Children's intergroup prosocial behavior:

The role of group stereotypes

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Abstract

Children are prosocial from a young age onward but their prosocial actions are not necessarily egalitarian – especially with regard to others' group membership. From around four years of age children tend to help and share more with in-group members compared to out-group members. However, a growing body of findings also suggest that sometimes children act more prosocially toward out-group members. How can we reconcile such seemingly contradicting behaviors? In this chapter, I describe how the salience of group stereotypes might shed light on these inconsistent findings. Specifically, different helping contexts can activate different group stereotypes. These different stereotypes could lead children to sometimes act more prosocially toward in-group peers, but sometimes show out-group bias in their helping or sharing behavior. For example, contexts that involve reciprocity could increase salience of a stereotype that out-groups are less trustworthy and thus children might be less inclined to share their resources with the out-group (i.e., in-group bias). Whereas an academic helping context might make a stereotype salient that entails out-groups are less competent and thus needing more help (i.e., out-group bias). Taking into account group stereotypes in children's prosocial behavior will provide us with a deeper understanding of the underlying motivations that lead to selective prosociality in children. In the long run, such insights can contribute to combating discrimination and prejudice early in life.

Children's intergroup prosocial behavior: The role of group stereotypes

Despite attempts to promote social solidarity, xenophobia and discrimination persist in societies across the world. Group-based biases affect children from a young age onwards and have detrimental effects on their social and academic development (e.g., Umaña-Taylor, 2016). One promising solution to counteract discrimination and prejudice is to encourage prosocial behavior across group boundaries, as positive contact between members of different groups can improve intergroup relations (Beelmann & Heinemann, 2014; Pettigrew, & Tropp, 2006; Taylor, 2020). Therefore, it is important to develop a better understanding of when and how group boundaries influence children's prosocial behavior. Such insight may create opportunities, in the long run, to foster positive intergroup relations early in life.

This chapter delves deeper into the question of when and how group boundaries influence children's (4-12 years) prosocial behavior. First, I will review research showing that children are more prosocial to in-group members than out-group members. Next, I describe research showing that children sometimes also help or share *more with out-group members* rather than recipients belonging to their in-group. I will then offer a way to reconcile these seemingly contradictory findings. In particular, the salience of group stereotypes in different prosocial contexts might explain in-group and out-group bias in children's prosocial behavior. I will discuss empirical evidence that illustrates how group stereotypes influence children's prosocial behavior and raise new questions and avenues for future research that follow from this focus on group stereotypes.

The research discussed focuses on prosocial behavior, which is generally defined as voluntary behavior intended to benefit others (e.g., Dunfield & Kuhlmeier, 2013). I cover

behaviors such as providing instrumental help to others, sharing one's resources, or comforting those in need. Moreover, the group boundaries discussed here refer to a wide array of groups (e.g., ethnic and racial, gender, school-based groups). I focus on children up to 12 years in this chapter because a deeper understanding of bias in younger children's prosociality might pave the way for interventions that could occur when such biases are arguably still more malleable than later in life (Raabe & Beelmann, 2011).

In-group bias in children's prosocial behavior

Groups are salient and important to children from a young age onward. Infants detect someone's gender and race when they look at faces (see Marquis & Sugden, 2019; Quinn et al., 2011). Shortly after, during the preschool years, children start to express an explicit preference for various in-group members over out-group members. For example, around 3-years White children prefer to befriend peers belonging to their gender in-group (Shutts et al., 2013) and around 4 years of age White children evaluate White children more positively than children belonging to racial out-groups (Raabe & Beelmann, 2011). Even when groups are based on novel arbitrary categories (i.e., minimal groups), like T-shirt color, in-group preferences emerge in children as young as 5 years (i.e., Dunham et al., 2011).

