Family and Neighborhood Effects on Children's Well-Being

Anne R. Pebley (UCLA) and Narayan Sastry (RAND)

Observers have speculated that high levels of residential segregation between the rich and poor in the United States play an important role in the persistent gap in children's well-being, including health, school performance, behavior problems, substance abuse, early sex and parenthood, delinquency, and violence (Brooks-Gunn, Duncan, and Aber, 1997). Between 1970 and 2000, residential segregation by income increased substantially in the United States (Jargowsky, 1997; Mare and Cort, 2004). Residential segregation by income concentrates children from poor families into poor neighborhoods, in effect, compounding family socioeconomic disadvantage with neighborhood-level disadvantage. To what degree can neighborhood disadvantage account for inequality in children's well-being? And what are the neighborhood and family mechanisms through which neighborhood disadvantage operates?

Experimental and observational studies indicate that children in poor neighborhoods perform more poorly in school and have lower skills levels and more behavior and health problems, even when family characteristics are held constant (Pebley and Sastry, 2004). For example, the "Moving to Opportunity" study randomly assigned very low income residents of public housing to continued public housing or residence in low-poverty neighborhoods in five major U.S. cities. Children who moved to middle class neighborhoods generally performed significantly better than those remaining in poor neighborhoods. Poor neighborhoods may affect well-being in several ways, over and above the disadvantages associated with growing up in a poor family (Leventhal and Brooks-Gunn, 2000; Sampson, Morenoff, and Gannon-Rowley, 2002). These neighborhoods often have worse schools, child care, and children's services, which can be easily overwhelmed by the needs of poor families. Concentrated poverty neighborhoods also provide few well-educated and successful adult role models for children (Wilson, 1987), who may thus see little value in doing well in school. As a result, children who are avid readers and like school may be socially isolated from peers. The stress associated with living in a violent and dangerous neighborhood may lead to behavior problems and depression in children which makes learning more difficult. Stressful neighborhood environments may also cause parents to employ parenting behaviors which adversely affect children's behavior and learning (Leventhal and Brooks-Gunn, 2000).

Past research that examined the effects of neighborhood poverty has at least two major limitations (Duncan and Raudenbush, 1999). Most studies did not control adequately for family characteristics which affect children's well-being. For example, parents who have poor skills are less likely to read to their children and to develop children's problem solving skills at home. Failure to hold constant key family characteristics such as parents' skills may overstate the size of neighborhood effects. Previous research has also generally been based on study designs and statistical models which are poorly suited to separating neighborhood and family effects.

In this paper, we examine the effects of family and neighborhood socioeconomic status on inequality in children's reading and math skills and behavioral problems, including internalized and externalized behavior problems. We use new data from the Wave 1 of the Los Angeles Family and Neighborhood Survey (L.A.FANS), fielded in 2000-2001, that was designed specifically for studies of neighborhood effects and national data from the Child Development Supplement to the Panel Study of Income Dynamics (CDS-PSID). To describe inequality in children's well-being, we borrow summary measures, such as Lorenz and concentration curves, from research on income

inequality. These measures allow us to assess well-being inequality directly and comprehensively. Despite its usefulness, this innovative approach has not previously been applied to studying inequality in children's well-being. Using these tools, we compare the proportion of well-being inequality that is attributable to inequality in family income, family wealth, mother's schooling and reading skills, and to inequality in neighborhood income, both before and after controlling for other child, family, and neighborhood characteristics. Our analysis also includes more complete information on family characteristics that allow us to draw clearer conclusions about the *net* effects of family and neighborhood socioeconomic status on children's well-being.

