

Center- and Program-Level Factors Associated with Turnover in the Early Childhood Education Workforce

Staff turnover is a pressing problem in early childhood education. High turnover can create organizational instability and distract from the care and education mandate of early childhood education centers. The Early Childhood Workforce Development Research Alliance of the Regional Educational Laboratory Northeast & Islands wants to better understand the factors associated with turnover in the early childhood educator workforce. Using data from the 2012 National Survey of Early Care and Education, this study found that a low average turnover rate across early childhood education centers obscured systematic variation in turnover patterns across types of centers and programs, with high turnover rates in some types. Higher wages were associated with lower turnover rates across centers. Turnover rates were highest among private-pay centers serving children ages 0–5. Nonwage benefits such as health insurance and retirement benefits and paid time off for professional development were generally unrelated to turnover rates. Educators were also clustered into certain center types based on background characteristics; Black educators and educators with lower educational attainment more likely to work in centers with low wages and high turnover.

Why this study?

Turnover in the early childhood educator workforce affects the quality of children’s early childhood education environment¹ and has been linked to weakened language and social development.² The academic and financial costs of teacher turnover for student learning and school budgets are considerable.³ Members of the Early Childhood Workforce Development Research Alliance of the Regional Educational Laboratory Northeast & Islands want to better understand the relationships between educator turnover rates and key characteristics of early childhood education centers. This understanding could help direct resources and interventions to the settings where they are most in demand or might be most effective.

What was studied and how?

This study addressed two research questions related to turnover in the early childhood education workforce:

1. What was the turnover rate across early childhood education centers in the United States in 2012?
2. What center characteristics (such as nonwage benefits and supports, age group served, funding structure, center size, and staff composition) were associated with center turnover rates?

1. Hale-Jinks, C., Knopf, H., & Knopf, H. (2006). Tackling teacher turnover in childcare: Understanding causes and consequences, identifying solutions. *Childhood Education*, 82(4), 219–226.
2. Whitebook M, Howes C, Phillips D. (1990). *Who cares? Child care teachers and the quality of care in America. Final report: National Child Care Staffing Study*. Child Care Employee Project.
3. Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher turnover affects students and schools. *Education Policy Analysis Archives*, 27(36), 2–29.

This study used data from the 2012 National Survey of Early Care and Education (NSECE), a nationally representative survey that characterizes the use and availability of early childhood education centers in the United States.⁴ This report addresses some previously unanswered questions using data from the center-based provider survey, which was administered to directors of centers that provide care to children not yet in kindergarten, and the workforce survey, which was administered to a single educator from each responding center.

Early childhood education centers in the sample were classified based on their turnover rates. Low-turnover centers had rates below 5 percent, medium turnover centers had rates of 5–19 percent, and high-turnover centers had rates of 20 percent or higher. Center characteristics were compared across turnover categories. A survey-weighted ordinal logistic regression was used to estimate the relationship between center characteristics and the likelihood of being in a higher turnover category. Centers were also classified by program type (see box 1).

Box 1. Early childhood education center program types

The National Survey of Early Care and Education (NSECE) classified centers into one of four program types. **School-sponsored centers** are those for which a public school district has administrative oversight or reporting requirements. **Head Start** centers report funding for at least one child from Head Start dollars but are not school-sponsored. **Public prekindergarten** centers receive funding from public prekindergarten funds for at least one child but are not school sponsored and report no Head Start funding. **Other program types** are any centers that do not meet these criteria. This category comprises private, parochial, and other nonpublic centers.

Findings

The descriptive and regression analyses results are discussed below.

Higher wages were associated with lower turnover rates

Early childhood education centers that paid higher wages had lower educator turnover rates, and centers that paid lower wages had higher rates. Centers in the bottom quartile of the wage distribution, which paid an average hourly wage of \$8.17, had an average turnover rate of 19 percent in 2012. Centers in the top three quartiles of the distribution, which paid an average wage of \$16.73, had an average turnover rate of 12 percent. This pattern held even after regression analyses controlled for other factors likely to be associated with wages and turnover rate, including program type and region.

