to help out-group peers. This is an important result and suggests that the content of specific out-group stereotypes rather than general out-group evaluation can lead children to help in-group peers less than out-group peers.

Results for the codes children intended to enter showed a similar but less strong pattern. Again, a more negative perceived stereotype was associated with out-group bias in children's helping. Contrary to results found for children's intention to help, a negative perceived stereotype was associated with a stronger willingness to enter codes for out-group peers and was not related to in-group helping. This study thus provides a first step into showing that children's endorsement of an ethnic out-group stereotype can be related to a heightened out-group bias in their intention to help. The direction of the effect, however, needs further attention. On the one hand, endorsement of the stereotype that the out-group is less smart might lead to an increased intention to help out-group peers ('they need more help'), as was shown in children's intention to enter codes. On the other hand, endorsement of this specific stereotype could lead to a lower willingness to help in-group peers ('we need less help'), as was shown in children's intention to help.

A third possibility is that both of these motivation are at play, as exploratory analyses showed that when children report relatively strong endorsement of the stereotype that Surinamese children work less hard, this was related to a reduced intention to help in-group peers, but also somewhat related to increased willingness to help out-group peers. Less strong endorsement of this out-group stereotype was related to the intention to help in-group and out-

group peers equally. This indicates that when out-group stereotypes imply that 'the out-group needs more help than we do', also when the out-group seems responsible for this need, this leads children to help out-group peers more and in-group peers less. These results might indicate that children view smartness and working hard as overlapping constructs (see Dweck, 2002). However, children's endorsement of the stereotype about the out-group's work ethic was not related to how many codes they wanted to enter for in-group and out-group peers. Moreover, no effects were found for the time children intended to help.

At least two interpretations can be given for the inconsistency between children's intention to help and their intended motivation to spend time or enter codes. Possibly the results for intended time and codes are less reliable. The sample size was rather small. Although we aimed at a sufficient number of children per cell of our design, we could only examine our dependent variables for children who intended to help. Moreover, the questions about time might have been too abstract for children this age group. Children in Study 2 estimated they would help much longer than children actually helped in Study 1. Moreover, research shows that the development of children's conception of time continues well into adulthood (see Wearden, 2016). Study 2 underlines that ethnic stereotypes are an important factor in explaining why children intend to help out-group peers more than in-group peers. However, whether endorsement of stereotypes results in increased out-group helping, decreased in-group helping, or both, warrants further research.

General Discussion

A widely accepted explanation of differential levels of prosocial behavior toward in-group versus out-group members is mere evaluation or identification with the in-group (e.g., Dunham, Baron, & Carey, 2011; Stürmer & Snyder, 2010; Wynn, 2009; Warneken, 2009). That is, when the group context is salient, the in-group is liked better compared to the out-group, and prosocial responses towards in-group members are more likely to emerge. In

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contrast to this notion, we found that children intended and actually helped a Surinamese out-group peer longer and more with a word-guessing game than a Dutch in-group peer, *despite* a more positive evaluation of the in-group than the out-group. While developmental studies have shown that in-group favoritism can be absent in some children (e.g., Griffiths & Nesdale, 2006; Shutts, Kinzler, Katz, Tredoux, & Spelke, 2011) and that children under the right circumstances sometimes like out-group peers more than in-groups (Rutland, Hitti, Mulvey, Abrams, & Killen, 2015), out-group bias in children's actual behavior in peer encounters is a rare finding.

Some other previous work did document a dissociation between preference and prosociality in much younger children's sharing behavior. Children's preferential sharing with ethnic in-group and out-group peers was found to be unrelated to their intergroup attitudes (Renno & Shutts, 2015) or their preference toward newly created social categories (Rhodes et al., 2017). A similar dissociation has been shown in studies that focus on children's understanding of social class and wealth. For example, 4 and 5 year olds have been shown to like advantaged targets more but at the same time share more with disadvantaged targets than with advantaged targets (Li, Spitzer, & Olson, 2014). Likewise, Shutts and colleagues showed that children aged 5 to 9 years preferred wealthy peers over poor peers but gave more resources to poor peers than to wealthy peers (Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016). This suggests that children's affective preferences can contrast with their prosocial behavior.

Other key mechanisms identified as important in children's intergroup cognition, such as ethnic identification and perceived in-group norms (see Abrams et al., 2003; Nesdale, 2004) also did not guide children's intergroup helping. This indicates that perhaps complex behaviors like helping are not guided by simple affective preferences (see Warneken, 2009). Moreover, what motivates children to help in actual peer encounters might differ from their

considerations when asked to judge third-party interactions (e.g., Sierksma, et al., 2014a; Weller & Laggatutta, 2014) in which these mechanism were shown important.

Out-group stereotypes

Our research offers a first step in identifying one key mechanism that might guide children's intergroup helping. It suggests that out-group stereotypes could be crucial in explaining why children wanted to help out-group peers more compared to in-group peers with a word-guessing task. Results of this study show that even though children were more negative about the out-group, the specific content of the out-group stereotype as being less smart and more lazy, induced children who endorsed this stereotype to be less inclined to help children of the in-group compared to the out-group. This finding could have important implications for understanding children's helping behavior and prosocial behavior towards out-group members more generally. It suggests that the affective responses toward out-groups (i.e., being negative) can contrast with responses elicited by the content of a particular stereotype (i.e., 'they need more help than we do'). This raises important questions about when and how intergroup helping behavior is driven by affect and when stereotype content is guiding children's intergroup helping.

Importantly, our results do not imply that children will always (intend to) help out-group peers more than in-group peers, but suggest that children's intergroup helping depends on the specific stereotypes that are relevant in a particular context. To give some examples: in helping situations involving reciprocity, a general stereotype about the out-group's untrustworthiness may lead to less helping of out-group peers as compared to in-group peers (see also Balliet, Wu, & De Dreu, 2014). Or in a situation that requires athletic ability, a stereotype about the out-group as being 'strong' or 'athletic' may result in less helping of out-group peers as compared to in-group peers.

It is important to note, that in the current study children evaluated the Surinamese out-group relatively positively. In line with the stereotype content model (Fiske, et al., 2011), it is likely that children perceived the Surinamese out-group as warm but incompetent ('paternalistic stereotype'). As a consequence, this could have elicited pity or sympathy and subsequently increased their intention to help. This suggests that endorsement of a negative stereotype can elicit paternalistic motives (see also Cuddy, Fiske, & Glick, 2007). There is research that shows paternalistic tendencies are already present in children as young as 5 years (i.e., Martin, Lin, & Olson, 2016; Martin & Olson, 2013). This might also mean that negative out-group stereotypes solely lead children to help out-group peers more than in-group peers when it concerns an out-group peer that is not strongly disliked, or, in other words, is perceived as warm. Specifically, an out-group that is perceived as incompetent but less warm, might evoke contempt and as such lead to less helping. Of course, this idea needs additional investigation in future research.

In short, perhaps the most important implication of the present results is that intergroup bias in helping can result from other reasons than only differential evaluations of in-group and out-group. To further understand children's intergroup helping behavior, future studies should examine how stereotype content, the context of helping, and evaluative processes interact. In other words, research should go beyond the question: 'Are children more or less likely to help out-group children?' and move towards a better understanding about what circumstances and what factors promote intergroup helping in children. The present findings suggest that stereotype content may have a major influence.

Limitations and other future directions

The current research offers important insights but some limitations should be noted. First, it is important to examine the robustness of our results and conduct a direct replication of the current research and study how stereotypes are related to children's actual helping in an

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intergroup context. Study 2 suggests that stereotypes inform children about the in-group's and out-group's need for help and that they intend to act accordingly. It would be interesting for future research to include a measure of the extent to which children perceive both groups to be in need for help with a word-guessing game. Such work should then also consider using a within-subjects design. This will offer a better understanding whether and how endorsement of ethnic stereotypes influences in-group and out-group helping within the same child and it will increase power. For example, children could be given the opportunity to help both ethnic in-group and out-group peers at the same time, while allowing them to freely choose how much they want to help an in-group peer, out-group peer or both. In addition, in Study 1, individual differences were measured after children's helping behavior whereas the order was reversed in Study 2. This order difference might have led to differences in children's helping (intention) and this should be avoided in future work. Furthermore, future studies should use a random selection of multiple pictures of in-group and out-group peers to enhance generalizability of the results.

