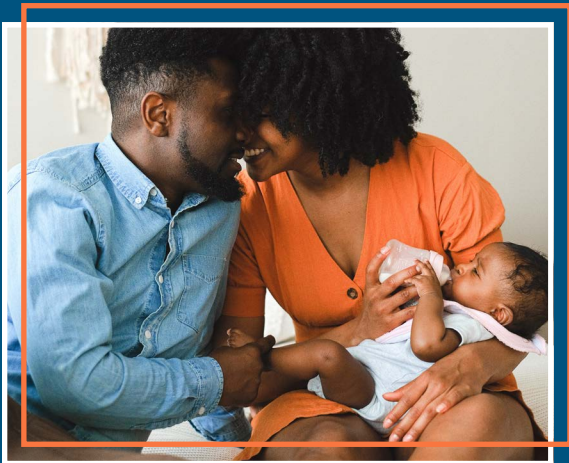


Advancing Racial Equity in Child Development through Antiracist Developmental Science



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Iheoma U. Iruka, Department of Public Policy, University of North Carolina at Chapel Hill

Melissa Clepper-Faith, Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill

Alexandria Forte, Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill



Equity Research Action Coalition

UNC Frank Porter Graham Child Development Institute

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Racism has deleterious effects on the development and learning of racial ethnic minority (REM) children and causes trauma through multiple pathways, affecting their physical, emotional, social, and academic growth and development. Racism is a system of hierarchy, privilege, and inequity based on skin color (the social construct of race) designed to maintain the power and privilege of White America, and it has pernicious, multidimensional effects at individual, systemic/ institutional, cultural, vicarious, and internalized levels. The exercise of power against racial groups that are defined as inferior, with the support of the entire culture, is embedded in our policy and legal systems and forms a core foundation of the United States of America.¹



The mechanisms through which racism affects child development include economic instability, inadequate neighborhood and community resources, adverse birth outcomes



and effects on physical health, and lack of educational opportunities. Economic instability and poverty can negatively affect development through parental economic stress, unhealthy environments, and lack of time for engagement.^{2,3} Black, Native American, and Latine⁴

U.S. households are more likely to live in poverty than are White households.⁵ Redlining and other discriminatory practices have contributed significantly to the cycle of intergenerational poverty for REM families due to a lack of educational and employment opportunities and a paucity of resource accumulation.⁶ Wealth resulting from intergenerational accumulation of resources provides numerous supports and social capital to simultaneously buffer children from adversities and accelerate their learning opportunities and progress.⁷ The purposeful denial of opportunities to invest in homeownership due to racism and redlining has had cumulative adverse effects on the economic stability of Black, Native American, and Latine families (and some Asian American groups).⁵

Redlining and other discriminatory practices also affect the neighborhood/community quality and resources that are available to REM families. Where children live determines multiple factors that impact their health, education, and development. Impoverished neighborhoods may include exposure to violence; environmental toxins^{8,9,10,11} (including lead and particulate air pollution)^{12,13}; lack of access to high-quality, nutritious food; and substandard educational resources.^{14,15} Low-income neighborhoods are characterized by fewer high-quality early childhood programs, libraries, schools, health facilities, and green spaces, all of which enrich a child's environment.¹⁶

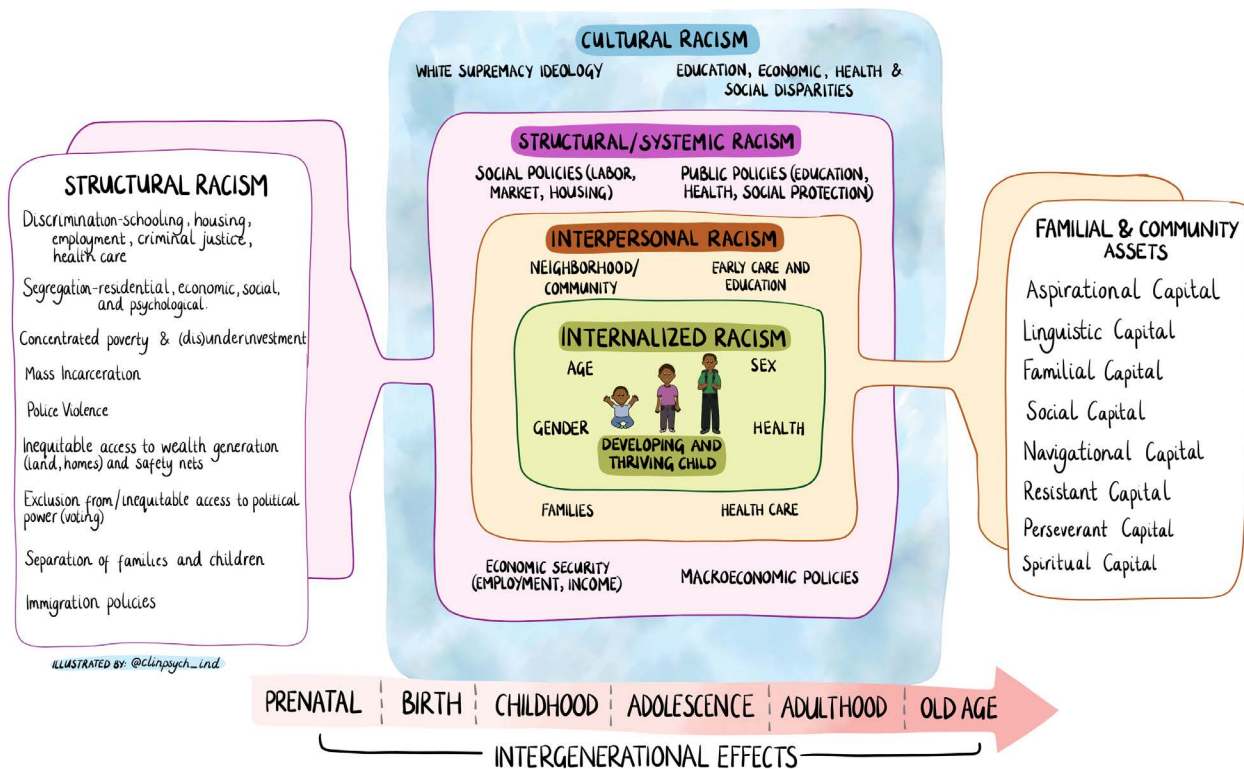
Residence in a low-income neighborhood can also adversely affect birth outcomes and physical health. The United States has striking racial disparities in birth outcomes, with preterm birth rates 1.6 times higher for Black women than White women and a greater prevalence of low birth weight among Black infants.¹⁷ Preterm birth is associated with a range of lifelong cognitive, behavioral, and health challenges for the child.^{18,19,20} A birthing person's lifetime exposure to structural racism and discrimination can act as a chronic stressor that operates on multiple levels, with adverse effects on birth outcomes and on the health of that individual.¹⁶

Where children live determines multiple factors that impact their health, education, and development.

Finally, educational opportunities vary widely between high- and low-resource communities; there are significant racial disparities in U.S. children’s access to high-quality early care and education (ECE) programs that provide safe and healthy environments with responsive early childhood professionals providing language and cognitively enriching activities. Black and Latine children are more likely to attend lower-quality programs than are White children.^{21,22} Studies also show that



REM children are more likely than White children to receive biased, unfair, and harsh treatment by and interactions with education professionals and staff.^{23,24} Biased treatment of REM children and youth can also result in harsher treatment by law enforcement, contributing to the risk of entering the “school to prison pipeline.”²⁵



Developmental Science and Child Development

Developmental science can provide a framework to examine how racism affects REM children and families and can support the development of programs and policies that mitigate its effects. The **Racism + Resilience + Resistance Integrative Study of Childhood Ecosystem (R³ISE Integrative Model)** addresses the gaps in child development research around racism and provides an opportunity to advance developmental science’s understanding of the impact of racism. To support the optimal development of children and ensure they thrive, we must identify the interplay between racism and family and community cultural assets and examine how racism affects all domains of development (physical, social, emotional, and cognitive) within or across ecological contexts.