A growing body of research shows that group boundaries also influence children's prosocial behavior. Similar to research on children's attitudes and preferences, a large majority of these studies suggests that children are more prosocial toward individuals belonging to their in-group. As early as infancy, children seem to expect individuals from the same group to help each other as opposed to helping someone belonging to the out-group (Jin & Baillargeon, 2017; Pun et al., 2021). Most research on the influence of group boundaries on prosocial behavior

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focuses on sharing behavior (i.e., giving away resources owned by the child) and resource distribution (i.e., allocating resources without a cost to the child). A central finding is that children often give away more resources to those belonging to their in-group. Such an in-group bias has been found for children's sharing and resource distribution behavior within group contexts based on arbitrary group boundaries (i.e., from 4 years onward; e.g., Benozio & Diesendruck, 2015; Böhm & Buttelmann, 2016; Buttelmann & Böhm, 2014; Dunham et al., 2011; Gummerum et al., 2009; Sparks et al., 2017), racial and gender groups (e.g., Mandalaywala et al., 2021; Renno & Shutts, 2015; Zinser et al., 1981), groups based on language or accent (Angerer et al., 2016; Kinzler et al., 2012) and classroom or daycare groups (e.g., Bindra et al., 2020; Fehr et al., 2008).

For children's helping behavior a similar pattern emerges: Children often want to help in-group members more (e.g., groups based on race or ethnicity: White 8-to-13-year-olds, Sierksma et al., 2014a; White 5-to-13-year-olds, Weller & Lagattuta, 2013; friendship groups: White 8-to-13-year-olds, Sierksma et al., 2015). Studies on children's actual helping behavior further show, for example, that White children in the U.S. provide more help to a White experimenter compared to a Black experimenter (Katz et al., 1976) and that children as young as 2 years help minimal in-group members more than minimal out-group members (Hilton et al., 2021; Plötner et al., 2015). Although much less is known about the role of group boundaries in other types of prosocial behavior, there is some indication that in-group biases also emerge beyond children's helping and sharing. For example, children (11 years and older) tell more prosocial lies to minimal in-group than minimal out-group peers (Sierksma et al., 2018) and are more likely to keep secrets for in-group puppets compared with out-group puppets (4-5 years,

Misch et al., 2016). Older children also show in-group bias in their intention to help others when they are bullied (11-14 years, Gönültaş & Mulvey, 2021; 8–10 and 13–15 years, Palmer et al., 2015).

Taken together, this research suggests that the tendency to behave more prosocially toward in-group members than out-group members originates early in life and across a diverse set of prosocial behaviors. Moreover, in-group bias in children's prosocial behavior emerges for a wide collection of groups, ranging from existing groups (e.g., based on race, gender) to groups based on novel and arbitrary features. Children's prosocial in-group bias is thus pervasive and widespread.

Out-group bias in children's prosocial behavior

Despite a central role in the literature for prosocial in-group biases, *out-group biases* in children's prosocial behavior have also been documented. That is, research seems to suggest that children are sometimes inclined to help or share more with out-group members than in-group members. In fact, a recent meta-analysis on children's and adolescent's group-based biases in economic sharing games (Lazić et al., 2021) shows that of the 69 effect sizes obtained, a total of 24 effect sizes indicated participants cooperated *more* with out-groups than with in-groups. A prosocial out-group bias is thus not at all uncommon. For example, in a dictator game 3-to-5-year-old White and Hispanic children in the U.S. sent more marshmallows to Black recipients compared to White and Hispanic recipients (List et al., 2017). Moreover, Zinser and colleagues (1976) gave White preschoolers and school-aged (i.e., 2nd and 3rd grade in the US school system) children in the U.S. the opportunity to share candy with Black, Indian and White children who were portrayed as poor. Their results showed that while preschool children did

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not differentiate, school-aged children gave more candy to Black and Indian recipients than to White recipients. Other studies showed that young children also share more with the out-group when groups were based on classrooms (kindergartners in Israel, Kogut, 2012, study 2; Fehr et al., 2008, 3-4 years).

Prosocial out-group biases also emerged in studies that assessed children's helping behavior. For example, in one study White Dutch children (8-13 years) were asked to report their intention to give away money to national in-group or German out-group children who just lost their house and toys due to a fire. Across two studies, results showed that when children were told no one would know how much they gave away, they gave more money to out-group than in-group members (Sierksma et al., 2014b). In another case it was found that, across two studies (Study 1 assessing actual behavior and Study 2 assessing behavioral intentions), White Dutch children helped Black Surinamese out-group targets more and longer than in-group targets (10-13 years, Sierksma et al., 2018). In sum, a non-negligible number of studies suggest that, at times, young children help or share more with out-group members than in-group members.

