



## Spatial variation in poverty-generating processes: Child poverty in the United States

Katherine J. Curtis\*, Paul R. Voss, David D. Long

*Department of Community and Environmental Sociology, University of Wisconsin-Madison, Madison, WI 53706, United States*  
*The Odum Institute for Research in Social Science, Department of Sociology and Carolina Population Center, University of North Carolina-Chapel Hill, Chapel Hill, NC 27599, United States*  
*Applied Population Laboratory, University of Wisconsin-Madison, Madison, WI 53706, United States*

### ARTICLE INFO

#### Article history:

Received 6 August 2010  
 Revised 23 May 2011  
 Accepted 23 July 2011  
 Available online 12 August 2011

#### Keywords:

Child poverty  
 Spatial differentiation  
 Spatial heterogeneity  
 Spatial regime  
 Spatial regression  
 United States

### ABSTRACT

This study builds on research demonstrating that sub-regions within the United States have different processes that affect poverty and that child poverty is spatially differentiated. We focus on the social attributes of the local area to assess what the geographic place represents in terms of social characteristics, namely racial/ethnic composition and economic structure, and to resolve apparent inconsistencies in poverty research. Using spatial regime and spatial error regression techniques to analyze county census data, we examine spatial differentiation in the relationships that generate child poverty. Our approach addresses the conceptual and technical aspects of spatial inequality. Results show that local-area processes are at play with implications for more nuanced theoretical models and anti-poverty policies that consider systematic differences in factors contributing to child poverty according to the racial/ethnic and economic contexts.

© 2011 Elsevier Inc. All rights reserved.

### 1. Introduction

The United States has one of the highest average incomes in the industrialized world and, strikingly, it has one of the highest rates of poverty (Iceland, 2006; Smeeding et al., 2001). Although poverty declined in recent decades, falling from 13.7% in 1969 to 11.3% in 1999 (Dalaker, 2001; US Census Bureau, 1993), recent estimates show that poverty is on the rise with nearly 43 million Americans (14.3%) living in poverty in 2009 (American Community Survey, 2010). Of particular concern, economic vulnerability is especially acute for the youngest population. Poverty among America's youth has been increasing since the 1990s while, in contrast, it has been steadily declining among the older population. Despite the nation's wealth, 16% of its children were living in poverty in 1999 and the proportion increased to 20% of children (23.2% of children less than 5 years-old) in 2009. Also of concern is the spatial inequality of poverty. Some regions are particularly disadvantaged, most notably the South with a regional poverty rate higher than 16% in 2009.

Scholars have recognized the spatial patterning of poverty in the United States and the role of place in aggravating and reproducing poverty (Adams and Duncan, 1992; Glasmeier, 2006; Lobao, 2004; Lobao and Saenz, 2002; O'Connor, 2001; Weinberg, 1987). Appalachia, the Mississippi Delta, the Texas borderlands, and tribal reservations and communities have been given varying degrees of analytical attention because of the high and persistent concentration of poverty within these areas (Billings and Blee, 2000; Dill and Williams, 1992; Duncan, 1992a,b; Slack et al., 2009; Saenz and Ballejos, 1993; Snipp and Summers, 1992; Voss et al., 2006). To understand the spatial differentiation in poverty, researchers have analyzed

\* Corresponding author. Address: 1450 Linden Drive, 350 Agricultural Hall, University of Wisconsin-Madison, Madison, WI 53706, United States. Fax: +1 608 262 6922.

E-mail addresses: [kcurtis@ssc.wisc.edu](mailto:kcurtis@ssc.wisc.edu) (K.J. Curtis), [Paul.Voss@unc.edu](mailto:Paul.Voss@unc.edu) (P.R. Voss), [dlong@ssc.wisc.edu](mailto:dlong@ssc.wisc.edu) (D.D. Long).

poverty within spatial units (Friedman and Lichter, 1998; Lobao, 1990; O'Hare and Johnson, 2004; Slack et al., 2009), explained the historical underpinnings of poverty in select geographic sub-regions (Billings and Blee, 2000; Dill and Williams, 1992; Duncan, 1992a,b; Snipp and Summers, 1992), and made efforts to identify the role of place in encouraging poverty (Cotter, 2002; Lichter and McLaughlin, 1995; Lichter et al., 1993). This large body of research has demonstrated that the burden of poverty is unevenly distributed across the United States and it is closely linked to the uneven distribution of social and economic factors.