L.A.FANS collected extensive information on children's family and home life, school, and neighborhood social characteristics, including questions designed by Sampson et al. (1997) to measure social control and social interaction in Chicago neighborhoods (see www.lasurvey.rand.org for more details). L.A.FANS sampled 65 neighborhoods in Los Angeles County from three strata: very poor, poor, and non-poor. Within each sampled neighborhood, information was collected on a random sample of approximately 50 children, allowing both within and between neighborhood comparisons. In all families with more than one child age 17 or younger in the household, information was collected on two randomly sampled children, permitting us to estimate models with family effects. The majority of children in the L.A.FANS sample are Latino. However, there are sizeable samples of children of all major ethnic groups and of immigrant, second generation, and non-immigrant children.

Our analysis will be presented in two parts. First, we will examine the relationship of neighborhood-level income, residential turnover, ethnic composition and immigrant composition on measures of children's well-being. We focus on two measures of children's well-being: (1) reading and problem solving skills (measured by Woodcock-Johnson Revised standardized tests), and (2) social and psychological development (measured by the Behavior Problems Index). Both measures are available for children ages 3 to 17. We will examine the effects of neighborhood characteristics before and after controlling for family demographic and socioeconomic characteristics.

In the second part of the analysis, we will examine the mechanisms through which neighborhood-level characteristics influence children's well-being. We will consider neighborhood social control, social cohesion, and social interactions among neighbors. In other words, rather than making assumptions about the mechanisms through which neighborhood composition (e.g., neighborhood average income levels) affect families and children, as most prior research does, we will examine the effects of composition on the neighborhood characteristics that theory suggests are important for families and children, such as the strength of local institutions, social organization and interaction, norms, and markets. We will also consider family processes, such as parenting behavior, maternal depression, family functioning, and social and family ties. This will allow us to examine the specific pathways through which neighborhood and family stressors affect children's well-being.

Our analysis will use both fixed effects and random effects models to examine the effects of neighborhood and family characteristics on children's outcomes. A serious problem in neighborhood effects research is that unmeasured characteristics may lead certain families both to choose good neighborhoods and to make larger investments of other types in their children (Tienda, 1991; Duncan and Raudenbush, 1999). We will use fixed effects models similar to measure the size of family and neighborhood effects and to test hypotheses about the significance of neighborhood

effects, once family effects are held constant. Then we will estimate random effects models to test hypotheses about the effects of specific family and neighborhood characteristics.

References

Brooks-Gunn, J., G.J. Duncan, and J.L. Aber (eds.) (1997), *Neighborhood Poverty*. New York: Russell Sage Foundation.

Duncan, G.J., and S.W. Raudenbush (1999), "Assessing the Effects of Context in Studies of Child and Youth Development," *Educational Psychologist* 34(1): 29-41.

Leventhal, T., and J. Brooks-Gunn (2000), "The Neighborhoods They Live In: The Effects of Neighborhood Residence on Child and Adolescent Outcomes," *Psychological Bulletin* 126(2): 309-337.

Jargwosky, P.A. (1997), *Poverty and Place: Ghettos, Barrios, and the American City*. New York: Russell Sage Foundation.

Mare, Robert D., and David Cort (2003), "Residential Segregation by Income 1990 to 2000." Manuscript.

Pebley, Anne R., and Narayan Sastry (2004), "Neighborhoods, Poverty and Children's Well-being: A Review," in Kathryn Neckerman (ed), *Social Inequality.* New York: Russell Sage Foundation.

Sampson, R.J., J.D. Morenoff, and T. Gannon-Rowley (2002), "Assessing 'Neighborhood Effects:' Social Processes and New Directions in Research," *Annual Review of Sociology* 28: 443-478.

Sampson, R.J., S.W. Raudenbush, and F. Earls (1997), "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy," *Science* 277 (August 15, 1997): 918-924.

Tienda, M. (1991), "Poor People, Poor Places: Deciphering Neighborhood Effects on Poverty Outcomes," in Joan Huber (ed.) *Macro-micro Linkages in Sociology*, Newbury Park, CA: Sage.

Wilson, W.J. (1987), *The Truly Disadvantaged*. Chicago: University of Chicago Press.