Third, the current studies focused on older majority status children in relatively homogenous schools and future studies should examine whether the results generalize. First of all, not knowing how adults perceive this particular out-group limits interpretability of the current findings. It is important to test how this particular ethnic context might affect Dutch adults' helping behavior and what types of stereotypes adults endorse about the Surinamese out-group. This could offer a more in-depth insight into whether the current findings are specific to this age group and if so, what in development might explain potential differences between children and adults. For example, children's limited experience with ethnic out-group peers could expose them to different stereotypes compared to adults (e.g., Pauker, Xu, Williams, & Biddle, 2016) or adults' helping behavior could be guided more by how warm or cold they perceive the out-group to be (Cuddy et al., 2007).

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Secondly, previous research that 6-year old children already are familiar with ethnic stereotypes, at least in the USA (Pauker et al., 2010). Future work could thus also focus on younger children. Children aged 10 to 13 years have a relatively complex understanding of groups and group norms (e.g., see Killen & Rutland, 2011) and are well aware of norms against discrimination (e.g., Rutland, Cameron, Milne & McGeorge, 2005). The mechanism underlying older children's intergroup helping might therefore differ from those in younger children. Ethnic bias has been found in children from 4 to 5 years onwards (Raabe & Beelman, 2011), but around this age children are unfamiliar with specific stereotypes (Pauker et al., 2010). This might mean that simple in-group preference or out-group dislike underlies helping in younger children (e.g., Elenbaas, Rizzo, Cooley, Killen, 2016). On the other hand, younger children also strongly endorse fairness norms and as such might help in-group and out-group peers equally (e.g., Geraci & Surian, 2011), or they might simply not notice a peer's ethnicity in the absence of category labels (e.g., Degner & Wentura, 2010; Pauker, Williams, & Steele, 2015). Future work should consider testing children's intergroup helping across a broader age range.

Third, this research should also be conducted in an ethnically more heterogeneous school context and take into account out-group contact, because contact with out-group peers tends to ameliorate how the out-group is perceived (Tropp & Prenovost, 2008). This could indicate that children attending a heterogeneous school have less stereotypical ideas about out-group peers (but see Couper, Sheehan, & Thomas, 1991). Moreover, children in this study were mostly very positive about the in-group, which may indicate a ceiling effect for this measure. Growing up in more diverse environments might lead to more diversity in how children perceive their in-group. Intergroup helping should be assessed in minority status children as well. These children might also endorse negative stereotypes about their own group (e.g., Shutts, Kinzler, Katz, Tredoux, & Spelke, 2011) and this might lead them to help

in-group peers more when they endorse the negative stereotype about their in-group being less smart.

Conclusion

The main contribution of the present research is that children helped out-group peers more than in-group peers. Moreover, evaluative processes did not guide this effect. The second study suggests that the content of out-group stereotypes can magnify out-group bias in helping. Including children's endorsement of ethnic stereotypes in future studies on intergroup helping will allow for in-depth analysis of the conditions that foster in-group and out-group helping across different contexts. This should offer crucial insight into how the increasingly ethnically diverse society children grow up in, influences their positive intergroup behavior, and will create opportunities to design interventions that foster intergroup solidarity and prevent discrimination early on in life.

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Table 1. Descriptives and correlations for moderating variables in Study 1

	1. In-group evaluation	2. In-group Identification	3. Out-group evaluation	4. Out-group norm
M (SD)	6.67 (0.63)	4.07 (0.63)	5.71 (1.36)	5.23 (1.52)
2. In-group Identification	.23**			
3. Out-group evaluation	.20*	-.30***		
4. Out-group norm	.15	-.22**	.63***	

Note. * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

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Table 2. Multilevel results for children's decision to stop or continue helping, number of codes entered and the time spent helping

	Stop vs. no stop ¹	Number of codes	Time (n =121)
<i>Model 1</i>			
Recipient's group	.08	-.21***	-.20*
<i>Model 2</i>			
Ethnic Identification	.01	-.05	-.09
*Group	.12	-.01	-.09
<i>Model 3</i>			
In-group evaluation	-.16	-.02	-.11
* Group	.10	-.04	-.12
<i>Model 4</i>			
Out-group evaluation	-.04	.05	.11
* Group	-.14	.05	-.07
<i>Model 5</i>			
In-group norm	.15	.02	.21*
* Group	-.12	.02	-.05

Note. ¹ Dependent variable: 0 = no stop, 1 = stop. Coefficient represents the mean odds to stop helping. *** $p \leq .001$, * $p \leq .05$, two-tailed. Children's experience with a typing course was included as a control variable.