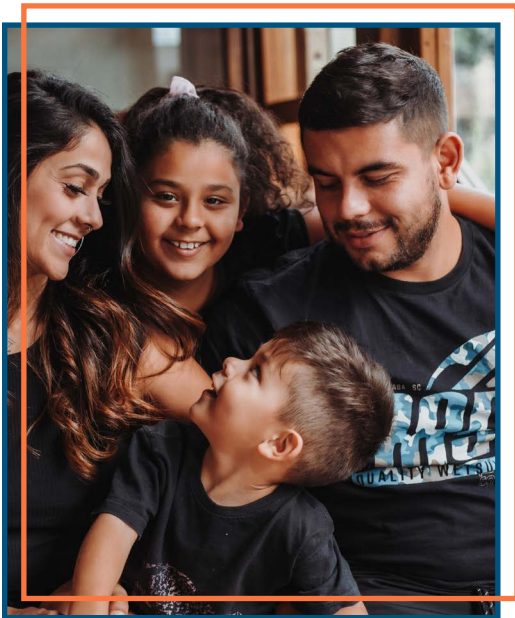
The **R³ISE Integrative Model** provides a framework for conceptualizing all the key mechanisms by which racism, both interpersonal and structural, affects children’s growth and learning, and it emphasizes the multidimensionality of racism: cultural racism (“the water we swim in”), structural influences, institutional racism, and interpersonal effects. R³ISE emphasizes the cultural assets of family and community that promote and build the resilience of REM children; these cultural assets help Black, Indigenous, Latine, Asian, and other communities of color to navigate the various forms of racism.²⁶

The R³ISE Integrative Model can be used to examine current policies and support those that disrupt the harmful effects of multilevel racism while also supporting and promoting REM cultural assets. Those policies that disrupt the effects of racism and promote cultural assets have the greatest potential to positively affect child



development.²⁷ An amalgamation of policies is needed to undo the harmful effects of structural and systemic injustices, including prioritization of economic stability and support for housing; equitable prenatal, child, and family health; and quality early childhood programs and education.

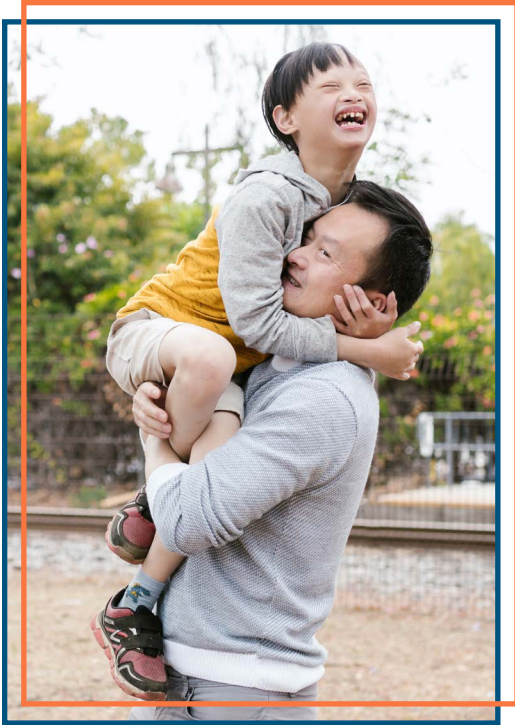
Examples of antipoverty policies that support economic stability include the earned income tax credit (EITC) and child tax credit (CTC). Emerging research supports the relationship between poverty-alleviating programs such as the EITC and CTC and their link to improved health and educational child outcomes.³ Black people earn less than their White counterparts across every level of education and profession.^{28,29} Therefore, income support, investment in Black- and Brown-owned and -led entities, and attending to racial wage disparities can help to lift REM families out of poverty.



An amalgamation of policies is needed to undo the harmful effects of structural and systemic injustices.

Municipalities can address the need for safe, stable housing and neighborhood support by engaging in racial impact studies to examine racial disparities in housing and land-use policies, supporting policies to mitigate displacement due to gentrification and to keep renters and homeowners housed, and promoting inclusionary housing policies by supporting and funding shared equity homeownership (e.g., Housing Choice Voucher Program).

