Editorial

# The development of intergroup bias: Social-cognitive foundations and pathways forward

## 1. Introduction

Humans exist in a world made up of social groups. This environment presents a number of challenges for the developing child. To become successful members of their communities, children must be able to identify the relevant social groups around them, categorize themselves and others with respect to those groups, and determine how those groups might inform their behavior, judgments, and decisions. Thus, social categorization is a fundamental component of early cognition. However, viewing the world through the lens of social groups, especially early in life, can facilitate the development of intergroup bias, particularly in the forms of stereotyping, prejudice, and discrimination. Children's early awareness of social groups quickly leads them to form preferences in favor of ingroup members and against outgroup members across a wide range of settings and affects their cognition and behavior in various contexts and across domains (for review, see Chalik et al., 2022).

Despite a growing body of research demonstrating the tremendous role that social groups play across the human lifespan, many important questions remain open. What are the psychological and contextual variables that affect the development of intergroup biases across childhood? How do those biases play out in children's behavior in real-world settings? How might psychologists, educators, and parents harness research findings to combat the negative consequences of intergroup bias?

## 2. The current issue

In this special issue, we provide a selection of empirical and theoretical papers that expand our current understanding of the foundations and consequences of intergroup bias, as well as potential pathways forward. We bring together 11 papers that include data from four different countries (the United States, China, Germany, and Singapore), focusing on participants from infancy through ten years of age. The authors used a wide range of methodologies, including behavioral, neuroscientific, and observational methods, in both correlational and experimental paradigms. They explored children's beliefs about a diverse set of social distinctions, including race, gender, immigrant groups, and novel groups.

The papers in this special issue address a wide range of issues relevant to the development of intergroup bias. Here, we introduce them by describing three themes that underlie this body of research: (1) the developmental processes that support social categorization, (2) the consequences of social categorization, and (3) pathways for combating intergroup bias.

### 2.1. The developmental processes that support social categorization

One of the most fundamental processes underlying the formation of intergroup bias is social categorization, a process that starts in early infancy. The mechanisms and conditions that support the development of social categorization are addressed by a number of articles in this special issue. For example, Roth and Reynolds (2022) investigated the neural correlates of infants' processing of faces of differing races and found that different learning conditions affect the efficiency with which infants perform race-based categorization. Similarly, Lee and Setoh (2022) found that between the ages of 3 and 5 years, children become more efficient in categorizing faces of different races. Halbeisen and Jaffé (2022) documented similar findings with regard to gender, suggesting that construal-level mindset influences the efficiency with which 3- to 6-year-old children categorize, and Pronovost and Scott (2022) described another process–exposure to generic language–that supports categorization in 3-year-old children. Finally, Mari (2022) described the wide array of linguistic, visual, and behavioral cues that young children use when categorizing the people around them.

### 2.2. The consequences of social categorization

As noted above, viewing people as members of social groups comes at a cost. In many (but not all) situations, social categorization leads to the development of stereotyping, prejudice, and discrimination. Lee and Setoh (2022), Misch et al. (2022), Wang et al. (2023), and Yang et al. (2022) all provided novel insights into the nuanced processes by which children of different ages prefer ingroup members over outgroup members across a range of measures and group distinctions, and Mari (2022) provided a review of how cues to social categorization influence children's inferences about social groups. Glidden et al. (2022) documented that children between 4 and 10 years of age use group memberships when interpreting people's ambiguous behaviors, sometimes resulting in unsubstantiated negative evaluations of outgroup members. Additionally, Liu et al. (2023) showed that 4- to 6-year-old children often make unwarranted inferences about people's preferences due to an over-reliance on knowledge about ingroup members.

### 2.3. Pathways for combatting intergroup bias

Despite the negative processes reviewed above, all is not lost. First, it is important to note that there are settings in which the negative consequences of social categorization do not emerge. Grigoreva and Rottman (2022) documented that when exposed to negative messages (i.e., disgust-eliciting propaganda) about a novel outgroup, children between

5 and 9 years of age *do not* develop negative beliefs about this group. Furthermore, Misch et al. (2022) and Yang et al. (2022) both showed that not all groups elicit comparable levels of bias, and Misch et al. (2022) further showed that with age, bias decreases for certain groups. In addition, Lee and Setoh (2022) and Misch et al. (2022) provided evidence that whereas ingroup positivity emerges across a wide range of settings, outgroup negativity tends to occur in a much more limited set of instances.

Importantly, a number of the articles in this special issue provide strategies that may be used to reduce intergroup bias. Wang et al. (2023) showed that giving 3- to 5-year-old children individuating information about people reduces the extent to which they apply gender stereotypes. Halbeisen and Jaffé (2022) showed that 3- to 6-year-old children who are in a concrete, versus an abstract, construal-level mindset are less likely to categorize individuals by gender, and Liu et al. (2023) documented that reminding 5- to 6-year-olds of the diversity in a population can lead them to focus less on ingroup-centered preferences when thinking about what is in the interests of everyone. Each of these articles suggests that although intergroup bias is a pervasive phenomenon that shapes much of children's worlds, it can be remedied.

