

National Poverty Center Working Paper Series

#06-18

June, 2006

Racial and Ethnic Inequality in the Duration of Children's Exposure to Neighborhood Poverty and Affluence

Jeffrey M. Timberlake, University of Cincinnati

This paper is available online at the National Poverty Center Working Paper Series index at: http://www.npc.umich.edu/publications/working_papers/

Any opinions, findings, conclusions, or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Poverty Center or any sponsoring agency.

Racial and Ethnic Inequality in the Duration of Children's Exposure to Neighborhood Poverty and Affluence*

Jeffrey M. Timberlake

University of Cincinnati

^{*} Direct correspondence to Jeff Timberlake, University of Cincinnati Department of Sociology, PO Box 210378, Cincinnati, OH 45221-0378 (jeffrey.timberlake@uc.edu). A previous version of this paper was presented at the 2005 annual meeting of the Population Association of America in Philadelphia, PA. This research was supported by a pre-doctoral fellowship from the Population Research Center, NORC and the University of Chicago, NICHD Grant 2 T32-HD073-02 and grants from the National Poverty Center at the University of Michigan and the Charles Phelps Taft Research Center at the University of Cincinnati. Any opinions expressed are those of the author. Thanks to Mary Corcoran, Patrick Heuveline, Maria Krysan, Ross M. Stolzenberg, Kristi Williams, and the participants in the Urban Social Processes and Demography workshops at the University of Chicago for helpful comments, Kyle Crowder for the provision of 1990 to 2000 census tract match files, and Joseph Michael for research assistance.

Racial and Ethnic Inequality in the Duration of Children's Exposure to Neighborhood Poverty and Affluence

Abstract

Despite much scholarly attention to "neighborhood effects" on children, no study to date has measured the cumulative exposure of children to neighborhood poverty and affluence. In this paper I construct multi-state period life tables to estimate racial and ethnic inequality in the amount of time children can expect to live in poor and nonpoor neighborhoods throughout childhood. At rates prevailing in the mid-1990s, Black and Latino children can expect to spend almost 50% of childhood in neighborhoods with poverty rates in excess of 20%. The corresponding figure for White children is about 10%. I find that Black/White differences in childhood exposure to neighborhood poverty are due largely to differences in the probability of being born into a poor neighborhood, as opposed to differences in rates of upward and downward neighborhood mobility during childhood. Finally, cross-period analyses indicate that White children's share of childhood in the most affluent neighborhood type increased rapidly beginning in the late 1980s and that although Black children's exposure to nonpoor neighborhoods has increased since the mid-1970s, a substantial fraction of childhood is still spent in the poorest neighborhood type.

Sociological inquiry into the effects of neighborhood characteristics on the behavior and life chances of individuals spans nearly the entire history of the discipline (e.g., Riis 1890; Addams 1910; Park and Burgess 1925; Drake and Cayton 1945; Clark 1965). Most recently, William Julius Wilson is credited with rekindling sociologists' concern with "neighborhood effects" on children (Jencks and Mayer 1990:111; Small and Newman 2001; Sampson, Morenoff, and Gannon-Rowley 2002:446). In *The Truly Disadvantaged*, Wilson (1987) argues that a combination of urban industrial decline and the migration of middle class Blacks out of inner city neighborhoods in the 1970s resulted in sharp increases in the concentration of poverty in urban Black neighborhoods. According to Wilson, these trends have had catastrophic effects on the capacity of inner city parents to socialize children successfully. In very poor neighborhoods, contends Wilson (1987:57),

the chances are overwhelming that children will seldom interact on a sustained basis with people who are employed or with families that have a steady breadwinner. The net effect is that joblessness, as a way of life, takes on a different social meaning; the relationship between schooling and postschool employment takes on a different meaning. The development of cognitive, linguistic, and other educational and job-related skills necessary for the world of work in the mainstream economy is thereby adversely affected... A vicious cycle is perpetuated through the family, through the community, and through the schools.

