Segregated from the Start: Comparing Segregation in Early Childhood and K–12 Education

Erica Greenberg and Tomas Monarrez
Segregated from the Start

- Goal: to compare segregation in early care and education (ECE) and K–12 schools given the early roots of racial bias and importance of positive peer interactions for school readiness
- Supported by the Overdeck Family Foundation
The Backdrop to Segregation in ECE

- US residential racial segregation is pervasive and enduring
  - Largely due to racist New Deal federal policies in metropolitan areas (e.g., Rothstein 2017), with rural segregation stretching back centuries to slavery and Jim Crow
  - Harmful to economic opportunity, education, and safety in communities of color (e.g. Billings, Deming, and Rockoff 2014)

- US school segregation layers on top of residential segregation
  - Federal integration efforts began in 1954 with Brown, reached their peak in the 1960s-1980s, and have since retreated (e.g., Reardon, Grewal, Kalogrides, and Greenberg 2012)
Segregation in ECE

- US ECE segregation reflects residential and school segregation—and beyond
  - What little we know focuses on school-based programs (Reid, Kagan, Hilton and Potter 2015, Frankenberg 2016, Piazza and Frankenberg 2019)
  - This is largely because of the lack of national data on the demographics of ECE programs, unlike K–12 and higher education
  - But a growing literature shows that the roots of racial and ethnic bias form during children’s earliest years (Kelly et al. 2008, NG et al. 2017, Xiao et al. 2017), and that the racial composition of ECE programs is linked to classroom quality and school readiness (Reid et al. 2015, Valentino 2017)
  - ECE is thus a key – and understudied – place for addressing issues of diversity, equity, and inclusion in American society
Research Questions

1. How does segregation in ECE compare with segregation in K–12 education?
2. How does segregation vary among ECE programs?
3. How can we address segregation in ECE?
Data

- National Survey of Early Care and Education (2012)
  - Public-Use Center-based and Home-based Provider Files
  - Sampling weights allow us to generate nationally representative estimates
  - Examined the racial and ethnic composition of children enrolled (Hispanic, Black, white, and “another race” students), along with provider and community characteristics
    - Focused on programs with at least 5 students
- Common Core of Data (2011-12)
- Private School Universe Survey (2011-12)
Methods

- Defining segregation: enrollment of Black and Hispanic children compared to total enrollment in each ECE program
  - Reflects data limitations, historic oppression, and stark ongoing inequities
- Begin with a distribution of ECE programs based on their Black and Hispanic enrollment, alongside the same distribution of K–12 schools
- Move to a rigorous summary measure of segregation: Index of Dissimilarity
  - Measures how much, on average, programs’ racial composition deviates from the composition of all programs nationwide
  - Ranges from 0 to 1, with 0 perfectly integrated and 1 perfectly segregated
How Early Childhood Programs Compare with Kindergarten and First Grade in Black or Hispanic Enrollment Share


Note: Estimates for early childhood education include programs with at least five students enrolled.
Early Childhood Education Is More Segregated Than Any Other School Level


Notes: ECE = early childhood education. Estimates for early childhood education include programs with at least five students enrolled. The dissimilarity index is a summary measure of segregation that represents the share of black or Hispanic students that would need to move to achieve perfect integration. Findings are robust to alternative segregation indexes. See the technical appendix for more details.
Segregation in Early Childhood Education Programs by Ages Served, Urbanicity, and Region

### Dissimilarity Index

- **Ages served**
  - Birth to age 3: 0.71
  - Ages 3 to 5: 0.70

- **Urbanicity**
  - Highly urban: 0.70
  - Moderately urban: 0.66
  - Highly rural: 0.70

- **Region**
  - Northeast: 0.77
  - South: 0.69
  - West: 0.68
  - Midwest: 0.66

Source: Authors' calculations of the distribution of black or Hispanic students using the 2012 National Survey of Early Care and Education.
Home-Based ECE Programs Are Far More Segregated Than Center-Based Programs

Dissimilarity index

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<tr>
<td>Home based</td>
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Sources: Authors’ calculations of the distribution of black or Hispanic students using the 2012 National Survey of Early Care and Education. 
Notes: ECE = early childhood education. Estimates include programs with at least five students enrolled. The dissimilarity index is a summary measure of segregation that represents the share of black or Hispanic students that would need to move to achieve perfect integration. Findings are robust to alternative segregation indexes. See the technical appendix for more details.
Unlisted Home-Based ECE Programs Are More Segregated Than Listed Programs

Dissimilarity index

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<th>Dissimilarity Index</th>
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<tbody>
<tr>
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Sources: Authors’ calculations of the distribution of black or Hispanic students using the 2012 National Survey of Early Care and Education.

Notes: ECE = early childhood education. Estimates include programs with at least five students enrolled. The dissimilarity index is a summary measure of segregation that represents the share of black or Hispanic students that would need to move to achieve perfect integration. Findings are robust to alternative segregation indexes. See the technical appendix for more details. Listed programs have been identified in administrative databases, while unlisted programs are reported (by families with young children) as providing regular weekly care.
Key Findings

- ECE is considerably more segregated than K–12 schools
- ECE segregation is driven by home-based programs
  - Center-based programs are just as segregated as K–12, bringing up new questions about ECE choice, as well as the role of school boundaries
  - Home-based programs, especially unlisted programs, are almost as segregated as they could possibly be
- Findings mirror broader segregation theory: less institutionalization and government oversight lead to more segregation
(Much) More Research is Needed

- Do levels of segregation vary across states, localities, policy contexts, and time?
- How does ECE segregation relate to residential segregation?
- What are the causes of ECE segregation?
- What are the short- and long-term consequences of ECE segregation?
How can we address segregation in early childhood education?

- Or rather, how do we think about segregation in early education—and what societal goals do we have for integration?

- Do they vary for infant/toddler providers and preschools?

- Do these goals vary for center- and home-based providers?

- What are Black and Hispanic families’ perspectives on ECE segregation?
  - How do issues of trust and safety, core to ECE choice, relate to experiences of implicit bias and structural racism in integrated programs?
  - In ECE, can separate be equal?
Thank You!

Contact | egreenberg@urban.org