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Racial Awareness and Bias Begin Early: Developmental Entry Points, Challenges, and a Call to Action

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Abstract

Overt expressions of racial intolerance have surged precipitously. The dramatic uptick in hate crimes and hate speech is not lost on young children. But how, and how early, do children become aware of racial bias? And when do their own views of themselves and others become infused with racial bias? This article opens with a brief overview of the existing experimental evidence documenting developmental entry points of racial bias in infants and young children and how it unfolds. The article then goes on to identify gaps in the extant research and outlines three steps to narrow them. By bringing together what we know and what remains unknown, the goal is to provide a springboard, motivating a more comprehensive psychological-science framework that illuminates early steps in the acquisition of racial bias. If we are to interrupt race bias at its inception and diminish its effects, then we must build strong cross-disciplinary bridges that span the psychological and related social sciences to shed light on the pressing issues facing our nation's young children and their families.

Keywords

race bias, early development, infants, preschool, young children

As President Joe Biden and Vice President Kamala Harris took their oaths of office in January 2021, they projected powerful images and eloquent appeals for coming together as a nation to overcome the racial divisions that undermine our democracy. But just a week earlier, the images and rhetoric were starkly different, as members of several avowed White-nationalist organizations invaded the U.S. Capitol Building, wielding weapons and brandishing hate in their speech and actions and on their flags and T-shirts. Only months earlier, the summer of 2020 served up yet another vision, as we witnessed the killing of Black Americans, including George Floyd, and the continuing protests over racial injustice that they inspired across the nation. Such expressions are not lost on young children.

Racism is no stranger to our nation. Neither is it a stranger to the psychological sciences (Roberts & Rizzo, 2021). Decades of research have revealed that the racial categories we form and the biases with which we infuse them are neither innate nor universal. Instead, they are social constructions, ones that we acquire "from the outside in," and they are shaped by the expressions of racial bias we witness, whether directed toward ourselves or others. These expressions may be overt, such as the hate speech and violent actions at the capitol building, but they may also be conveyed with more subtle expressions known as microaggressions, including snubs or gestures (Sue, 2010; Williams, 2020b).

As adults, we have acquired biases about people and groups of people that are based on their membership in what we perceive as social categories, including categories of race. Children also acquire racial biases, ones that reflect the prejudices that are pervasive in their families and communities. Because negative racial biases have deleterious consequences for individuals and societies (Richeson & Sommers, 2016), considerable attention has been aimed at identifying their developmental roots, the forces that sustain them, and pathways for reducing them (e.g., Aboud et al., 2012; Bigler & Liben, 2007; Cooley et al., 2019; Elenbaas et al., 2020; Lee

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et al., 2017; Rhodes & Baron, 2019; Roberts et al., 2020; Rogers, 2019; Spencer et al., 2019; Waxman, 2013).

One goal of this article is to advance our understanding of the developmental entry points of race bias. I begin by providing an overview of experimental evidence documenting how race bias unfolds in infants and young children and how vulnerable they are to the effects of the racial biases that surround them. Next, I identify three serious gaps in the extant research and outline steps to narrow them (Waxman, 2013). My aim is not to provide a comprehensive review of the research on this crucial topic but instead to use the current evidence as a springboard toward developing a broader psychological-science research framework designed to better illuminate the mechanisms underlying the development of race bias and to identify pathways to interrupt it. Although I focus squarely on entry points to race bias here, strong parallels may be found in research on the development of other social biases, including gender bias.

At the outset, a bit of terminological clarification is necessary. I use *race bias* to refer to preferences, beliefs, and attitudes, measured primarily at the individual level, that privilege members of one racial group over another. In contrast, *racism* conveys considerably more than biases held by individuals. I use *racism*, or *systematic racism*, to refer to "a system of advantage based on race" (Tatum, 2017, p. 87), one that is "baked in" to institutional policies and practices and conveyed both implicitly and explicitly in cultural messages. Within the United States, the system of racism is one that privileges White people and "Whiteness" above all others (e.g., Kendi, 2016; Rogers & Way, 2018). This terminological distinction between race bias and racism, important in itself, may ultimately help clarify how racism is acquired from the outside in, how day-to-day experiences of bias at the individual level become internalized, and ultimately how to most effectively disrupt its transmission.

Racial categories in infants

Attention to race emerges early in infancy. Infants prefer to look at faces of people whose race matches those of their primary caregivers and those closest to them (Anzures et al., 2013; Bar-Haim et al., 2006; Dunham et al., 2015; Lee et al., 2017; Liu et al., 2015; Mahajan & Wynn, 2012; Sangrigoli & De Schonen, 2004; Sugden & Marquis, 2017). These early perceptual preferences, evident as early as 3 months of age, are guided by infants' own experience. One of the most compelling demonstrations comes from Bar-Haim and colleagues (2006), who examined 3-month-old infants' visual attention to faces from either their own race ("own race") or a different race ("other race"). They focused on three different groups of infants. White infants living in a predominantly White community in Israel exhibited the classic own-race face preference, devoting more visual attention to White than to Black faces. Black infants living in a Black community in Ethiopia also exhibited the own-race face preference, devoting more visual attention to Black than to White faces. The third group was Black Ethiopian infants whose families had moved to a predominantly White community in Israel; these infants showed no preference for Black or White faces. More recent neuroscientific work offers powerful converging evidence: Infants' neural responses to own-race versus other-race faces varies reliably as a function of their own racial exposure, as measured by the racial demographics of their neighborhoods (Hwang et al., 2020).

Thus, infants' early visual preferences are sufficiently plastic, both neurally and behaviorally, to be shaped by their exposure to and interactions with others. These early visual preferences, which are primarily perceptual, are important guideposts for development: They ensure that infants attend to, and therefore learn from, certain individuals over others (Jin & Baillargeon, 2017; Kinzler & Spelke, 2011; Pun et al., 2017). But infants' visual preferences are not yet infused with social or cultural content.

When do infants' visual categories become infused with racial bias? How do these categories gather sufficient cultural content and conceptual power to guide children's beliefs, attitudes, and expectations of themselves and others? This is a compelling and quintessentially developmental question.

Before considering the evidence on racial categories in young children, a word about the ubiquitous process of categorization is in order. A proclivity to form categories is a fundamental cognitive process that is evident throughout the animal kingdom and available to infants in the first months of life (Murphy, 2004). It is noteworthy that although the *process* of forming categories is universal, the particular categories we form and the evaluative content with which we infuse them are not. Thus, although a tendency to form distinct categories of people, partitioned on the basis of race or ethnicity, appears to be universal, the particular racial categories we form are social constructions; they are established on the basis of our direct experiences as well as the beliefs and expectations transmitted, wittingly or not, by others. Strikingly, although categorical distinctions on the basis of race are not supported by scientific evidence, we hold to them tenaciously. This tenacity, supported by a cognitive bias (known as *psychological essentialism*), carries significant consequences (Diesendruck, 2013; Gelman, 2005; Medin & Ortony, 1989; Rhodes & Moty, 2020). We tend to treat

racial categories as "natural kinds"; like other natural kinds, we assume that members of racial categories share underlying properties that run deeper than what meets the eye (e.g., attitudes, dispositions, intelligence, moral capacities).

Racial categories in young children

By the time they reach preschool, children's racial categories appear to be touched by the expressions of bias that surround them (Aboud et al., 2012; Bigler & Liben, 2007; Kowalski, 2003). No longer perceptual preferences alone, emerging racial categories begin to guide preschool-age children's evaluations and expectations of others, including their beliefs, attitudes, and expectations of others, including children that they have never even met (Mandalaywala et al., 2018; Pauker et al., 2016; Perszyk et al., 2019; Roberts & Gelman, 2017; Shutts, 2015; Xiao et al., 2014). For example, if a preschool-age child is taught that one individual (say, a White child) has a certain "hidden" property (e.g., a favorite food or song), they tend to extend that property to other individuals on the basis of race (other White children). This pattern of generalization, from a single individual to an entire group, is an inductive inference. It is taken as evidence of psychological essentialism—the belief that people of the same race share essential properties that run deeper than the eye can see. This belief is tied closely to social stereotyping and prejudice (Gelman, 2005; Rhodes & Baron, 2019; Waxman, 2013).

Several different sources influence the racial categories that children construct. Decades of research have highlighted the power of language. Although children notice a range of physical features that correlate with racial-category distinctions (e.g., skin color, hair texture, native language or dialect), there is little evidence that they use such features to predict the behaviors of others—unless a racial category is highlighted explicitly. Naming is an especially powerful means of highlighting social categories (Diesendruck & Halevi, 2006; Kinzler, 2021; Patterson & Bigler, 2006; Waxman, 2010) whether the category name is one that children have heard or one that is novel. Providing an entirely novel category name (e.g., Haitian) to an individual (e.g., a Black child) or group of individuals (e.g., three Black children) strengthens preschool-age children's establishment of a race-based category and guides them to limit their generalizations from the named individuals to other members of the same racial category (e.g., other Black people).

Thus, naming is instrumental as children construct racial categories and use them to guide their evaluations of others, including their choices for which children they would most like to play with, share toys with, or sit near in class (Diesendruck & Deblinger-Tangi, 2014; Rhodes & Gelman, 2009; Roberts & Gelman, 2017). This power of naming, evident in children's construction of social categories, is reminiscent of Gordon Allport's observation that category names "act as shrieking sirens . . . deafening us to all finer distinctions that we might otherwise perceive" (Allport, 1954, p. 179). Although it is unlikely that social-category names overshadow entirely all finer distinctions among individuals, their power in children's acquisition of and reasoning about race cannot be denied.

Children's expectations and evaluations of others are sculpted not only by how categories are named but also by what they learn about members of such categories from their families and communities. Children are keen observers, taking in not only what they hear but also what they see. As a result, both verbal and nonverbal behaviors serve as powerful sources of bias. For example, when 5-year-old children observe negative affect being expressed toward one individual, they tend to generalize that same negative evaluation to other members of that person's racial group (Skinner et al., 2016; Skinner & Perry, 2019). Moreover, because 5-year-olds, like adults, are more likely to believe something they have seen or heard repeatedly than something they have heard only once, repeated exposure to negative racial biases can facilitate the spread of negative racial stereotypes (Fazio & Sherry, 2020).

Unfortunately, young children are exposed to expressions of bias—intentionally or not—in their homes, neighborhoods, and preschool classrooms. In some cases, the expression is overt. More frequently, racial bias takes a more subtle form, expressed as microaggressions, which include snubs, dismissive looks, and gestures. Although often dismissed as innocent or innocuous, microaggressions nonetheless have considerable impact (Sue, 2010; Williams, 2020a). In one study, for example, preschool teachers were asked to view short, videotaped episodes involving four children (a Black boy, a Black girl, a White boy, and a White girl) and to identify any disruptions that might occur. In fact, no disruptions did occur. Still, teachers' eye movements, measured by eye-tracking technology, revealed that they anticipated that the Black children, and especially Black boys, were most likely to be sources of classroom trouble (Gilliam et al., 2016; see also Dancy, 2014; Okonofua & Eberhardt, 2015; Starck et al., 2020; Todd et al., 2016; Walton & Eberhardt, 2016).