On average, 13 percent of educators left their early childhood education center in 2012, but turnover rates varied according to center characteristics and systematic variation in wages

School-sponsored centers had lower turnover rates than did centers in other program types. This may be because school-sponsored centers paid higher wages. The average hourly wage paid by school-sponsored centers was \$22.60, and 60 percent of school-sponsored centers were in the low-turnover category, where turnover rates were below 5 percent. The second highest-paying center type was public preK centers, which paid an average hourly wage of \$16.57, and 47 percent of public preK centers fell into the low-turnover category. Results of regression analyses suggest that differences in turnover rates by program type were driven by systematic variation in wages and other center-level characteristics across program types.

4. NSECE Project Team (National Opinion Research Center). (2017). *National Survey of Early Care and Education (NSECE), 2012*. Inter-university Consortium for Political and Social Research.

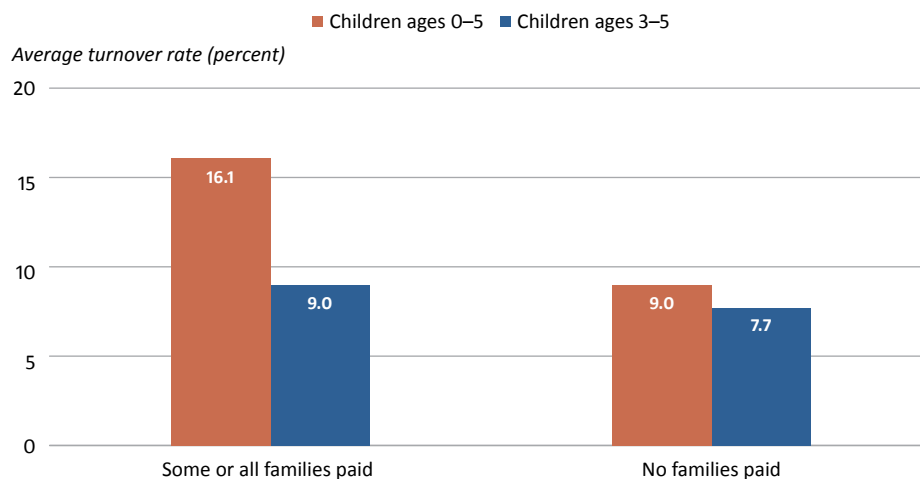
Turnover rates were higher and wages were lower in early childhood education centers serving children ages 0–5 than in centers serving children ages 3–5

The average hourly wage of educators working in centers serving children ages 0–5 was \$12.60, which was more than \$6 below the \$18.87 average hourly wage paid to educators in centers serving children ages 3–5. Centers serving only children ages 3–5 were concentrated in the low-turnover category (71 percent), whereas centers serving children ages 0–5 were underrepresented in that category (42 percent). The regression analyses found a statistically significant relationship between age group served and the likelihood of being in a higher turnover category, suggesting that age group differences in turnover cannot be fully explained by differences in wages.

Turnover rates were highest in private-pay centers serving children ages 0–5

Families access early childhood education programs through a variety of pathways, with publicly funded programs becoming increasingly common.⁵ Staff turnover varied across centers depending on the payer. About 67 percent of centers at which none of the families paid for services were in the low-turnover category compared with 45 percent of centers at which some or all families paid. It is possible that this reflects the disproportionate availability of free preschool programs across the country and lower underlying turnover rates among educators serving children ages 3–5. However, in a comparison of average turnover rates by age group and payer, private-pay centers serving children ages 0–5 stood out from other types of centers. Whereas average turnover rates were at or below 9 percent among all centers serving children ages 3–5 and publicly funded centers serving children ages 0–5, the turnover rate averaged 16 percent among private-pay centers serving children ages 0–5 (figure 1).

Figure 1. Early childhood education center–level turnover rates were highest in private-pay centers serving children ages 0–5, 2012



Note: The differences in the average turnover rate between private-pay centers serving children ages 0–5 and the other three center types in the figure were statistically significant at $p < .05$.

Source: Authors' analysis of the 2012 National Survey of Early Care and Education (NSECE Project Team, National Opinion Research Center, 2017, National Survey of Early Care and Education [NSECE]. 2012. Inter-university Consortium for Political and Social Research).

5. Friedman-Krauss, A. H., Barnett, W. S., Garver, K. A., Hodges, K. S., Weisenfeld, G. G., & DiCrecchio, N. (2019). *The National Institute for Early Education Research: The state of preschool 2018*. National Institute for Early Education Research.