Support for equitable prenatal, child, and family health is imperative; a mother's prenatal health directly affects the healthy development of her children and is supported by increased access to Medicaid and culturally centered prenatal



care. Pediatric health is supported by access to Medicaid, the Children’s Health Insurance Program (CHIP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The Maternal, Infant, and Early Childhood Home Visiting program and the Group Prenatal Care program are promising strategies for incorporating targeted services to meet the needs of REM families.

Quality early childhood intervention and education are crucial during the early years of brain development. Access to quality early-childhood and intervention programs and services supports school readiness skills and academic attainment over time.³⁰ Policies that address systemic barriers (e.g., cost, quality, and accessibility of care), such as tuition-free universal pre-K and Head Start, increase accessibility of care for REM families and

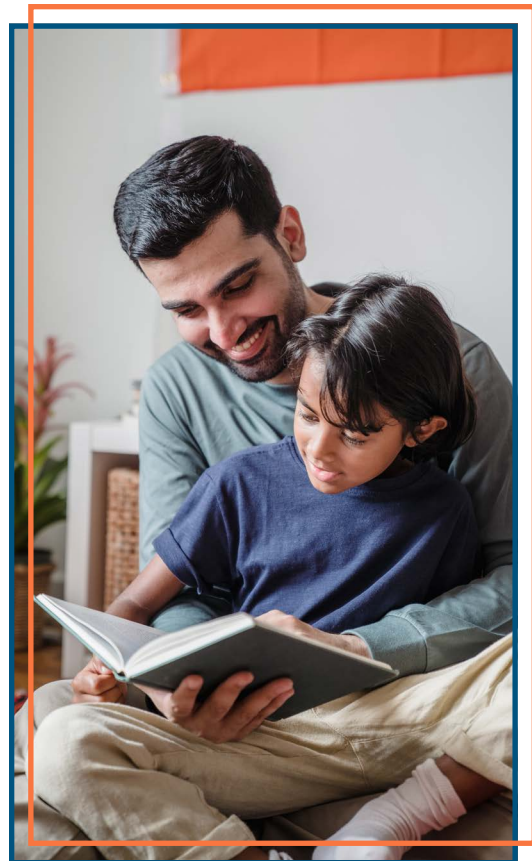
support healthy development. Curricula and pedagogy that center the cultural assets of REM families and communities and promote Black excellence by culturally responsive educators are essential because they validate the lived experience of Black, Indigenous, Latine, and other REM children.

Research that centers the perspectives of REM families and seeks to understand their ability to survive in inequitable environments is needed to support and fuel policies that work to dismantle the damaging impact of systemic racism. As highlighted by the **R³ISE Integrative Model**, studies that investigate



the cultural assets of children, families, and communities are necessary and critical in developmental science. Modalities such as community-based participatory research (CBPR), which incorporate the community voice in research, can provide a framework to center REM families and allow them to be active members of the entire research process.³¹ New research that centers cultural assets within REM families will build counternarratives to past deficit-based research. Further, creating new survey tools that capture cultural assets will begin to build the knowledge base and allow for other studies to incorporate this tool into data collection and explore how cultural assets may impact outcomes for developing children.

In sum, addressing multiple forms of racism will require understanding its persistent and compounding nature, as well as the many ways it impacts children’s healthy development. The R³ISE Integrative model alerts us to the impact of racism and emphasizes the importance of elevating family and community assets to advance equity. Developmental science must transform to ensure all children have the opportunity to thrive.