The central objective of this paper is to assess spatial differentiation in the *relationships* between child poverty and its dominant drivers. Specifically, we examine the extent to which racial/ethnic composition and the economic structure of a local area modify the relationship between child poverty and its other predictors. What are the factors driving child poverty? Why is child poverty high in some areas, but not others? These questions persist, at least in part, because of inconsistencies in empirical results due to incomplete modeling strategies. An analysis of child poverty that explicitly incorporates variation in social contexts, we assert, offers a more informed understanding of the factors that facilitate the social injustice of child poverty in an otherwise wealthy nation.

We take on the conceptual and the technical “spatial” dimensions of child poverty to advance the understanding of spatial inequality. Space is implicit in any county-level analysis of poverty or, more generally, in the analysis of any spatially-conceptualized and -defined unit (e.g., community, village, neighborhood, census tract, state). Social science research on aggregate-level poverty has taken a more spatially-informed perspective in recent years (Slack et al., 2009; Voss et al., 2006). These studies have corrected for model estimation problems associated with analyzing spatially-referenced data. The current analysis extends the conceptual treatment of space by examining the potential conditioning influence of geographic context. Our results demonstrate that the vast amount of work on county-level poverty and other socioeconomic conditions that does not account for spatial processes is empirically incorrect and can lead to erroneous theoretical conclusions.

We aim to advance the understanding of the spatial differentiation of child poverty and, ultimately, how to ameliorate the deep social problems that accompany poverty at the individual, family and community level. To do so, we ask whether the relationships between child poverty and previously established correlates of poverty are similar across the United States, or whether they vary among particular sub-regions, including socially-defined rather than strictly geographically-defined places. We focus on the conditioning influences of racial/ethnic composition and economic structure in altering variation in child poverty's association with known covariates. Broadly, variation in the relationships would support the argument that much can be gained by moving away from the perspective that theoretical models of inequality and poverty, in particular, can be analyzed at a given level of geography and generalized across all contexts (Lobao, 1993; Lobao et al., 2007). Advances in theoretical models that prioritize either race/ethnicity or economic structure can result from the analysis of the conditions under which different relationships emerge; the meaning of racial/ethnic concentration and economic structure might vary according to the value of the other. To this end, our research is a useful extension of standard and, indeed, spatial regression approaches. As we discuss below, inconsistent results across studies can be resolved through this analytical approach. Moreover, our approach helps explain inconsistent findings. For example, the nature of the local economy shifts the association between race/ethnicity and child poverty; the association is strongly associated in some areas and unrelated in others.

In addition to advancing theoretical models, such information can inform potential policy strategies for ameliorating poverty in different types of places, for example, based on racial/ethnic concentration or economic dependence. A policy may have varying effectiveness based on the relative importance of the targeted correlate of poverty in different places given the nature of the local area economic structure or racial/ethnic dynamics.

## 2. Spatial differentiation in child poverty

Research analyzing geographic units that does not account for spatial processes is empirically incorrect. The extent to which the empirical inaccuracies lead to flawed theoretical interpretations depends on the strength and type of spatial process underlying the data. In some instances, key explanatory variables adequately capture the underlying spatial process. In other instances, spatially lagged dependent variables or error terms are necessary to produce consistent and efficient results. Still, in other instances, the spatial process operates at a higher order and produces unstable estimates that cannot be generalized across the study region. It is also possible that multiple forms of spatial effects are present, as in the current study. Given the myriad types of spatial effects at play in social science data, researchers must seriously engage in spatial thinking or risk conducting a naïve and erroneous analysis.

Friedman and Lichter (1998) were among the first to directly address the spatial differentiation in child poverty at the national level. Their approach was analytically improved in a subsequent reanalysis (Voss et al., 2006).<sup>1</sup> The role of local labor market conditions in shaping the spatially uneven distribution of child poverty across US counties is a central focus of these studies. In addition to economic structure, however, the analyses examined the impacts of racial/ethnic composition and regional status. Statistical accounting for region, employment structure or racial/ethnic composition provides a useful strategy for

<sup>1</sup> Examples of spatially-informed analyses of poverty are also found in the health and economic literatures. See Levernier et al. (2000) for a regional comparison and Holt (2007) and Rupasingha and Goetz (2007) for national-level analyses.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات