Young Children & Implicit Racial Biases

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Children are not born harboring racial biases, but they are born learning. Young children, even infants, learn from the "mere observation" of other people's behavior. Nonverbal signals of racial biases are abundant in children's everyday social environments. Studies show that preschool children acquire social group biases when they observe other people's social interactions and nonverbal behaviors. These new findings have implications for child development and educational equity. Even before kindergarten, racial biases are caught even when not explicitly taught, suggesting the need for practical actions for parents, teachers, and others concerned about the transmission of racial bias across generations.

hildren are not born with racial biases. Yet children have acquired racial biases before they enter first grade. To construct more complete theories about implicit biases – including sources, consequences, and remedies – we need to understand better how children experience and acquire these biases. How do social group biases held by adults and embodied in societal structures become part of the mental framework of the child?

We would have a ready-made answer to this academic question if parents or schools intentionally provided lessons in racism. In other words, it would be easy to explain young children's racial biases if parents explicitly taught children to reject people of a different race, or if teachers purposely taught racism in the same way they teach reading, through a step-by-step deliberate process, but this is not common. Moreover, the acquisition of racial biases does not follow the principles of classical learning theories for children, such as Skinnerian learning: Psychologists rarely see parents or teachers explicitly reward children for racist words or conduct. Quite the opposite. In the United States today, one commonly encounters parents and teachers who explicitly discourage the expression of racial biases. Despite this, kids acquire these biases, and do so at a very young age.

For developmental psychologists, this presents a puzzle about how infants and young children so readily and effortlessly acquire behaviors, norms, and values from parents and the cultural milieu. Young children, even infants, are no longer believed to be blank slates who primarily learn through Skinnerian reinforcement. Nor are they thought of as Piagetian problem-solvers who construct a conception of the world through independent discovery devoid of social input. Although efforts to research the social mechanisms that influence young children's acquisition of racial biases date back to at least the 1920s, only recent experiments have systematically focused on the mechanisms by which these biases are transmitted from adults to young children.¹

In this essay, we bring modern developmental psychology ideas into the discussion of how young children acquire implicit biases, and we explore the psychological mechanisms underlying the intergenerational transmission of such biases. These mechanisms do not map onto Skinnerian reinforcement, Piagetian constructivism, or deliberate didactic instruction in school. Rather, we describe how children's observational social learning plays a key role in the earliest emergence of implicit biases in children.

U ndoubtedly, the most well-known and societally impactful study showing the young age by which children display racial biases was conducted by psychologists Mamie Phipps Clark and Kenneth Clark.² Their "doll study" was influential in the 1954 U.S. Supreme Court ruling that school segregation was unconstitutional in *Brown v. Board of Education*. The participants were 253 Black children between three and seven years old who were presented with four dolls that were identical, except that two had white skin and blond hair and the other two had brown skin and black hair. Ninety percent of the children identified the white-skinned, blond-haired doll as being white and the brown-skinned, black-haired doll as being Black. The children were then asked a series of questions regarding their preferences about the dolls and which doll looked most like them. More positive characteristics and preferences were ascribed to the dolls they identified as white, while negative characteristics and rejection were ascribed to the dolls they identified as Black.

Beyond rejection and negative ascriptions, children also display racial biases in judging the amount of pain experienced by others. Psychologist Rebecca A. Dore and colleagues conducted a study in which children were instructed to rate the amount of pain they might feel across ten different events, such as biting their tongue or hitting their head (the children were five, seven, or ten years old, all living in a predominantly white U.S. community, and 90 percent were identified by the parents as being white).³ The children were then presented with pictures of children matched to their own gender and similar in age, one being a Black child and the other a white child, and they were instructed to rate the pain these children might feel if the same thing happened to them. By seven years of age, children were demonstrating a weak racial bias that the Black child would feel less pain, and by ten years old, the bias was strong and reliable.