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Table 3. Multilevel regression results for Study 2

	Intention to help	Number of codes	Time
Group	-.18*	-.01	.21
Stereotype smart	.15	-.14	-.19
Stereotype smart	.20*	.24*	-.10
*Group			

* $p \leq .05$

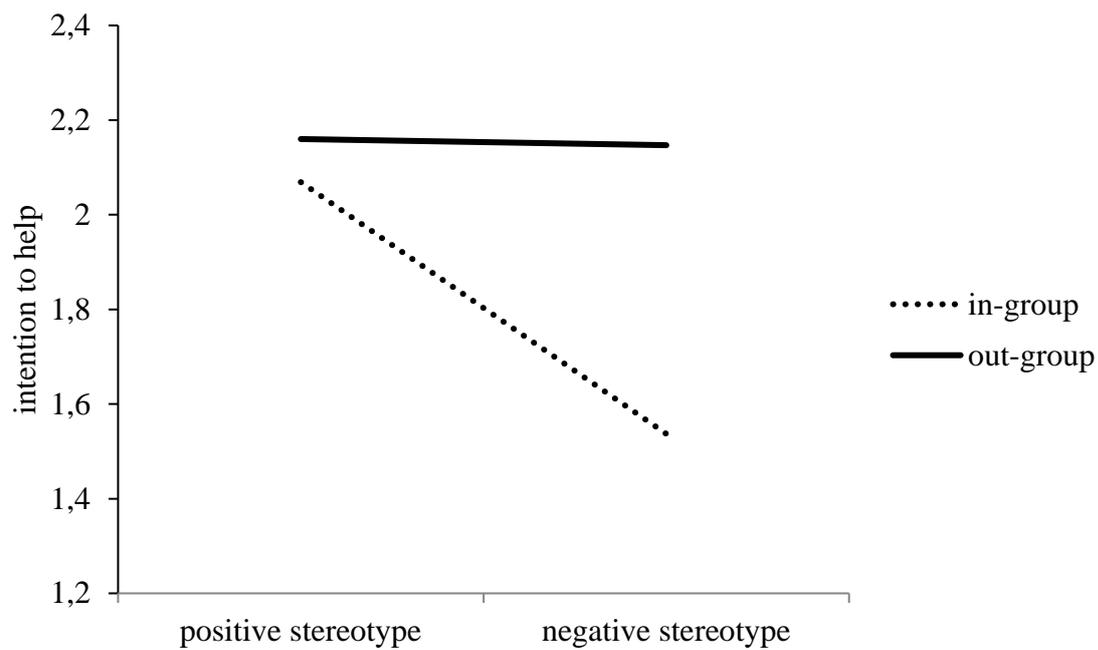


Figure 1. Influence of the out-group stereotype being less smart on children's intention to help in-group and out-group peers (1 = no, 2 = maybe, 3 = yes), Study 2

Footnote 1.

Study 1 and 2 also included a measure on intergroup anxiety. Although we believe that intergroup anxiety may be an interesting moderating variable, in hindsight, we realized that there was a bad fit between the generic measure we employed and the current studies involving a rather specific positively evaluated out-group. This was corroborated by the puzzling findings. Children's level of general intergroup anxiety, however, did influence their (intention) to help members in this specific ethnic intergroup context. We are, however, not able to explain the findings thoroughly and therefore unsure what we might learn from them. For transparency reasons we have therefore included a description of the results in the supplemental materials online.

Footnote 2.

When a difference score was included for children's endorsement of out-group stereotypes relative to in-group stereotype, this did not result in significant interactions with the group context on children's intention to help or the number of codes they wanted to enter.