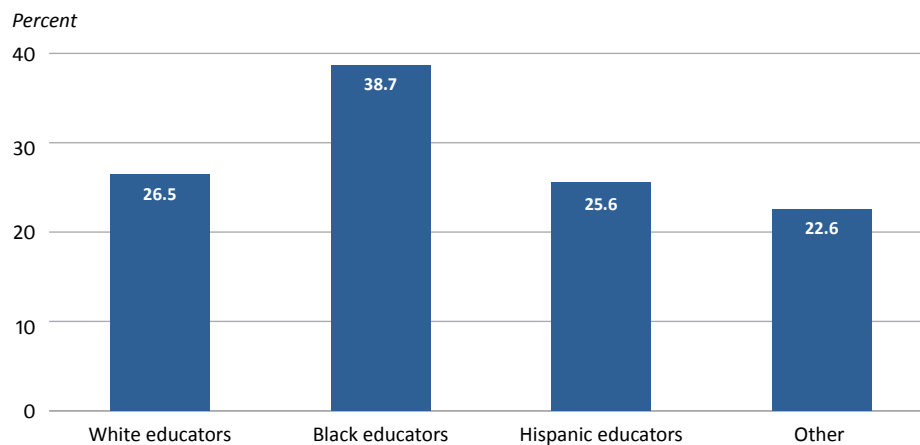
Nonwage benefits were generally unrelated to turnover patterns in early childhood education centers

Early childhood education centers providing health insurance or retirement benefits to their educator staff had lower turnover rates, on average, than centers that did not provide such benefits. However, after regression analyses controlled for other center-level factors, including center size, region, program type, and student demographics, the differences were not significant, suggesting that the association between offering nonwage benefits and turnover is driven by other factors, such as wages, that are associated with both benefits and turnover rates.

Educators' personal characteristics, including educational attainment, experience, and race/ethnicity, were associated with the types of centers they worked in

Educators with lower educational attainment and educators with less experience were concentrated in private-pay centers serving children ages 0–5. Educators with these characteristics, along with Black educators, were also overrepresented in low-wage centers and in centers that did not offer benefits (figure 2). Racial/ethnic employment patterns might reflect racialized educational disparities, bias in the hiring processes, or uneven retention of educators from different racial/ethnic groups stemming from a variety of factors. Understanding the co-occurrence of individual- and center-level variation is critical for identifying socioeconomic segmentation of the labor market and access to higher wages and nonwage benefits.

Figure 2. Black educators were more likely than educators of other races/ethnicities to work in low-wage early childhood education centers, 2012



Note: $n = 4,782$. Differences in the distribution of educators by race/ethnicity in low-wage centers are statistically significant at $p < .001$. Because one employee was surveyed in each early childhood education center and response rates were lower among educators than directors, this figure does not represent all 7,773 centers in the analytic sample.

Source: Authors' analysis of the 2012 National Survey of Early Care and Education (NSECE Project Team, National Opinion Research Center, 2017, National Survey of Early Care and Education [NSECE]. 2012. Inter-university Consortium for Political and Social Research).

Limitations

The structure, quality, and age of the NSECE data pose some limitations. First, the cross-sectional nature of the NSECE survey precludes determining the direction of the relationships identified through these analyses. Second, some measures may lack precision: a binary indicator of whether a center provides benefits indicates very little about the cost and the quality of those benefits. Finally, the responses that respondents would give to the survey questions might have changed considerably since 2012. Future research could attempt to replicate these analyses using the 2019 NSECE data once they are released.

Implications

These findings could be used to advance efforts to improve early childhood educator wages through direct and indirect means. Approaches could include pay-parity legislation for public prekindergarten programs, one-time or periodic stipends and refundable tax credits for educators,⁶ or scholarship programs that support early childhood education teachers' educational attainment and career advancement.

Researchers could examine why private-pay centers serving children ages 0–5 have much higher turnover rates than other centers and what sorts of interventions might be effective for reducing educator turnover in these contexts.

Finally, practitioners and policymakers could explore ways to reduce stratification in working conditions across the early childhood education workforce. Pipeline programs that improve educators' access to higher education could give workers with lower educational attainment more power in the labor market.

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Caven, M., Khanani, N., Zhang, X., & Parker, C. E. (2021). *Center- and program-level factors associated with turnover in the early childhood education workforce* (REL 2021–069). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast & Islands.

6. Isaacs, J. B., Adelstein, S., Kuehn, D., Loprest, P., Genua, D., & Gebrekristos, S. (2018). *Early childhood educator compensation in the Washington Region*. Urban Institute.