## 3. Future directions

The body of research presented in this special issue offers many new insights into the development of intergroup cognition and behavior, and at the same time opens up new avenues for further research. To highlight just one of these avenues, research should more directly explore why there are inconsistencies across studies in *which* social categories evoke different types of negative inferences. As noted above, some of the research in this special issue documents that although intergroup bias is pervasive across a wide variety of contexts, there do exist some intergroup contexts in which it does not seem to emerge–or at least, does not seem to emerge as strongly. A better understanding of why certain, but not all, group settings are rife with bias would not only expand our knowledge of the basic processes that guide social categorization, but would also lay the groundwork for efforts to take what works (i.e., what reduces bias) in some situations and apply it more broadly.

The research in this special issue also has a number of practical implications, which we hope will be used by researchers, applied professionals, educators, and families to implement interventions to counteract the negative consequences of intergroup bias. The findings documented here join a growing body of evidence showing many promising strategies for reducing bias. However, to our knowledge, this body of research has not yet produced scalable methods for incorporating these strategies into the everyday lives of children. As researchers, we have the responsibility of not only producing findings that can uncover a promise for a better future, but of communicating those findings to the public so that they can be used to promote positive change. A next step for the scientific community will be to reach out to those on the front lines of childrearing and education so that we may assist in implementing practical solutions that can better the lives of children

across a wide array of contexts.

All in all, this special issue adds to our understanding of the foundations and consequences of intergroup bias and opens a number of exciting new directions for potential pathways forward. We look forward to continuing the conversations started here in the years to come.

## References

Chalik, L., Misch, A., & Dunham, Y. (2022). Social cognitive development: The intergroup context. In O. Houde, & G. Borst (Eds.), *The Cambridge handbook of cognitive development* (pp. 481–499). Cambridge University Press.

Glidden, J., D'Esterre, A. P., Butler, L. P., & Killen, M. (2022). Claims of wrongdoing by outgroup members heighten children's ingroup biases. *Acta Psychologica, 230*, Article 103732. https://doi.org/10.1016/j.actpsy.2022.103732

Grigoreva, A. D., & Rottman, J. (2022). Does disgust-eliciting propaganda shape children's attitudes toward novel immigrant groups? *Acta Psychologica, 231*, Article 103790. https://doi.org/10.1016/j.actpsy.2022.103790

Halbeisen, G., & Jaffé, M. E. (2022). Construal level mindsets modulate gender categorizations in preschool children. *Acta Psychologica, 230*, Article 103708. https://doi.org/10.1016/j.actpsy.2022.103708

Lee, K. J. J., & Setoh, P. (2022). The developmental trajectories of racial categorization and explicit racial biases in Singapore. *Acta Psychologica, 230*, Article 103694. https://doi.org/10.1016/j.actpsy.2022.103694

Liu, R., Zhang, Y., & Christie, S. (2023). Diversity vs. ingroup: How children generalize for the common good. *Acta Psychologica, 234*, Article 103864. https://doi.org/10.1016/j.actpsy.2023.103864

Mari, M. A. (2022). How cues to social categorization impact children's inferences about social categories. *Acta Psychologica, 229*, Article 103707. https://doi.org/10.1016/j.actpsy.2022.103707

Misch, A., Dunham, Y., & Paulus, M. (2022). The developmental trajectories of racial and gender intergroup bias in 5- to 10-year-old children: The impact of general psychological tendencies, contextual factors, and individual propensities. *Acta Psychologica, 229*, Article 103709. https://doi.org/10.1016/j.actpsy.2022.103709

Pronovost, M. A., & Scott, R. M. (2022). The influence of language input on 3-year-olds' learning about novel social categories. *Acta Psychologica, 230*, Article 103729. https://doi.org/10.1016/j.actpsy.2022.103729

Roth, K. C., & Reynolds, G. D. (2022). Neural correlates of subordinate-level categorization of own- and other-race faces in infancy. *Acta Psychologica, 230*, Article 103733. https://doi.org/10.1016/j.actpsy.2022.103733

Wang, M. Z., Ng, V., & Gleason, T. (2023). Toy stories: Children's use of gender stereotypes in making social judgments. *Acta Psychologica, 235*, Article 103879. https://doi.org/10.1016/j.actpsy.2023.103879

Yang, X., Yang, F., Guo, C., & Dunham, Y. (2022). Which group matters more: The relative strength of minimal vs. gender and race group memberships in children's intergroup thinking. *Acta Psychologica, 229*, Article 103685. https://doi.org/10.1016/j.actpsy.2022.103685

Hanna Beißert[a,b,c,*], Lisa Chalik[d,f], Antonia Misch[e]
[a] *DIPF | Leibniz Institute for Research and Information in Education*
[b] *Center for Research on Individual Development and Adaptive Education of Children at Risk (IDeA)*
[c] *Goethe University Frankfurt*
[d] *Skidmore College*
[e] *Christian Albrecht University of Kiel*
[f] *Yeshiva University*

[*] Corresponding author.
*E-mail address:* h.beissert@dipf.de (H. Beißert).