So how can we reconcile these seemingly contradicting behaviors that children are motivated to favor their in-group but sometimes help out-group members more? There is a tendency to explain these surprising findings by pointing to idiosyncratic issues of the particular study. For example, post hoc explanations have been offered by pointing to the design of the study (i.e., including a measure about being proud; Sierksma et al., 2014b) or participants' familiarity with the out-group (Kogut, 2012). It is rare that such findings then receive more attention within that same work or receive much (follow-up) attention in the field. However,

these less intuitive findings might actually provide a unique window into the mechanisms underlying children's intergroup prosociality.

Understanding group-based biases in children's prosocial behavior

To prevent group biases in children's prosocial behavior and foster prosociality across group boundaries it is crucial to understand what motivates young children to differentiate between in-groups and out-groups when they help, share and comfort others. In general, the emergence and influence of group boundaries on children's (moral) behavior and reasoning is complex and children seem to take into account moral, social conventional and psychological concerns (see for example Elenbaas et al., 2020; Killen & Rutland, 2011).

Focusing on children's prosocial behavior specifically, one explanation that often emerges in the literature for why children favor some groups over other groups in their prosocial behavior is that children prefer or like their in-group more than out-group members (e.g., McAuliffe & Dunham, 2016; Kuhlmeier et al., 2014; Over, 2018). These biased attitudes then are assumed to lead to increased prosocial behavior toward in-groups and/or decreases in out-group prosociality. In other words: Children sometimes seem to care more for those they like. This idea seems intuitively appealing and is in line with research that shows that adults tend to behave more prosocially to those that they like (Fehr & Gächter, 2002). Moreover, children also share more with friends than peers they dislike (e.g., Moore, 2009; Paulus & Moore, 2014) and are less likely to help someone who caused harm to someone else (Vaish et al., 2010). However, assuming children's intergroup attitudes underlie biases in intergroup prosocial behavior also raises some issues that warrant closer scrutiny.

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First, as described previously, children and adults tend to like and prefer in-group members more than out-group members. Cases of out-group preference in children are rare in the literature and only seem to emerge under very specific circumstances (i.e., Rutland et al., 2015) or in children belonging to disadvantaged ethnic or racial groups (e.g., Newheiser et al., 2014; Raabe & Beelmann, 2011; Shutts et al., 2011). As such, if children simply help and share with those they like, we would predict in most cases that children show an in-group bias in their prosocial behavior as well. Indeed, this fits well with the large body of research suggesting children help or share more with in-group members compared to out-group members. It is less clear, however, how this account aligns with children's tendency to sometimes behave more prosocially toward out-group members (or to not differentiate at all, e.g., Bigler et al., 1997; Sierksma, 2018). That is to say, assuming that in-group attitudes lead to biases in children's intergroup helping does not provide a unifying framework for the processes that might underlie in-group biases *as well as* out-group biases in children's behavior, especially when those children belong to advantaged groups (as is the predominant focus of research to date).

Second, research that directly assessed the association between group attitudes and children's prosocial behavior provides mixed evidence and often does not support the idea that children simply help or share more with those they like (e.g., Mandalaywala et al., 2021; Renno & Shutts, 2015; Rhodes et al., 2017; Shutts et al., 2016; Sierksma et al., 2018; Zimmerman & Levy, 2000; see also Dunham, 2018). For example, Renno & Shutts (2015) asked White children in the U.S. (3 to 5 years) to distribute resources to gender and racial in-group and Black out-group targets and also assessed children's preferences about both groups. Although results revealed a gender and racial in-group bias in children's resources allocations, children's in-

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group preferences only predicted the way they allocated resources in the gender group context and not in the racial group context. Similarly, in a study on helping behavior, White Dutch children expressed liking their ethnic in-group more but provided more help to Black out-group members and their helping behavior was not associated with their group preferences (10-13 years, Sierksma et al., 2018). There are many reasons why attitudes do not always predict people's behavior (e.g., Ajzen, 2000; Glasman & Albarracín, 2006) that are beyond the scope of this chapter. But research to date does not provide strong evidence that children's group preferences are associated with their prosocial behavior when they have an opportunity to help or share in an intergroup context.