Endnotes

- ¹ Jones J. (1972). *Prejudice and Racism*. Reading, MA: Addison Wesley
- ² Aber JL, Bennett NG, Conley DC, Li J. (1997). The effects of poverty on child health and development. *Annu. Rev. Public Health* 18:463–83. <https://doi.org/10.1146/annurev.publhealth.18.1.463>
- ³ NASEM (Natl. Acad. Sci. Eng. Med.). (2019a). *A Roadmap to Reducing Child Poverty*. Washington, DC: Natl. Acad. Press
- ⁴ Consistent with experts in the field, we use Latine, as a gender-neutral term, to refer to individuals whose cultural background originated in Latin America. Rather than using Latinx, a term Spanish speakers find unpronounceable in Spanish, we have opted to use the gender-inclusive term Latine, commonly used throughout Spanish-speaking Latin American.
- ⁵ Chen Y, Thomson D. (2021). Childhood poverty increased nationally during COVID, especially among Latino and Black children. *Child Trends*. <https://www.childtrends.org/publications/child-povertyincreased-nationally-during-covid-especially-among-latino-and-black-children>
- ⁶ Bailey ZD, Feldman JM, Bassett MT. (2020). How structural racism works—racist policies as a root cause of U.S. racial health inequities. *N. Engl. J. Med.* 384(8):768–73. <https://doi.org/10.1056/NEJMms2025396>
- ⁷ Miller P, Podvysotska T, Betancur L, Votruba-Drzal E. (2021). Wealth and child development: differences in associations by family income and developmental stage. *RSF Russell Sage Found. J. Soc. Sci.* 7(3):154–74. <https://doi.org/10.7758/RSF.2021.7.3.07>
- ⁸ Baek M, Outrich MB, Barnett KS, Reece J. (2021). Neighborhood-level lead paint hazard for children under 6: a tool for proactive and equitable intervention. *Int. J. Environ. Res. Public Health* 18(5):2471. <https://www.mdpi.com/1660-4601/18/5/2471>
- ⁹ Davis KM. (2021). Lead poisoning prevention efforts in high-risk environments: follow-up testing rates among preschool children in Flint, Michigan, 2013–2015. *J. Racial Ethn. Health Disparities* 8(1):199–209. <https://doi.org/10.1007/s40615-020-00772-0>
- ¹⁰ Egendorf SP, Mielke HW, Castorena-Gonzalez JA, Powell ET, Gonzales CR. (2021). Soil lead (Pb) in New Orleans: a spatiotemporal and racial analysis. *Int. J. Environ. Res. Public Health* 18(3):1314. <https://www.mdpi.com/1660-4601/18/3/1314>
- ¹¹ Wheeler DC, Raman S, Jones RM, Schootman M, Nelson EJ. (2019). Bayesian deprivation index models for explaining variation in elevated blood lead levels among children in Maryland. *Spat. Spatio-Temporal Epidemiol.* 30:100286. <https://doi.org/10.1016/j.sste.2019.100286>
- ¹² Commodore S, Ferguson PL, Neelon B, Newman R, Grobman W, et al. (2021). Reported neighborhood traffic and the odds of asthma/asthma-like symptoms: a cross-sectional analysis of a multi-racial cohort of children. *Int. J. Environ. Res. Public Health* 18(1):243. <https://www.mdpi.com/1660-4601/18/1/243>
- ¹³ Mullen C, Grineski S, Collins T, Xing W, Whitaker R, et al. (2020). Patterns of distributive environmental inequity under different PM2.5 air pollution scenarios for Salt Lake County public schools. *Environ. Res.* 186:109543. <https://doi.org/10.1016/j.envres.2020.109543>
- ¹⁴ Franco, M., Roux, A. V. D., Glass, T. A., Caballero, B., & Brancati, F. L. (2008). Neighborhood characteristics and availability of healthy foods in Baltimore. *American Journal of Preventive Medicine*, 35(6), 561–567.
- ¹⁵ Heard-Garris, N., Boyd, R., Kan, K., Perez-Cardona, L., Heard, N. J., & Johnson, T. J. (2021). Structuring poverty: how racism shapes child poverty and child and adolescent health. *Academic Pediatrics*, 21(8), S108–S116.