This raises a compelling question: Are preschool-age children sensitive to this nuanced pattern of bias, however subtle or unconscious its expression? Recent evidence suggests that they are. Working with 4-year-olds living in the Chicago area, we addressed this question directly, focusing on children's implicit and explicit

responses to images of other young children who varied systematically in both race (Black, White) and gender (boy, girl). We found that children expressed a strong bias for White (over Black) children on both implicit and explicit measures. Moreover, these children responded less positively to Black boys than to any other group of children, including Black girls, White boys, or White girls (Perszyk et al., 2019). This pattern was observed not only among White children in our sample but also among children of color.

Racial bias in young children is not news. Instead, it echoes evidence of bias in young children that was reported over 60 years ago in the Clarks' landmark "doll studies" (Clark & Clark, 1950). In these studies, elegant for their simplicity, children were shown two dolls, one White and one painted brown (no brown dolls were commercially available at the time). Children were asked a series of questions about the dolls, including which one they preferred. Both Black and White children overwhelmingly preferred the White doll. The same outcome was revealed again, as recently as 2017 (Spencer, 2017). This persisting evidence of racial bias in children as young as 4 years of age underscores the pervasiveness of racism and shatters any illusion that young children are immune to the racial bias they witness.

Why Does This Matter?

Racial bias in the preschool classroom serves as a compelling case in point. Young children's sensitivity to racial bias, certainly acquired from myriad sources, is related to another matter of considerable concern: the surprisingly sharp racial disparities in expulsion rates for children in U.S. preschools. Preschool suspensions and expulsions are nearly three times those in K-12 settings. More startling are the racial disparities. Black preschoolers' rate of expulsion exceeds that of White children by a factor of three; Latino preschoolers' rate of expulsion is more than double that of White children; Native American children, too, are overrepresented in preschool suspensions and expulsions; expulsion rates among Asian American preschoolers is comparable with, if not lower than, that for White preschool students (Giordano et al., 2021; U.S. Department of Education, Office of Civil Rights, 2014; U.S. Department of Health and Human Services, 2016).

Racial disparities in preschool suspensions and expulsions, adjudicated primarily on the basis of classroom behavior (Gansen, 2020), have damaging downstream effects. They perpetuate a pernicious problem: that not all children are afforded an equal opportunity to benefit from early learning environments.

In response to these racial disparities, suspensions and expulsions in preschools are now widely prohibited. This step is necessary, but it is not sufficient. It does little to correct the perhaps more subtle, day-to-day expressions of bias in the classroom. Although perhaps harder to quantify than expulsion rates, such expressions have cumulative negative effects on Black children's expectations of themselves, their emerging identities, and their well-being (Gansen, 2020; Ispa-Landa, 2018; Owens & McLanahan, 2020; Rogers et al., 2020; Spencer et al., 2019; Umaña-Taylor, 2018). Systematic racial bias in the preschool classroom also has negative cumulative effects on all children, shaping children's expectations not only of themselves but also of their classmates (Curenton et al., 2020; Gansen, 2020; Killen, 2019; Williams, 2020a).

In sum, fueled by their day-to-day experiences with parents, teachers and peers, preschool-age children are beginning to take race into account. Fortunately, preschool children's racial biases are neither as detailed, nor consolidated, nor resistant to change as those of adults. But this malleability is a double-edged sword: Racial bias can be either reduced or intensified depending on whether children witness, or are the targets of, positive or negative bias. Thus, the preschool years represent an important inflection point, when children's observations, interactions, and discussions about race have considerable impact, for better or worse, on whether and how race will influence their inferences, expectations, and behaviors toward others.

Building a More Comprehensive Research Agenda

The evidence is clear. The time has come to design a more comprehensive research agenda that brings cutting-edge experimental evidence on young children's emerging race biases into closer alignment with broader cross-disciplinary evidence that illuminates how powerfully children are shaped by their quotidian experiences in a racist society and in their proximal interactions with families, schools, and neighborhoods. Building this agenda begins with three steps: broadening our empirical base, expanding our methodological tool kits, and promoting translational science.