Third, prosocial behavior occurs in a range of contexts that entail widely varying considerations (for overviews see Stürmer & Snyder, 2010; Van Leeuwen & Zagefka, 2017). For example, we help others because we think someone needs help, because someone asked us for help or because we find ourselves in a situation in which it feels unfair to us to not share what we own. We also help others because we want to feel good about ourselves, or our group, or because we want to be liked or trusted by certain people. And we behave prosocially because we suspect that we might need help ourselves later on (i.e., to elicit reciprocity), because we are afraid other people might condemn us if we do not help (i.e., norms), or because we want to assert our group's higher status by showing how competent we are. That is to say, children might sometimes help those that they like more. But it seems highly unlikely that intergroup attitudes can account for the enormous diversity and complexity of motivations that drive adults as well as children to care for others (see also Malti & Cheah, 2021).

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Taken together, prosocial behavior is simply too complex and diverse to boil down to a single motivational mechanism (see also Davidov et al., 2016). And research needs to look beyond group attitudes as the sole basis for why and when children want to help or share their resources with in-group and out-group members.

The role of stereotypes in children's prosocial intergroup behavior

One possible mechanism that might underlie in-group as well as out-group biases in children's prosocial behavior is the salience of group stereotypes. In social psychology, stereotypes refer to traits that are viewed as characteristic of social groups and members of those groups (Stangor, 2016, p.4). Stereotypes differ, for example, from group attitudes that are about people's general negative or positive feelings about social groups. Not only are stereotypes more specific than group attitudes, stereotypes also differ in terms of valence. That is, people tend to endorse both positive and negative stereotypes about the same group. For example, adults sometimes endorse the stereotype that Asian people are smarter (positive stereotype) but also endorse the stereotype that Asian people are not friendly (negative stereotype) or perceive women are warm (positive attitude) but incompetent (negative stereotype) (e.g., Fiske et al., 2002; Zou & Cheryan, 2017). In contrast, group attitudes generally refer to a single valenced attitude (i.e., you feel positively or negatively towards a group; see also Sierksma et al., 2021 for a more in-depth discussion).

Given that stereotypes are often complex, multifaceted representations of groups, some have argued that they emerge later in development compared to group attitudes (Brown et al., 2017; Mackie et al., 1996), although this likely depends on the type of social group and the type of stereotype. Research suggests that gender stereotypes emerge during early childhood:

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Children think girls should play with dolls and boys should play with trucks or that pink objects are for girls and blue objects are for boys (for an overview see Martin & Ruble, 2004). Some racial stereotypes also emerge as early as 4 years because White children in the U.S. expect Black individuals to be less wealthy than White individuals (Mandalaywala et al., 2020; Olson et al., 2012; Shutts et al., 2016). Whereas, other racial and ethnic adult-like stereotypes emerge more robustly in middle- to late-childhood, around 8 to 9 years of age (but see Pauker et al., 2010; Sierksma et al., 2021). For example, studies with older children show that White children sometimes endorse the stereotype that Asian people are better at math than White people (tested 9–13 year-olds, Cvencek et al., 2011; tested 4th and 5th graders, Nasir et al., 2017) and that Black people are better at sports than White people (tested participants 9–13 years, Copping et al., 2013; Rowley et al., 2007).

How might group stereotypes influence prosocial behavior and help understand in-group or out-group biases? The idea is that different prosocial contexts activate distinctive stereotypes about the groups involved and then these stereotypes could guide children's prosocial behavior toward in-group and out-group peers. Sometimes the salience of stereotypes might lead children to believe that in-group members are more deserving of or need more help, whereas other times group stereotypes might lead them to believe that out-group members should receive more help. For example, when a helping context involves expectations of reciprocity, an out-group stereotype dictating that out-group members are untrustworthy might become salient (e.g., Zou & Cheryan, 2017). As a consequence, children could be less likely to help out-group peers than in-group peers because it is unlikely that 'they will return help'. Whereas, in academic contexts a common stereotype that the out-group 'is

less smart' could become active (e.g., Fiske et al., 2002). Then children might become motivated to help out-group recipients *more* compared to in-group recipients because the stereotype entails that 'they need it more'. And when helping involves a sports-activity and racial groups, this could activate a positive stereotype that African-Americans 'are good at sports' (Rowley et al., 2007). Consequently, children might help out-group peers less than in-group peers because 'they are already good at it'. As such, the salience of different group stereotypes could explain why children sometimes act more prosocially toward in-group members as well as why they sometimes act more prosocially toward out-group members.