These studies and more modern ones with additional experimental controls show that children rapidly acquire racial biases by a young age, including anti-Black biases, and that these biases are linked to the assumptions they make, the degree of empathy they express, and their preferences as to with whom they would prefer to play. What these studies do not show is how young children pick up these biases in the first place and why they are so readily learned.

hildren learn more in the first five years of life than at any other equivalent period in development. Adults are wiser than children, and adolescents more introspective about their place in the world, but infants and preschool children are more rapid learners across many domains. For example, infants are born capable of learning any language, and through social interaction with others they quickly become specialized in the language spoken by their cultural group.⁴ The answer to the perennial question, "What do children know, and when do they know it?" is that they know more and learn earlier than predicted by classic psychological theories.⁵ We will extend this newer developmental framework to implicit biases. No child is born with racial biases, but they acquire them rapidly, often despite parents' efforts to the contrary. How can this be? It seems that racial biases are caught even if not explicitly taught.

A crucial component of how children "catch" racial biases comes from young children's ability for observational social learning and imitation. Although all animals learn, human children are unique in the animal kingdom in their tendency to learn mannerisms, skills, social practices, and values simply by observing the nonverbal behavioral patterns of other people. Social learning and imitation have evolutionary value because they allow human children to learn by "proxy," by watching what others do and reenacting what they see. This fundamental mode of learning about the social and physical world has an underlying basis in the brain and is measurable prior to spoken language.⁶ We begin by providing examples of imitation in human infancy because describing this powerful, nonverbal capacity sheds light on how it becomes a channel for the transmission of bias in later childhood.

One study with twelve-month-old infants demonstrated that a twenty-second encounter with a stranger doing something novel with a toy was enough to induce learning.⁷ In this laboratory experiment, the infants sat on their mothers' laps and the mothers were blindfolded so that they could not influence the infants' behaviors. After seeing the brief demonstration with the toy (but not being allowed to touch it), the infants and mothers were sent home. The infants were tested after a delay of either one day, one week, or one month. After the delay, some infants were brought back to the same laboratory room, while others went to a completely new environment (to assess generalization across both time and setting). The infants were given the same object they had observed and their behavior was videorecorded. Remarkably, the infants imitated the actions they had seen, even those retested after a one-month delay and in a different room than the original one. The inference is that preverbal infants learn socially from the mere obser-

vation of other people's behaviors and can generalize across space (context) and time (delay). Even though infants at this age are too young to understand what we say, their brains are tuned to remember and imitate what they see us do.

Infants learn not only from what other people do, but also from what they intended to do. In one study, infants watched as an adult tried to pull apart a dumbbellshaped object, but the adult's hands "accidentally" slipped off the ends so it did not come apart. The adult tried several times in different ways but did not manage to succeed. The infants observed this pattern of actions but were not allowed to handle the toys themselves. There could be no Skinnerian shaping or Piagetian hands-on discovery experience; there was only observation of the adult's behavioral patterns.⁸ When the infants were presented with the objects, they did not duplicate what the adult actually did (hands slipping off), but instead reenacted the unspoken goal of the adult's actions. The infants wrapped their fingers firmly around the ends of the dumbbell and gave it a hard yank, successfully pulling it apart. Further work revealed the social nature of the process. An inanimate device was built, and the infants watched as mechanical pincers slipped off the ends of the same object in the same way the human fingers had done. When given the object, the infants picked it up but did not try to reenact the target act. An inference from this and related experiments is that infants have a primitive "theory of mind" that gives them the capacity to reason about the adult's goals rather than just their surface behavior.⁹ Children can pick up the nonobvious or hidden messages that lie behind adult actions.