In short, Wilson hypothesizes that children who grow up in poor neighborhoods experience more negative outcomes in school and in the labor market than otherwise equivalent children who grow up in nonpoor neighborhoods. Wilson's work prompted a flurry (or perhaps more accurately, a blizzard) of inquiry into the effects of neighborhood context on child well-being. Among the many outcomes that have been studied recently are school achievement

(Brooks-Gunn et al. 1993; Connell and Halpern-Felsher 1997; Harding 2003), teenage sexual behavior (South and Baumer 2000; Harding 2003; Browning, Leventhal, and Brooks-Gunn 2004), and delinquency (Bellair and Roscigno 2000; Duncan, Boisjoly, and Harris 2001; Rankin and Quane 2002). Other scholars have focused attention on the difficulties faced by African American parents in raising children in poorer neighborhoods than those occupied by otherwise comparable White families (Furstenberg et al. 1999; Pattillo-McCoy 1999). Although the findings of this research have been mixed (see Jencks and Mayer 1990; Elliott et al. 1996; Furstenberg et al. 1999), the bulk of the evidence indicates that neighborhoods exert small independent effects on children's social and psychological development.

As a result of this valuable research we now know much about the presence and size of the *effects* of childhood exposure to neighborhood poverty. However, and perhaps somewhat surprisingly, we know little about the *duration* of children's exposure to poor and nonpoor neighborhoods. Focusing on childhood is important because there are sound theoretical reasons to suspect that neighborhoods have powerful influences on children's life chances. Early childhood and adolescence are critical periods in which life trajectories are shaped via the influences of peer relationships, schooling, and initial labor market experiences. Children are overwhelmingly exposed to these influences in their local neighborhood. By contrast, theory is less well developed on how residence in a poor or affluent neighborhood might affect adult outcomes, in part because adults tend to be more geographically footloose in the course of daily activities (Rankin and Quane 2002).

Focusing on the duration of children's exposure to neighborhood poverty and affluence is important because if neighborhood characteristics indeed have effects on children, it can logically only be true that these characteristics exert their effects via the duration of exposure to risk. That is, a five-minute spell in a poor neighborhood should exert no measurable effect on a

child, except perhaps to increase slightly her risk of crime victimization (and even then it is the five minutes of exposure that increases the risk, not the exposure in a binary sense). Furthermore, a ten-year dose of exposure to a neighborhood's conditions should have greater effects on child outcomes than a one-year dose. In Quillian's (2003:222) words, "[m]ost of the mechanisms through which neighborhood poverty is believed to be linked to child and adolescent development... are likely to have effects that require at least moderately long exposure."

In this paper I use longitudinal data and multi-state period life table techniques to investigate racial and ethnic inequality in the duration of children's exposure to affluent and low, moderate, high, and extreme poverty neighborhoods. I seek to accomplish three empirical objectives in this paper: first, I estimate "childhood expectancy" across neighborhood types for White and Black children, with Latinos as a comparative case. The term "childhood expectancy" denotes the percentage of childhood (birth to exact age 18) that the average child is expected to spend in a given neighborhood type (Heuveline, Timberlake, and Furstenberg 2003). This analysis provides a baseline measure of racial and ethnic inequality in childhood exposure to neighborhood poverty and affluence. I then compare White and Black childhood expectancy by neighborhood type at birth (i.e., whether children were born in poor or nonpoor neighborhoods). The findings of this analysis indicate the extent to which aggregate racial inequality is caused by differential exposure at birth to neighborhood poverty versus racial differences in rates of upward and downward neighborhood mobility throughout childhood.

Finally, I examine the extent to which White/Black inequality in children's exposure to neighborhood poverty and affluence has changed over time. In so doing I implicitly measure the impact of several recent demographic trends that in concert may have had large effects on trends in racial inequality. First, American cities on average have experienced steady declines in Black/White segregation since 1970 (Timberlake and Iceland 2005). Simultaneously, however,

within-group income segregation has increased, especially for African Americans (Jargowsky 1996). Finally, poverty became increasingly concentrated in Black neighborhoods during the 1970s and especially the 1980s (Wilson 1987; Jargowsky 1997); however, recent data suggest this trend reversed somewhat in the 1990s (Jargowsky 2003). Thus, one of the empirical questions I seek to answer in this paper is how these trends have interacted to produce changes in patterns of childhood exposure to neighborhood poverty and affluence from the mid-1970s to the mid-1990s.

Racial and Ethnic Inequality in Neighborhood Context

An extensive social science literature, reporting findings from analyses of numerous data sources, has demonstrated two facts about racial differences in neighborhood context. First, African American families tend to live in neighborhoods with higher levels of social and economic distress than those occupied by statistically comparable White families (Alba and Logan 1991; Logan and Alba 1993; Sampson, Morenoff, and Earls 1999; White and Sassler 2000; Rosenbaum and Friedman 2001). Second, in a given period Blacks are less likely than Whites to move at all (South and Deane 1993; Crowder 2001; South and Crowder 1998), less likely to transition from poor to nonpoor neighborhoods, and more likely to transition from nonpoor to poor neighborhoods (Gramlich, Laren, and Sealand 1992; Massey, Gross, and Shibuya 1994; South and Crowder 1997, 1998).

These two streams of research suggest that Black children likely spend much more time in poor neighborhoods than White children; however, to date few studies investigate the question directly. St. John and Miller (1995) use 1980 and 1990 census data from Chicago and five southwestern cities to compare the proportions of Black, White, and Latino children residing in neighborhoods with poverty rates of greater than 40%. They find that in 1990 Black children were 7 to 48 times more likely to live in such neighborhoods in the Southwest, and over 91 times

more likely in Chicago. Rosenbaum and Friedman (2001) find that among households with children in New York City, native-born Black households are located in neighborhoods with significantly higher levels of juvenile delinquency, teenage fertility, and AFDC receipt, and lower levels of math achievement in school. However, neither of these studies investigates total childhood durations of exposure to poor neighborhoods.

More closely related to the present study are analyses performed by South and Crowder (1998) and Quillian (2003). South and Crowder estimate transition probabilities for Black and White single mother-headed households with children. They find that Black single mothers are less likely than White single mothers to move from poor to nonpoor neighborhoods and more likely to move from nonpoor to poor neighborhoods, controlling for household socioeconomic status and life course characteristics. Quillian estimates the length of spells experienced by Black and White heads of household in poor (between 20% and 40% poor), and very poor (greater than 40% poor) neighborhoods. He finds that about 60% of the Black population will reside in a poor neighborhood over a 10-year period, compared to just 10% of Whites. He also finds that of the Whites who do experience exposure to poor neighborhoods, about 40% will remain in those neighborhoods 10 years later, compared to 70% of equivalent Blacks.

The present analysis complements and extends Quillian's (2003) research in at least two ways. First, I compare the experiences of Black, White, and Latino *children*, on whom much of the "neighborhood effects" literature has focused. Second, the "spells" approach Quillian employs is useful for estimating the prevalence of transitory and chronic membership in particular neighborhood types. However, even children who spend only a short period of time in a poor neighborhood during any given spell might experience multiple spells of varying lengths. Thus, knowing that a large proportion of spells in poor neighborhoods are relatively short yields only indirect information about time spent in poor neighborhoods throughout childhood. The

advantage of the life table approach I employ is that it records the cumulative amount of time children are expected to spend in a particular type of neighborhood. Finally, by comparing childhood expectancies across neighborhood types at birth, I am able to estimate the effects of two sources of racial differences in childhood exposure to neighborhood poverty: racial differences in the probability of being born into a poor neighborhood, and racial differences in rates of transition between poor and nonpoor neighborhoods.

Data

Panel Study of Income Dynamics

The primary source of data for this research is the Panel Study of Income Dynamics (PSID), waves 1976 through 1997 (PSID 2005). The PSID was first administered in 1968 to 4,800 families (comprising about 18,000 individuals), and then annually or semi-annually thereafter. At the time it was first fielded the PSID was representative of noninstitutionalized U.S. residents and their families (PSID 1987). Children leaving the households of the original sample were followed and interviewed along with any new family members. The representativeness of the sample has been maintained over time, despite some attrition (Fitzgerald, Gottschalk, and Moffitt 1998).

In 1990 the PSID drew a large supplementary sample of Latino families; thus, I was able to perform single-period comparisons between White, Black, and Latino children. Because the original PSID panel contains few Latino families, however, I had to restrict single-period analyses by neighborhood type at birth and cross-period analyses to Black and White children. In addition, I restricted analyses to children living in metropolitan areas (MAs). I use individual-level weighted data to perform all analyses (PSID 1998:22-38).

In the early 1990s, the University of Michigan's Institute for Social Research (ISR) released the 1970 and 1980 Geocode Match Files (GMFs), which enabled researchers to append

tract-level information from the 1970 and 1980 U.S. census to PSID data. Unfortunately, these files did not contain addresses for 1969, 1975, 1977, 1978, or any year after 1985. Thus, much research on racial differences in residential mobility has been limited to analyzing data from the years 1979 to 1985 (Gramlich 1992; Crowder 1997, 2001; Quillian 1999; South and Crowder 1997, 1998). This restricted time frame has hamstrung researchers' ability to exploit fully the potential of geocoded PSID data for understanding racial inequality in neighborhood context over time. The updated 1990 GMFs contain addresses for 1986 to 1997. In addition, while preparing the 1990 file, ISR staff found address files for 1975, 1977, and 1978 in a bank safe deposit box (Kim and Padot 1999:5). Thus, in this research I am able to analyze an uninterrupted series of data from 1976 to 1997.

U.S. Census Data

I used the 1990 GMF to link PSID data with data from the 1970 through 2000 U.S.

Decennial Censuses, concatenated in the Neighborhood Change Database (NCDB). The NCDB was developed by the Urban Institute in collaboration with GeoLytics, Inc. (GeoLytics, Inc. 2003). A unique feature of the NCDB is that all census tracts from 1970 through 1990 are matched to consistent Census 2000 boundaries. The benefit of this geographical matching is that changes in neighborhood poverty rates from year to year would not be due to changing boundaries of those neighborhoods. The addition of census data to the PSID results in a singular source of data on children and the neighborhoods in which they live, measured by proxy with census tracts. While tracts may not perfectly replicate the subjective definitions residents have of their "neighborhoods" (Lee and Campbell 1997), many researchers have used tracts as the best available proxy (e.g., White 1987; Jargowsky 1997; South and Crowder 1997; Quillian 1999).

Because PSID respondents are surveyed every year while census tract information is only measured every decade, I had to impute 1976 to 1997 intercensal tract values via exponential

interpolation, using 1970 through 2000 census data. For this procedure I assumed a constant population growth rate r from 1970 to 2000 (Preston, Heuveline, and Guillot 2001). I estimated tract characteristic X in inter- or extracensal year t with the following formula:

$$X_{t} = X_{t-n}e^{rn}, (1)$$

where

$$r = \frac{1}{30} \left(\frac{\left[\sum_{t=1970}^{2000} \ln \left(\frac{X_{t+10}}{X_t} \right) P Y_{t,t+10} \right]}{P Y_{1970,2000}} \right), \tag{2}$$

where X is a MA-level characteristic (total tract population and total persons in poverty) measured in census years t and t + 10, $PY_{t,t+10}$ are person-years lived between census years t and t + 10, and $PY_{1970,2000}$ are person-years lived between 1970 and 2000 (Preston, Heuveline, and Guillot 2001:12; Heuveline 2004). Person-years are estimated with the following formula:

$$PY_{t,t+T} = \frac{\left(N_{t+T} - N_{t}\right)T}{\ln\left(\frac{N_{t+T}}{N_{t}}\right)}.$$
(3)

Thus, equation (2) yields annualized rates of change in MA characteristic *X*, weighted by decade-specific rates of change to account for variations in the timing of growth (i.e., early or late) over the 30-year period. I then matched tracts on the census data files to tracts on the GMF, resulting in a data file that contains PSID variables on children and census data on tracts for the 1976 to 1997 period.

Methods

Multi-state Period Life Tables

Period life tables are a general class of demographic models that describe the transition over time of a cohort of units from one life state to another. In its most classic form, a mortality life table

describes the dying out of a birth cohort. However, life tables can be extended to other situations to describe "exits" or "decrements" from one life state to another, such as from single to married status. In this example, a multiple decrement life table is used to account for the competing risks of marriage and death for members of a birth cohort (Preston, Heuveline, and Guillot 2001). The multi-state (or increment-decrement) life table is an extension of these methods in that (1) individuals don't necessarily transition from one state to another; and (2) some destination states are "non-absorbing;" that is, flows to (increments) and from (decrements) various states are possible (Palloni 2001:256). In contrast to cohort life tables, which simply record what happens to a birth cohort as it ages, period life tables estimate what *would* happen to a birth cohort if it were to experience, in this case, the age-specific neighborhood transition probabilities that exist during the period in which the birth cohort is defined. Because the future experiences of such cohorts are not observed, but rather estimated with period conditions, demographers refer to them as "synthetic" birth cohorts (Preston, Heuveline, and Guillot 2001:42).

