August 2012

Neighborhood Poverty and Nonmarital Fertility: Spatial and Temporal Dimensions

**Background.** Recent studies have begun to explore contextual, specifically neighborhood, correlates of nonmarital childbearing. These studies have produced inconsistent results, with some finding that high levels of neighborhood poverty increase the risk of nonmarital childbearing, while others failed to find this impact. Some of these inconsistent findings may be explained by researchers’ failure to adequately measure spatial and temporal effects. In the majority of these studies, neighborhood poverty was measured as the poverty level in an individual’s immediate neighborhood of residence at a specific age. Because neighboring areas may help to shape access to resources and opportunities for socialization, a measure of poverty in an individual’s immediate neighborhood may not tap the complete context for her behavior. It is also possible that an individual’s childbearing behavior is influenced by her exposure to poverty throughout childhood, not just at a single point in time.

**Methods.** Using data from the Panel Study of Income Dynamics (PSID), a longitudinal survey of U.S. residents and their families, WCPC Affiliate Kyle Crowder and his colleague Scott J. South test the effects of spatial and temporal exposure to poverty on the risk of nonmarital childbearing. In calculating the impact of exposure to poverty in surrounding neighborhoods, the authors use a weighting system that gives more weight to conditions in neighborhoods that are closer in distance to the neighborhood of residence. In order to address the temporal aspect of this study, the researchers use three measures of poverty exposure. First, they test the effects of the local poverty rate (i.e., in the individual’s immediate neighborhood) at age 14. Second, they compute the local average poverty rate experienced between birth and the year preceding each age an individual is at risk of becoming an unmarried parent. Third, they measure the average level of poverty in surrounding neighborhoods between birth and the year preceding each age an individual is at risk of becoming an unmarried parent. Also included in the analysis are control variables for race, gender, family economic status, parental education, and mobility. The researchers use a series of event-history regression models to test the associations between the expanded spatial and temporal measures and a nonmarital birth in each time period. Estimates from models with both point-in-time and cumulative measures of exposure to neighborhood poverty are computed to examine the sensitivity of the findings to these different measures.

**Findings.** Initial findings that do not include measures of local or extralocal poverty show expected results. Women are significantly more likely than men to report having a nonmarital birth; blacks are significantly more likely than whites to report a nonmarital birth; the proportion of childhood years spent in a poor family or a female-headed household is associated with a significantly higher likelihood of a nonmarital birth; and individuals whose head of household completed college are significantly less likely to report a nonmarital birth. When a measure for extralocal poverty is included, the authors find that, controlling for poverty in the neighborhood of residence, higher levels of poverty in surrounding neighborhoods are associated with a lower risk of nonmarital parenthood. This is consistent with theories that emphasize relative deprivation, where individuals might compare the status of their own neighborhood to those around them: if the individuals in surrounding areas are also poor then an individual is less likely to feel disadvantaged, which might result in less risky behavior by the individual. More generally, including extralocal poverty and average exposure to poverty (rather than a point-in-time measure) in the analysis strengthens the positive relationship between poverty in the immediate neighborhood of residence and the likelihood of a nonmarital birth. These findings suggest that research that fails to take into consideration the spatial and temporal dimensions of neighborhood poverty may substantially underestimate the effects of neighborhood context on nonmarital fertility and other behaviors.
Poverty Research Flash 2012-03

Neighborhood Poverty and Nonmarital Fertility: Spatial and Temporal Dimensions

New research from Kyle Crowder and Scott J. South

Key Findings

• Being poor or living in a poor neighborhood has been associated with an increased risk of nonmarital childbearing. However, the effects of poverty may be cumulative over time and may depend on conditions outside of one’s immediate area, so measuring an individuals’ exposure to poverty over time and in one’s broader community may better capture these dynamics than simply measuring poverty at one point in time or in one’s neighborhood of residence.

• Using expanded measures of exposure to poverty over time strengthens the association between neighborhood poverty and nonmarital childbearing.

• Controlling for poverty in the immediate neighborhood of residence, expanded spatial measures of poverty have an inverse relationship with nonmarital fertility, with those surrounded by areas of low poverty rates at greater risk of becoming an unwed parent.