Broadening the empirical base

If we are to understand the entry points of race bias and identify effective agents and avenues of change, then we must broaden the empirical base. Perhaps most urgently, we must increase the diversity of the children we study. This will require a three-pronged approach.

First, lab-inspired experimental evidence on the acquisition of race categories in the United States have

involved predominantly, but not exclusively, White middle-class children. Most of the lab-inspired experimental studies that have included sufficiently large samples of children of color have been conducted primarily outside of the United States, including, for example, Brazil (Sacco et al., 2019), South Africa (Kinzler et al., 2012; Olson et al., 2012; Shutts et al., 2011), China (Qian et al., 2016, 2017), and Japan (Dunham et al., 2006). This work certainly sheds light on mechanisms underlying the development of race awareness and race bias, but it also introduces a new divide: The cultural, social, and historical contexts of race and racism in these countries differ considerably from those in the United States. Narrowing this divide will require broadening the empirical base to include sufficiently large numbers of children of color living in the diverse range of communities in the United States (Dunham et al., 2014; Roberts et al., 2020; Rogers et al., 2020; Waxman, 2013).

Second, there is a rich and long-standing body of evidence documenting healthy patterns of development in children of color in the United States (e.g., Aboud et al., 2012; Byrd, 2011; Garcia Coll, 1990; Spencer et al., 1985; Spencer & Markstrom-Adams, 1990). Drawing primarily on qualitative and observational methods, this research reveals that preschool-age Black children are aware of racial bias against Black people, and they resist internalizing this racial stigma as part of their own self-concept to maintain positive views of their own skin color and racial identity (Rogers & Way, 2018). Yet there is surprisingly little contact between this literature and that from primarily lab-inspired work. Building stronger connections between these unnecessarily disparate research traditions will enrich our theories of how race bias, and its consequences, unfold among U.S. children.

Third, there is also a developmental gap. Psychological scientists agree that early experience shapes subsequent development, but evidence on the emergence of racial bias, identity formation, and intergroup relations in children younger than 5 years of age is surprisingly scant, and longitudinal evidence that traces these phenomena over developmental time is almost entirely absent. This is a serious gap. The preschool years seem to mark an inflection point at which most children increasingly expand their social networks beyond their own families and closest others. We also know that this broader social exposure affords children new opportunities, for better or for worse, to witness social interactions and the overt and covert expressions of bias that may surround them. Moreover, the biases expressed by preschool-age children are less entrenched and less resistant to change than those of older children and adults (Apfelbaum et al., 2008; Bigler, 2013; Birtel et al., 2019; Setoh et al., 2019). Yet we know very little about the processes by which White children and children of color internalize racial privilege and assume their status in the racial hierarchy (e.g., Rogers, 2019). If the goal is to understand the entry points of racial bias—and to identify pathways to disrupt it—it is crucial that we gather more evidence that illuminates the development and consequences of racial stigma and privilege in very young White children and children of color.

To summarize, limitations in our empirical base set limits on our theories and vision. What remains unaddressed is how racial bias emerges in children living in the diverse social contexts of the United States and how it is shaped by the status, networks, economics, and power dynamics within their families and communities. It also leaves unaddressed how children adjudicate between the positive and negative expressions about race that they witness. Broadening the empirical base will be challenging. Doing so will require building sustainable partnerships with local schools, child-care facilities, and community-based organizations.

Broadening our methodological tool kit

We must expand our methodological tool kit. Scholars in demography, economics, sociology, education, and human development have led the way in developing nationally representative data sets, ones that shed light on the broad contexts in which development unfolds (e.g., Chase-Lansdale et al., 1991; Chetty et al., 2016). This includes identifying how neighborhoods, schools, interventions, and policies affect child outcomes (Burkholder et al., 2019; Chase-Lansdale et al., 2019; Chen et al., 2012; Chetty et al., 2016; Ispa-Landa, 2018; Reardon & Owens, 2014; Sabol et al., 2021; Sampson & Sharkey, 2008; Schanzenbach, 2019). Unfortunately, this multidisciplinary body of work has made insufficient contact with evidence from the broader psychological sciences on how racial bias and inequities unfold in young children. Bringing these rich veins of evidence into alignment will require integrating quantitative and qualitative approaches to identify how children see themselves and are seen by others and how their emerging racial identities and biases are influenced by their social networks and their interactions in the cultural, social, and linguistic communities in which they are raised (Huguley et al., 2019; Perry et al., 2020; Rogers et al., 2020; Skinner et al., 2016; Spencer et al., 2019; Waxman, 2013). Much empirical, methodological, and theoretical work remains. This work, multidisciplinary to its core, holds the key to understanding the entry points for racial bias and to developing sustainable interventions that effectively diminish it.

Promoting translational science: getting the word out

The best policies and practices—in our homes, schools, and governments—are informed by strong, scientifically grounded evidence. Parents, educators, and policymakers must be informed when we discover evidence that would strengthen their roles as agents of change. In doing so, it will be advantageous to build on strong research-practice partnerships to disseminate evidence-based insights more rapidly, more broadly, and more clearly (Lewis & Wai, 2021; Miller, 1969).

Consider, for example, whether, when, and how we talk with children about race. It is now well documented that people (and especially White people) tend to avoid talking about race, deeming racial topics taboo and experiencing stress in interracial interactions (Craig et al., 2018; Perry et al., 2020; Plant & Devine, 2003; Richeson & Sommers, 2016; Scott et al., 2020a). This avoidance has consequences for young children: Parents (and especially parents of White children) are reluctant to talk about race with their children. Their reluctance is reinforced by a mistaken notion that children are too young to think about race. In fact, recent evidence reveals that parents dramatically overestimate the age at which children begin to think about race (Sullivan et al., 2021). Providing parents with evidence from psychological science matters: When parents were informed that children's sensitivity to race begins early, parents initiated discussions about race considerably earlier (Sullivan et al., 2021). Moreover, the consequences of (not) talking about race in White families may be intergenerational. For example, among White parents, those who reported that their own parents talked to them about race when they were a child were more likely to have race conversations with their children, and these race conversations were associated with more awareness of systemic racism in society (Chae et al., 2020).

Parents, educators, and service providers would also benefit from evidence-based recommendations about how to talk about race with children. In particular, they would benefit from understanding the advantages of adopting a "color-conscious" approach and leaving behind a color-blind approach that leaves children especially vulnerable to the negative stereotypes they witness (Pahlke, 2012, Perry et al., 2019, 2020; Plaut et al., 2018; Scott et al., 2020a, 2020b; Vittrup & Holden, 2011; Wang et al., 2020; Waxman et al., 2017). By arming parents, educators, service providers, and policymakers with scientifically grounded evidence about how bias develops, we support their positions as agents of change.

Summary

Together, this research framework will advance our understanding of how (and how early) racial bias takes hold in young children and to identify the conditions that permit emergent negative biases either to flourish or to fade. By bringing greater attention to the crucial intersection between the developing child and their environment, it should lead us to identify powerful and sustainable pathways to promote greater equity and more positive developmental outcomes for children growing up in the diverse kinds of social environments that constitute the human experience (Roberts et al., 2020; Rogers, 2019).

Taking these steps will require acknowledging how deeply entrenched racism and racial biases are in our culture and the profound challenges we face going forward. It will also require breaking down disciplinary silos to combine insights from children in their natural social contexts with discoveries from laboratory-based evidence and nationally representative data sets. It will require looking beyond overt expressions of racism to examine the impact of more subtle day-to-day microaggressions and experiences of racism. It will require weaving insights about bias in children together with the bias of their parents, teachers, service providers, and peers. But what is at stake is whether the psychological sciences will stem the deep wells of racism before they enter the hearts and minds of our children.

Transparency

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