



Neighborhood poverty and school readiness

By 2010, more Americans lived in a neighborhood where a large share of residents live below the poverty line than did at the beginning of the decade. The trend was most pronounced among families with children.¹ The increase happened during the period that includes the Great Recession (December 2007 to June 2009) and coincided with growing income inequality among families with children.² Concentration of economic disadvantage in neighborhoods is increasingly seen as a challenge for families and communities.³ Children living in communities with a poverty rate of 20 percent or higher start school less ready to learn than their peers in more affluent neighborhoods.⁴ These children are less likely to enter kindergarten with the early academic, attention, and socioemotional skills needed to succeed in school. School readiness has been shown to be a robust predictor of long-term school reading and math achievement and well-being.⁵ Having more children in need of additional early learning support stresses community systems that serve those children and families, including schools and social service agencies.

To better understand the role of neighborhood poverty and family poverty in early childhood, Sharon Wolf, Katherine Magnuson, and Rachel Kimbro combined a national data set (the Early Childhood Longitudinal Study-Kindergarten, cohorts of 1998 and 2010) with census data on children's home neighborhood poverty levels and find that between 1998 and 2010:

- more young children entering kindergarten were exposed to neighborhood poverty;
- kindergarteners from higher-poverty neighborhoods were less prepared for school;
- academic skills gaps between poor and nonpoor kindergarteners increased; and
- levels of neighborhood poverty—holding family poverty constant—predicted the school readiness of children entering kindergarten.⁶

Kindergarteners from poor neighborhoods are less prepared for school

Wolf and colleagues broke neighborhood poverty levels into the following four categories:

- low-poverty neighborhood: 0 to 13.9 percent of children are poor
- moderate-low-poverty neighborhood: 14.0 to 19.9 percent of children are poor

- moderate-high-poverty neighborhood: 20.0 to 39.9 percent of children are poor
- high-poverty neighborhood: 40.0 percent or more of children are poor

They then separated children in those neighborhoods into two groups—poor (family income is below the poverty threshold) and nonpoor (family income is above the poverty threshold). They found that, without adjusting for family poverty or any other factors, children living in the highest-poverty neighborhoods start school, on average, close to a year behind their peers from the lowest-poverty neighborhoods in academic skills. This was true in both 1998 and in 2010.

In 2010, more young children entered kindergarten exposed to neighborhood poverty

Wolf and colleagues examined changes in the children's neighborhood with higher (or lower) concentrations of poverty from 1998 to 2010. Figure 1 shows the distribution of children both poor and nonpoor over this time period.

Below are some key takeaways from Figure 1 with respect to changes between 1998 and 2010 in the proportion of children living in poor households and poor neighborhoods:

- More children in the sample were poor (28.1 percent in 2010, compared to 19.8 percent in 1998);
- Fewer children (poor and nonpoor alike) lived in more affluent neighborhoods (56.1 percent in 2010 vs. 64.0 percent in 1998); and
- More kindergarteners (poor and nonpoor alike) lived in poor neighborhoods with moderate-high poverty or high poverty (27.9 percent in 2010 vs. 22.0 percent in 1998).

The researchers also found that nonpoor and white children saw the greatest increase in residing in poor neighborhoods, particularly in the suburbs, the Midwest, and the South (not shown in Figure 1). As more children in families with incomes above their federal poverty threshold were exposed to neighborhood poverty, white children experienced greater exposure to neighborhood poverty.⁷ Nonetheless, urban residents and African Americans remain much more likely to live in a poor neighborhood.

Academic skills gaps between poor and nonpoor kindergarteners increased over time

Although test scores for reading and math improved for children in all neighborhood types from 1998 to 2010, this improvement

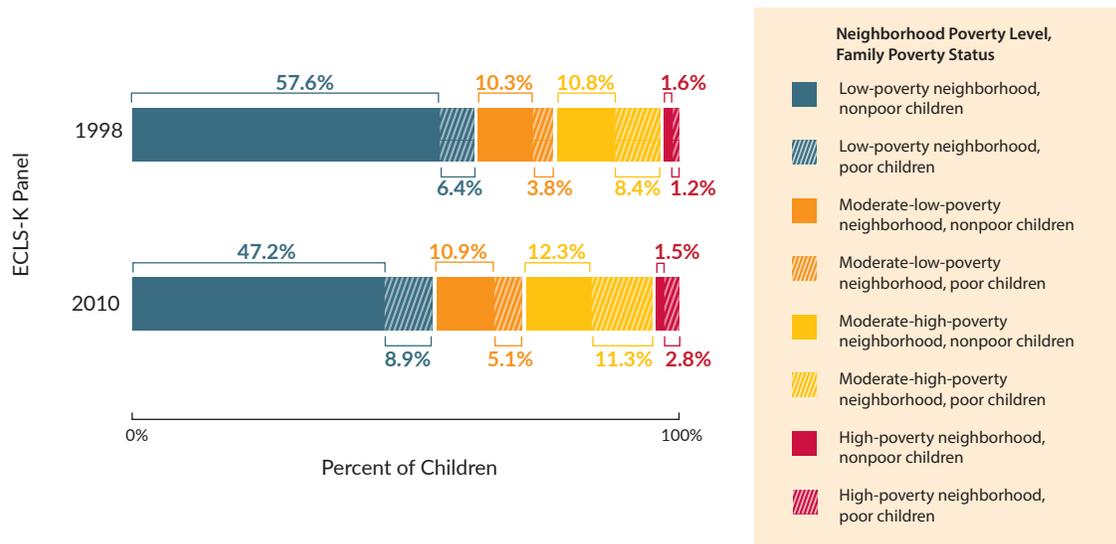


Figure 1. Distribution of children by neighborhood poverty and family poverty, 1998 and 2010: Nonpoor children were more likely to live in a poor neighborhood in 2010.

Source: Estimates are derived from 20 multiply imputed data sets and are weighted.

Note: Each bar represents the children in an ECLS-K panel (1998, $N = 19,200$; 2010, $N = 15,700$) by neighborhood poverty and family poverty level. This graph appears in *Children and Youth Services Review* 79 (2017), p. 374; used with permission.

was not uniform across family income levels. Rather, the improvement in test scores in higher-poverty neighborhoods was driven by the increase in nonpoor families living in these neighborhoods. For example, the gap between poor and nonpoor children for reading scores increased from 1998 to 2010 by the equivalent of a month of learning. The gap in classroom acting out had a similar pattern but at a smaller magnitude.⁸ As a result, the gap in performance between poor and nonpoor children in high-poverty neighborhoods increased between 1998 and 2010.

Wolf and colleagues ascribe the changes to a widening income gap within higher-poverty neighborhoods. During this time, more affluent families became more likely to live in these neighborhoods, even as they saw their average incomes increase. At the same time, poor families had stagnant incomes. The authors suggest that the larger income gaps within higher-poverty neighborhoods may have led to greater achievement gaps between poor and nonpoor children in those neighborhoods.

Levels of neighborhood poverty predict school readiness of children entering kindergarten

The authors also examined the influence of living in a neighborhood of concentrated poverty on school readiness for all children regardless of family income. They used a regression model in which academic and behavioral outcomes were modeled as a function of neighborhood poverty categories, controlling for demographic and family covariates. This approach reduces the likelihood that observed confounders (e.g., parent's education) explain the associations. Even after controlling for poverty status and other family background characteristics, they found that children living in more affluent neighborhoods had higher

reading and math scores than children living in neighborhoods with more concentrated poverty. The differences were roughly equivalent to 2 months of learning.⁹ The pattern for classroom behavior problems, self-control, and approaches to learning, as reported by teachers, was less consistent.

Conclusions and policy implications

Neighborhood poverty and family poverty both predict school readiness. Associations with neighborhood poverty are stronger for academic skills than for classroom behavior. While the study did not test whether family poverty and neighborhood poverty cause lower school readiness, these associations suggest that neighborhood context should be considered when designing interventions to improve children's school readiness. Targeting neighborhoods may be a useful tool for policymakers and administrators in both designing support and intervention programs and setting program-eligibility guidelines.

Future research

Suggested further research identified by study authors includes the following:

- Further exploration of recent changes in residential circumstances of young children, and their potential link to school readiness.
- Further attention to how advantages and disadvantages accrue for children not just in the family context but also the neighborhood context.
- Further attention to how school readiness and children's early school skills predict their later academic success and educational attainment. ■

For a list of the sources used for this brief and further reading, visit www.irlp.wisc.edu/publications/fastfocus.htm. Edited by Deborah Johnson.

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