- ¹⁶ Acevedo-Garcia D, Noelke C, McArdle N, Sofer N, Hardy EF, et al. (2020). Racial and ethnic inequities in children's neighborhoods: evidence from the new Child Opportunity Index 2.0. *Health Aff.* 39(10):1693–40. <https://doi.org/https://doi.org/10.1377/hlthaff.2020.00735>
- ¹⁷ Alhusen JL, Bower KM, Epstein E, Sharps P. (2016). Racial discrimination and adverse birth outcomes: an integrative review. *J. Midwifery Women's Health* 61:707–20. <https://doi.org/10.1111/jmwh.12490>
- ¹⁸ Hack M, Klein NK, Taylor HG. (1995). Long-term developmental outcomes of low birth weight infants. *Future Child.* 5(1):176–96. <https://doi.org/10.2307/1602514>
- ¹⁹ Johnson S. (2007). Cognitive and behavioural outcomes following very preterm birth. *Semin. Fetal Neonatal Med.* 12(5):363–73. <https://doi.org/https://doi.org/10.1016/j.siny.2007.05.004>
- ¹⁶ Ibid
- ²⁰ Petrou S, Sach T, Davidson L. (2001). The long-term costs of preterm birth and low birthweight: results of a systematic review. *Child Care Health Dev.* 27(2):97–115. <https://doi.org/10.1046/j.1365-2214.2001.00203.x>
- ²¹ Early DM, Iruka IU, Ritchie S, Barbarin OA, Winn D-MC, et al. (2010). How do pre-kindergarteners spend their time? Gender, ethnicity, and income as predictors of experiences in pre-kindergarten classrooms. *Early Childhood Res. Q.* 25(2):177–93. <https://doi.org/10.1016/j.ecresq.2009.10.003>
- ²² Valentino R. (2018). Will public pre-K really close achievement gaps? Gaps in prekindergarten quality between students and across states. *Am. Educ. Res. J.* 55(1):79–116. <https://doi.org/10.3102/0002831217732000>
- ²³ Bryan N. (2020). Shaking the bad boys: troubling the criminalization of black boys' childhood play, hegemonic white masculinity and femininity, and the school playground-to-prison pipeline. *Race Ethn. Educ.* 23(5):673–92. <https://doi.org/10.1080/13613324.2018.1512483>
- ²⁴ Gilliam WS, Maupin AN, Reyes CR, Accavitti M, Shic F. (2016). Do early educators' implicit biases regarding sex and race relate to behavior expectations and recommendations of preschool expulsions and suspensions? *Res. Study Br., Yale Child Study Cent., Yale Univ., New Haven, CT.* https://medicine.yale.edu/childstudy/policy-and-social-innovation/zigler/publications/preschool%20implicit%20bias%20policy%20brief_final_9_26_276766_54643_v1.pdf
- ²⁵ Whaley AL, McQueen JP. (2020). Evaluating Afrocentric violence prevention for adolescent Black males in an urban public school: an idiothetic approach. *J. Child Fam. Stud.* 29(4):942–54. <https://doi.org/10.1007/s10826-019-01637-9>
- ²⁶ Cabrera, N. (2013). Positive development of minority children. *Social Policy Report* 27(2), 1–30
- ²⁷ Iruka IU, Harper K, Lloyd CM, Boddicker-Young P, De Marco A, Jarvis B. (2021c). Anti-racist policymaking to protect, promote, and preserve Black families and babies. Rep., Equity Res. Action Coalit., Durham, NC. <https://equity-coalition.fpg.unc.edu/resource/anti-racist-policymakingto-protect-promote-and-preserve-black-families-and-babies/>
- ³ Ibid
- ²⁸ Iruka IU, James C, Reaves C, Forte A. (2021d). Black child national agenda: America must deliver on its promise. Rep., Equity Res. Action Coalit., Durham, NC. <https://equity-coalition.fpg.unc.edu/resource/blackchild-national-agenda-america-must-deliver-on-its-promise/>
- ²⁹ Semega JL, Fontenot KR, Kollar MA. (2017). Income and poverty in the United States: 2016. *Curr. Popul. Rep.* P60-259, US Census Bur., Washington, DC. <https://www.census.gov/content/dam/Census/library/publications/2017/demo/P60-259.pdf>
- ³⁰ Karoly LA. (2016). The economic returns to early childhood education. *Future Child.* 26(2):37–55. <https://doi.org/10.1353/foc.2016.0011>
- ³¹ Viswanathan, M., Ammerman, A., Eng, E., Garlehner, G., Lohr, K. N., Griffith, D., ... & Whitener, L. (2004). Community based participatory research: Assessing the evidence: Summary. *AHRQ Evidence Report Summaries.* 1998–2005. 99.