Building on these studies about the power of mere observation of adult behavior to spark children's actions, we now turn to work directly addressing children's acquisition of social biases. Modern research in child development has shown that young children exhibit biases based on race, gender, language, and other attributes during the preschool and elementary school years.¹⁰ We therefore wanted to look at preschool children to understand in more detail how novel biases might first be created in the mind of the young child.¹¹

One study presented four- to five-year-old preschoolers with video clips of adult biased behaviors.¹² The videos showed interactions between one adult (the "actor") and two other adults (the "targets"). The targets sat on either side of the central actor and wore differently colored T-shirts to distinguish one from the other. The video scenario showed the actor handing each of the targets a toy. While distributing the toy, the actor exuded positive nonverbal signals toward one of the targets (smiling, leaning in, using a warm tone of voice) and negative nonverbal signals toward the other target (scowling, leaning away, using a cold tone of voice) – conveying bias through action. The thirty-second script was played twice, each time with a different central actor, indicating that more than one person

held the negative (or positive) attitude toward these targeted people. Preschoolers were transfixed by this video of adult interaction, looking back and forth between the actor and the targets as the script unfolded.

We then assessed children's attitudes, cognition, and behavior toward the two targets, using social preferences (who they liked), their distribution of resources (sharing an attractive toy), and who they imitated (who they were willing to learn from). The results showed that preschoolers treated the targets differentially. Children adopted attitudes and behaviors that strongly favored the target of positive nonverbal signals relative to the target of negative nonverbal signals.

The key question arising from the results: can witnessing biased adult behavior directed toward a person of a certain color (here a particular T-shirt color) create social bias in the child that generalizes to a group of others who "look like" this negatively targeted individual? In a new study, children's responses were assessed using pictures of two groups of novel people.¹³ One group of new people wore the same-colored T-shirt as the target of the negative signal; the other group of new people wore the same-colored T-shirt as the target of the positive signal. The social preference and imitation tasks were repeated, and a new measure was included to assess which social group the child would choose to play with when they were told that another person had to be added to the game. Preschoolers displayed a bias toward liking, imitating, and wanting to play with social group members who looked like the targets of positive signals. They passed on the chance to play with someone from the negatively marked group, which – if it occurred in real life – would translate into reduced interactions with those from the disfavored group.

et's now turn our attention to examples of opportunities for observational social learning in the everyday lives of young children, specifically within their early care and education programs. In 2019, almost 60 percent of young children in the United States were enrolled in some form of nonfamilial care arrangement, often beginning in infancy or toddlerhood.¹⁴ While attending these early care and education programs, young children see and experience a myriad of adult social interactions, including how adult caregivers interact with other young children in the classroom and other adult caregivers, such as assistant teachers. We argue that these adult social interactions provide opportunities for young children to observe and learn implicit racial biases.

Expulsion and suspension from early care and education programs present a powerful, yet often unintentional, opportunity for young children to observe racial disparities in preschool. In the first national study of preschool expulsion rates, conducted between 2002 and 2004, preschoolers (three to four years old) were found to be expelled at a rate of more than three times that of K–12 students, and the rates in community-based child care programs were even higher.¹⁵ Black preschoolers were more than twice as likely to be expelled as white preschoolers, and boys were more than four times as likely to be expelled as girls, despite no evidence that either Black children or boys exhibited greater levels of misbehavior. Race and gender were found to interact, yielding especially high rates of expulsion for Black boys. In mixed-age classrooms, older preschoolers were more likely to be expelled than their younger classmates, which we speculatively link to other research demonstrating a tendency to view Black children as being older and more threatening.¹⁶ Similar race and gender disparities were found in more recent studies conducted by the U.S. Department of Education's Office of Civil Rights (OCR).¹⁷ In June 2016, the OCR reported that Black preschoolers were 3.6 times as likely to be suspended as white preschoolers. Although Black preschoolers represented only 19 percent of the preschool population, they received 47 percent of suspensions; and although boys represented 54 percent of all preschoolers, they received 78 percent of all suspensions. Fortunately, twenty-nine states, plus the federal Head Start program, now have legislation or executive branch policies aimed at limiting expulsions and suspensions in early care and education settings, with virtually all policy actions initiated since 2015.¹⁸