Taken together, this framework provides one explanation for the inconsistent findings with regard to how the group context impacts children's prosocial behavior. It assumes that how and when children act prosocially toward in-group and out-group members depends on the content of the group stereotypes that are salient in that particular moment. Taking into account group stereotypes also captures some of the complexity of motivations involved in prosocial behavior. As such, examining the role of group stereotypes in children's prosocial behavior can provide us with a deeper understanding of the circumstances and factors that promote intergroup helping in children.

Empirical evidence for the role of stereotypes in children's prosocial intergroup behavior

Studies examining the influence of group stereotypes on children's prosocial behavior are scarce. But there is some empirical work that is suggestive of a possible role of group stereotypes in children's intergroup prosociality.

Stereotypes refer to traits that are seen as characteristic of groups and group members (Stangor, 2016) and there is evidence that other people's traits, such as whether people are

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nice or competent, influence the extent to which young children help or share their resources with them (e.g., see Kuhlmeier et al., 2014; Sierksma & Shutts, 2021). Moreover, sometimes a recipient's characteristics or traits influence children's prosocial behavior above and beyond how much they like these recipients. For example, children (around age 6) provide more help to children who are described as less competent compared with those described as competent (Sierksma & Shutts, 2021) even though they generally like competent individuals more (e.g., Jara-Ettinger et al., 2015; Lane et al., 2013). In another study (Li et al., 2014) young children (4-5 years) were introduced to puppets that were either resource rich or resource poor. While children liked rich puppets more than poor puppets, they gave more resources to the poor puppet. A similar pattern of results emerged in a study in which children were introduced to other children that differed in wealth: participants (5-9 years) liked wealthy children more but gave more stickers to poor children (Shutts et al., 2016). Although these examples indeed suggest that children base their prosocial behavior on characteristics of recipients, these accounts are only suggestive of the influence of group stereotypes on children's prosocial behavior as these studies did not involve a group manipulation.

One study that did involve a group manipulation was conducted by Zinser and colleagues (1979). In this study White children were asked to share their candy with a Black, Indian or White child who were all described as poor (i.e., 'this poor boy has many brothers and sisters and his mother and father don't have much money to buy him good things'). The older children in this study (i.e., second and third grade within the US-school system) shared more of their candy with Black and Indian recipients compared to White recipients. This sharing context, in which recipients were explicitly portrayed as poor, perhaps made the common out-group

stereotype salient that disadvantaged groups are poor (e.g., Mandalaywala et al., 2020; Olson et al., 2012; Shutts et al., 2016). As a consequence, participants might have perceived a higher need for candies in Black and Indian recipients and therefore gave them more (but see Mandalaywala et al., 2021 for an example of how children of various racial backgrounds might share in line with group stereotypes about wealth and give more White than Black children).

But why did children in this particular study give more to out-group members while in other work White children gave more to racial in-group than racial out-group targets (e.g., Renno & Shutts, 2015)? One issue that stands out is that Zinser and colleagues (1979) explicitly described recipients as being poor. Whereas in other studies group members are described in neutral terms or not at all (i.e., only a picture is shown). As such, in the former study an out-group wealth stereotype was probably very salient for young children. Such a stereotype, however, might have less readily come to young children's mind when they are solely shown pictures that differ in skin color. After all, young children are still in the process of learning about the social groups in their environment (Sierksma et al., 2021), suggesting that they might not spontaneously and robustly apply stereotypes yet. Again, however, this example of the role of group stereotypes remains speculative as group stereotypes were not measured.

More direct evidence comes from a study that assessed children's intergroup prosociality and also included a measure of perceived group stereotypes (Sierksma et al., 2018). In this study, White Dutch children (10-13 years) were ostensibly matched to another child that had to do an assignment in which he or she (recipient of help was gender matched to the participant) had to guess long words. The recipient child was either a White Dutch in-group member or a Black Surinamese out-group member (i.e., manipulated by showing participants a

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picture and a name, between subjects). Participants were told they could provide help to this child by entering codes into the computer (10 digits, e.g., 1kg8sf8g9q). Children learned that for each five codes they entered, the other child would receive one letter, and that the more letters they received the easier it was for them to guess the words.