Nonetheless, early expulsions and suspensions predict a host of negative life outcomes, likely because of a resulting damaged relationship to schools/ teachers and a concomitant denial of educational opportunities. The potential pathways to subsequent negative life outcomes include negative school attitudes, academic failure and grade retention, later suspensions and expulsions, a tenfold increased likelihood of high school dropout, and an eightfold increased likelihood of adult incarceration.¹⁹ Further suggesting potential correlations between early expulsions and later incarceration, the rate at which U.S. early care and education programs expel young children (6.7 to 7.5 per 1,000) is similar to the rate at which adults are incarcerated (6.4 per 1,000), with similar levels of race and gender disparities.²⁰ Preschool-age children of incarcerated adults are at a threefold increased likelihood of themselves being expelled from preschool, painting a picture of racially disproportional intergenerational exclusion.²¹

The poignant irony of the disproportional expulsion and suspension of Black preschoolers is that the initial argument for early care and education programs in the United States used research data obtained from overwhelmingly Black preschoolers and their families. The three most widely cited studies used to build the case for early care and education (Perry Preschool Study, Abecedarian Study, and Chicago Child-Parent Centers Study) were conducted with child participant samples that were, respectively, 100 percent, 98 percent, and 93 percent Black.²² None-theless, it is Black preschoolers who are most likely to be excluded from these same programs through racially disproportional expulsion and suspension practices.²³

Racial disproportionality in early childhood expulsions and suspensions has serious downstream implications. Why does it exist? Early work in K–12 schools focused on adult biases about children of color and their behaviors, particularly Black boys. Using elementary school disciplinary records, psychologist Russell J. Skiba and colleagues found that Black boys were more likely to be suspended or expelled relative to other students, even when the behaviors cited as the reason for the disciplinary sanctions were similar in severity.²⁴ Relatedly, other studies have documented adult biases that viewed Black boys as being more likely to engage in misbehavior, as well as a tendency for adults to overestimate the age of Black boys and view them as bigger and more dangerous.²⁵ Although such biases regarding Black boys may contribute to the extreme racial disparities in suspension and expulsion rates, the work is correlational and few studies have been designed to directly measure race/gender biases that might be exhibited by early educators toward preschoolers during everyday activities.

n the first such study, a high-tech eye-tracking device was employed to assess whether preschool teachers might assume and anticipate a greater likelihood of disruptive behaviors from Black preschoolers (especially Black boys) relative to white preschoolers.²⁶ The participants included one hundred seventeen early educators from around the United States attending a national early childhood education conference. Teachers were seated in front of a fifteen-inch laptop computer screen equipped with an eye-tracking device that was calibrated to their gaze and capable of measuring where they were looking on the screen. The participants were shown twelve thirty-second videos of four preschoolers (each four years old) in an early education classroom: a Black boy, a Black girl, a white boy, and a white girl. The twelve videos were recorded from different angles to balance the location of each child on the screen, one angle is shown on the left side of Figure 1. The participants were instructed to watch the videos, look for evidence of "challenging behaviors," and press a keypad button whenever they saw a behavior that could turn into a "challenging behavior" - all while their eye gaze was precisely tracked so that the amount of time the teachers spent looking at each child could be tabulated and analyzed.

At the end of the videos, the teachers were shown a picture of each of the four preschoolers, as displayed on the right side of Figure 1, and were asked which one of the preschoolers they felt required the most of their attention. The participants were not told until after the study that there was actually *no* challenging behavior in the videos: all four preschoolers were child actors who simply played with the objects as directed.

Results indicated that early educators, when expecting challenging behaviors, spent significantly more time focusing their gaze on the Black preschoolers, especially the Black boy. This finding was consistent regardless of the race of the teacher. However, when teachers were asked explicitly which child they believed required the most of their attention, results indicated that teachers believed they were most closely watching for misbehavior based on gender. The most common

Figure 1

Illustrations of the Video from the Eye-Tracking Study Done with Early Care and Education Teachers



The image on the left shows four children (two white, two Black, two girls, two boys) playing with objects. The children were child actors who showed no misbehavior during the video. The image on the right is the final screen presented to the teachers, who were asked for an explicit self-report of which child required the most attention. Source: Walter S. Gilliam, Angela N. Maupin, Chin R. Reyes, et al., "Do Early Educator's Implicit Biases Regarding Sex and Race Relate to Behavior Expectations and Recommendations of Preschool Expulsions and Suspensions?" paper presented at the U.S. Administration for Children and Families State and Territory Administrators Meeting, Alexandria, Va., September 28, 2016, https://marylandfamilies engage.org/wp-content/uploads/2019/07/Preschool-Implicit-Bias-Policy-Brief.pdf.

response was the Black boy (42 percent), followed by the white boy (34 percent), white girl (13 percent), and Black girl (10 percent). Either way, the Black boy ended up with the short end of the stick.²⁷

In short, when early educators were led to believe that a preschooler might misbehave, they focused their attention more acutely on the Black boy, anticipating bad behavior that never was to happen. In a way, this study resembles the first day of preschool for early educators. Teachers are presented with a group of preschoolers they have never met and are placed in a position where they might make assumptions about what kinds of behaviors to expect from each of them. If the eye-tracking study reflects to some degree how early educators behave in a real classroom, race and gender biases could account for at least some of the disproportional rates of preschool suspensions and expulsions of Black boys.²⁸

But how do the *other* preschoolers in the classroom experience this extra vigilance placed on the Black boys in the classroom? As discussed earlier, young children are astute observers of adult behavior, and even subtle displays of negative affect and attention by adults are noted by young children who then shape their own biases based on this observational social learning. While the adults are focusing most acutely on the Black boys when expecting misbehavior, the other children in the room are watching the adults closely and actively forming their own expectations and biases based on those observations.²⁹ Sometimes the lessons that stick the most are the ones never intended to be taught.

Preschool children are also being provided, unintentionally, with hundreds of hours of "data" about implicit racial bias at an *institutional* level, beyond the acts of individual teachers. Most early care and education programs have more than one adult in the room at the same time, often a lead teacher plus one or more assistant teachers or aides. These assistant teachers and aides are more likely than lead teachers to identify as a person of color (41 percent versus 35 percent in center-based programs and 66 percent versus 30 percent in home-based programs).³⁰

The roles that the assistant teachers and aides play and the duties they perform are supportive, but usually quite different than those performed by lead teachers. In a nationally representative study of 3,191 preschool classrooms, assistant teachers were reported as being more likely to perform duties such as cleaning tables and setting up rest areas in the room, rather than leading the teaching of the children, working with parents, or providing overall planning activities.³¹ This was especially true when there was a relatively larger discrepancy in educational level between the lead and assistant teacher. Taken together, white early care and education staff are more likely to engage in higher-paid/higher-status tasks, while nonwhite staff are performing lower-status tasks under the lead teachers' supervision, communicating ideas about who has power and authority – and children watch this daily.

Additionally, an emerging body of evidence suggests that a race/ethnicity match between students and teachers may be beneficial to young children of color. In an eleven-state study of more than seven hundred prekindergarten classrooms, Hispanic/Latinx preschoolers scored higher on academic skills when in classrooms where the teacher was also Hispanic/Latinx, and Black preschoolers scored higher on teacher-reported academic and social-emotional measures when the teacher was Black.³² These findings, although only correlational, are similar to those found in a study of elementary school students.³³

Although such studies have led to increased calls to diversify further the early childhood teacher workforce, care must be taken to ensure that early educators of color are seen by the young children in their classrooms as taking an active and vital role in their education and care.³⁴ Otherwise, young children may be exposed, unintentionally, to racially defined social hierarchies within the early education setting, in which children are more likely to see white adults in leadership roles and adults of color in more subordinate roles. Child development research shows that young children are finely attuned to cues about prestige, power, and social status.³⁵ Although racialized patterns of job responsibilities and leadership op-

portunities are common across many employment settings,³⁶ when this happens in early care and education programs it provides another pathway by which implicit biases may begin to inform children's racialized expectations about social roles.³⁷