The first study showed that Dutch children helped Surinamese out-group targets more (i.e., they entered more codes) and longer than Dutch in-group targets. They did so, despite liking their in-group more than the out-group and their group preferences did not correlate with their helping behavior. Given that this helping context involved helping another child with guessing long and hard words, this context might have made the common out-group stereotype salient that disadvantaged out-groups are less smart (which is indeed also a common stereotype about Surinamese in the Netherlands, Kuipers, 2000). As such, a second study was conducted in which children's intention to help was assessed in the same set-up and in which children were asked how smart they thought Suriname out-group children were. The second study conceptually replicated the first study: Children intended to help out-group targets more than in-group targets, while they liked in-group members more than out-group members. And children indeed perceived Suriname out-group targets as less smart than Dutch in-group peers. Most important, this study showed that out-group bias in helping emerged in particular when children endorsed the stereotype that the out-group was less smart. When children thus seemed to think that the Surinamese out-group children were less able to solve the word puzzle themselves, they helped them more. The content of this salient out-group stereotype seemed to underlie children's out-group bias in helping. This research provides a first illustration that salient group stereotypes can influence children's helping behavior.

Thus, there is empirical evidence that children take into account other people's characteristics when they help or share resources with them. And people's traits and characteristics sometimes also weigh more heavily than how much children like the individuals who are in need of help or resources. Moreover, in academic context that involved ethnic groups, children who endorse a stereotype that the out-group is less smart, want to provide more help to out-group members than in-group members. In sum, this research suggests that group stereotypes could help understand how much children want to help in-group and out-group recipients. More research is needed to extend these findings and provide more robust evidence for the role of group stereotypes in children's intergroup prosociality. Next, I will highlight some avenues for future research that seem particularly fruitful.

Implications and suggestions for future research

First, it is important to note that group stereotypes likely do not exert the same influence on prosocial behavior across different contexts. For example, it is unlikely that negative stereotypes about incompetence will always lead to increased helping. Rather the idea is that only when the stereotype is relevant to what the recipient needs help with, will that group stereotype impact children's helping behavior. After all, people can hold many different stereotypes about one particular group (e.g., about a group's competence, warmth, foreignness etc. see Fiske et al., 2002; Zou & Cheryan, 2017) – what is crucial is which stereotype is active in a particular moment. This means that task specificity is an important issue to consider for future studies. For example, when sharing resources, stereotypes about wealth are relevant and as such might lead children to give more to those belonging to disadvantaged groups that are perceived as poor. However, when helping someone with his or her homework, stereotypes

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about wealth might not be salient or relevant and therefore one would not expect these to influence prosocial intergroup behavior. Whereas, stereotypes about competence might be salient and influential when providing aid in an academic context. Research on prosocial intergroup behavior should thus carefully delineate how the prosocial act relates to group membership of the recipient and the task they need help with or resources for. Such in-depth contextualization is crucial to truly understand why bias emerges in young children's prosociality.

Second, future work should also help us understand *how* stereotypes influence children's prosocial behavior. On the one hand, stereotypes might 'inform' children about a recipient's need for help and subsequently children work to alleviate this need (e.g., as in Sierksma et al., 2018). On the other hand, children could also be inclined to perpetuate the stereotype that is salient and consequently help or share more with those that already belong to the advantaged group. For example, in one study 4-to-6-year-old children of diverse backgrounds in the U.S. shared more with White compared to Black targets when they endorsed the stereotype that White people are wealthier (e.g., have nicer houses; Mandalaywala et al., 2021). This is in line with research that suggests that children as young as preschool sometimes perpetuate inequalities (for an overview see Paulus & Esser, 2020). Taking into the account the role of group stereotypes could perhaps shed more light on the conditions that lead children to rectify or perpetuate inequality through their prosocial behavior.

Third, even though previous research suggests that children's group attitudes did not predict their prosocial intergroup behavior (Sierksma et al., 2018) future studies may wish to examine the influence of group attitudes vis a vis group stereotypes carefully. Because one

caveat might be that in the study conducted by Sierksma et al (2018), Dutch children were relatively positive toward the Surinamese out-group. It could be that when group attitudes are very strongly positive or negative, this overpowers the influence of group stereotypes. That is to say, if children feel negatively about a particular (stigmatized) out-group, it is unlikely that they would be inclined to help them more even though the group stereotype might imply they need more help.

Fourth, whether and how stereotypes guide children's intergroup prosociality might depend on the extent to which children know and apply certain stereotypes. For example, while young children might be aware of racial stereotypes about wealth, they might not yet be familiar with positive racial stereotypes such as that Black people are more athletic (see Sierksma et al., 2021). As such, group stereotypes could influence young children's distribution of resources when wealth stereotypes are present. Whereas, group stereotypes might not (yet) guide prosocial responses related to sports or being athletic. A focus on group stereotype based prosociality therefore requires a much better understanding of young children's knowledge and application of stereotypes. Currently there is a scarcity of research on young children's stereotyping and studies often conflate prejudice and stereotypes (e.g., Pauker et al., 2010; Sierksma et al., 2021). A more in-depth analysis of the influence of group stereotypes could also provide more insight into the age differences that sometimes emerge in children's intergroup prosociality as these age differences might stem from young children's knowledge, or the absence thereof, about stereotypes.

Fifth, an important issue to address in future work is how children of different backgrounds are influenced by group stereotypes in their prosocial behavior. Children in the

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studies that indicate a link between group stereotypes and prosocial behavior belonged to advantaged groups (i.e., White Dutch, White American; Sierksma et al., 2018; Zinser et al., 1979) who were helping or caring for peers belonging to disadvantaged groups. As such, these studies do not provide insight into how group status might influence the association between stereotypes and prosocial behavior. It could be that group stereotypes influence prosocial behavior more strongly when children belong to advantaged groups because stereotypes often put advantaged groups in a more positive light. There is some evidence for this in the domain of rural versus urban group distinctions. Specifically, Kuang et al (2021) showed that Chinese children shared more resources with recipients who came from rural lower-class areas compared to children from urban higher-class areas. Moreover, across two studies, both children from rural and urban areas gave more to rural lower-class peers, but this bias was stronger in urban higher-class children. These findings suggest that children belonging to advantaged groups might be even more motivated to show increased prosocial behavior toward peers belonging to disadvantaged groups.

At the same time, children belonging to minority or disadvantaged groups likely experience the (negative) effects of stereotypes more often than children belonging to majority or advantaged groups. The former group of children might thus be exposed to and aware of stereotypes earlier in life than majority status children. Perhaps this also means that minority or disadvantaged status children's prosocial behavior will be influenced by group stereotypes more strongly or earlier in development. Similarly, it is important to take into account the social context that children reside in as increased exposure to diversity might impact the stereotypes that children learn and endorse at an early age (e.g., Pauker et al., 2016).

Lastly, while group stereotypes might be influential in prosocial contexts that involve group boundaries pertaining to real life groups, it is less likely that they play a role when minimal or novel group contexts are involved. Intergroup prosociality in which group membership is based on arbitrary features also solely lead to in-group biases in children's prosociality (Benozio & Diesendruck, 2015; Böhm & Buttelman, 2016; Buttelmann & Böhm, 2014; Dunham et al., 2011; Gummerum et al., 2009; Sparks et al., 2017) and prosocial out-group biases have so far not been documented. This further corroborates the idea that such intergroup contexts involve different underlying mechanisms for why children help or share. For example, when children are put into novel groups they might expect that they will subsequently cooperate with in-group (and compete with out-group members) and this anticipation might lead them to behave more prosocially to in-groups (Misch et al., 2021; see also Dunham, 2018; McGuire et al., 2018). Alternatively, simple in-group preferences might be influential (McAuliffe & Dunham, 2016; Kuhlmeier et al., 2014; Over, 2018).

Conclusion

Children as young as 14 months of age are willing to help others (Warneken & Tomasello, 2007) and with age their prosocial behavior becomes more selective. While children often behave more prosocially to in-group members, there is increasing evidence that young children also sometimes help or share more with out-group members. Rather than approaching instances of out-group bias in children's prosocial behavior as a fluke attributable to a particular research design or sample, out-group bias in children's prosociality might provide an important window into the processes that underlie group-based biases in children's prosociality. The

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present chapter suggests that stereotype content may have a major influence on children's intergroup prosociality and this framework raises many new questions for future research.

Developmental intergroup research on prosocial behavior can inform us about how to mobilize children to behave prosocially independent of the receiver's group membership. A deeper understanding of when and how children help or share with in-group and out-group members will be foundational for creating awareness in parents and educators of the role of prejudice and discrimination in children's prosociality and opens up opportunities to design evidence-based interventions to promote positive behavior across group boundaries.

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