Finally, early educators themselves may be the targets of racial bias, and their experiences of racism can impact the quality of care they provide. Recent findings show that during the height of the ongoing COVID-19 pandemic, early care and education professionals of color have experienced high rates of racialized aggression in their own daily lives, which is associated with increased experiences of stress particularly in Black and Asian early educators.³⁸ Both job stress and depression in early educators have been associated with increased rates of early childhood expulsions and suspensions, providing yet another pathway by which racial biases may increase the rate of early childhood exclusions (which have consistently been shown to be applied in racially disproportional rates).³⁹

hat practical steps can be taken based on scientific studies of young children and their experiences in bias-rich, real-world settings? Much has been written about the mixed results of attempts to remedy implicit racial biases in adults.⁴⁰ One wonders whether more positive results might be obtained through intervention programs designed for young children.⁴¹ In other domains of child development, early identification and treatment are more effective and less costly than interventions at older ages when a habit or attribute is more entrenched.⁴² This may be overly optimistic in the case of racial bias, because children will inevitably be exposed to pervasive racial inequities as they grow up, which could overwhelm a short-lived treatment program. Yet it is not inconceivable that efforts could alter some of these environmental conditions for children. In our experience, parents and early educators alike are taken aback to hear that young children's mere exposure to adult nonverbal behavior patterns (which often contain unintentionally biased behaviors) can subsequently influence the children's own behavior toward others.⁴³ It may be useful to move these and future scientific findings more rapidly into the hands of parents and early educators.

What might a parent do with this information? It is not impossible that parents could regulate their own behavior while in the presence of their own children. For example, there are white-Black differences in the frequency and content of parents' conversations about race with their children.⁴⁴ White parents are often uncertain about whether to engage with conversations about race, concerned about what messages are age appropriate, and anxious that such conversations may focus their child on racial differences that inadvertently stoke racial prejudice and implicit racial biases.⁴⁵ Although some white parents may attempt to become "colorblind" and "color mute" in interactions with their children, this may implicitly convey that race is a taboo topic, leaving young children to fill in the gaps from other sources (media, rumors from peers, chance encounters). The most feasible, wise, and efficacious recommendations for parents about discussing race with children are not well understood, and the topic deserves more research.⁴⁶

Other information of potential interest to parents is that fostering intergroup contact and friendships with children from another race is a promising avenue for reducing racial bias in children.⁴⁷ However, in contemporary U.S. society, neighborhoods, K–12 schools, and early care and education programs exhibit a high degree of segregation. More than one-third of all K–12 students attend a school in which 75 percent or more of the students are of a single racial group, and early care and education programs are considerably *more* racially segregated.⁴⁸ Schools in the United States are more racially segregated than their surrounding neighborhoods, and so too are early childhood programs.⁴⁹ Even parents who explicitly avow egalitarian views do not necessarily bring other-race acquaintances into their homes on a regular basis. Parents might make different choices about their own behavior and their children's playdates if given information about potential benefits of intergroup contact and friendships for their own child. Further applied-science studies in this area would be valuable.

It is also time to think about bringing more scientific information to colleges of education and teacher internships. It may be eye-opening for early care and education teachers to learn that their own implicit biases leak out in the classroom. Young children are acutely attentive to the direction of adult gaze, and teachers look toward Black boys when they anticipate trouble. It remains unknown whether information about implicit bias in the classroom could be used to enhance educational equity if effectively conveyed to teachers.⁵⁰ The National Academy of Education is attuned to these issues and is seeking to incorporate lessons on civics in an expanded U.S. educational agenda.⁵¹ There is also a push by the National Academy of Education and other psychology-focused organizations to translate scientific research into practical actions to improve the educational experience and foster the opportunity to thrive for all children. Among other things, this convergence is spotlighting the urgent need for increased understanding of the mechanisms by which racial biases are transmitted to children, often unintentionally, both in and out of school – and what might be done about it.

In conclusion, young children are social pattern detectors. They study our behavior, and sometimes the nonverbal messages they receive are not the ones we intend to send. What every parent, teacher, and societal leader should think about is that children watch and learn from our behavior before first grade. When we exhibit biases in front of young children, we are unwittingly instilling our biases in their minds – biases they then adopt, practice, and perpetuate.

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