State space. The multi-state approach begins with defining the state space, or the mutually exclusive and exhaustive set of values of the categorical dependent variable. I measured the poverty rate of children's neighborhoods, which has been of considerable interest to scholars in its own right, and is highly correlated with other measures of neighborhood socioeconomic status (Harris 1999). Jargowsky and Bane (1991) developed a categorical measure of neighborhood poverty by defining neighborhoods with less than 20% poverty as "nonpoor," those with 20 to 40% poverty "poor," and those with greater than 40% poverty "extremely poor." The authors confirmed the validity of these categories by visiting neighborhoods in a number of cities, finding that neighborhoods in poorer categories appeared more distressed on a number of subjective indicators. Local census officials confirmed these subjective rankings (Jargowsky and Bane 1991).

I extend the work of Jargowsky and Bane by defining three "nonpoor" neighborhood types: "affluent" neighborhoods have 3% or less of their residents in poverty,² "low poverty" neighborhoods are those with poverty rates of between 3 and 10%, and "moderate poverty" neighborhoods are defined as having 10 to 20% of their residents in poverty. I also defined two "poor" neighborhood types: "high poverty" neighborhoods have between 20 and 40% poverty, and "extreme poverty" neighborhoods feature poverty rates in excess of 40%. Although these five states obviously don't capture all of the variation in neighborhood conditions, many researchers have used similar categories as proxies for neighborhood "types" (e.g., Jargowsky 1997; South and Crowder 1997, Quillian 1999). Furthermore, the collapsed "poor" and "nonpoor" categories match those of previous research (e.g., South and Crowder 1997; Quillian 2003). I also defined one state for children who are censored, either because they entered the sample after birth (left-censored), or they were temporarily or permanently "lost to follow-up," either due to death or attrition.

Life table estimation. There are two principal methods to construct a multi-state life table—one based on rates of transition (Palloni 2001), and another based on probabilities of transition (Heuveline, Timberlake, and Furstenberg 2003) between states (in this case, neighborhood types). With repeated cross-sectional data, transitions are not directly observed, so researchers must use the former, more cumbersome method. With panel data, however, survivorship ratios can be estimated directly as:

$$\frac{{}_{n}^{i}L_{x}^{j}[t-n,t]}{{}_{n}L_{x-n}^{i}[t-n,t]} = \frac{{}_{n}^{i}N_{x}^{j}(t)}{{}_{n}N_{x-n}^{i}(t-n)},$$
(4)

where

 $_{n}L_{x-n}^{i}[t-n,t]$ is the number of child-years lived in neighborhood type i, between ages x - n and x in the period [t - n,t];

 $_{n}^{i}L_{x}^{j}[t-n,t]$ is the number of child-years lived in neighborhood type j, between ages x - n and x in the period [t-n,t] by children who were in neighborhood type i at time t - n; and

 $_{n}N_{x-n}^{i}(t-n)$ is the number of children aged x - n to x and in neighborhood type i at time t - n; is the number of children aged x to x + n and in neighborhood type j at time t who were in neighborhood type i at time t - n;

Using weighted geocoded PSID data, I reconstructed the neighborhoods in which children lived yearly (i.e., n = 1) from birth to exact age 18 and calculated the quantities ${}_{1}N_{x-1}^{i}(t-1)$ and ${}_{1}^{i}N_{x}^{j}(t)$ in any year t. I then obtained the distribution of child years lived across states between ages x and x + 1 from the same distribution between ages x - 1 and x using equation (4) above and the following accounting identity:

$${}_{1}L_{x}^{j}[t-1,t] = \sum_{i=1}^{I} {}_{1}L_{x}^{j}[t-1,t].$$
 (5)

With the resulting period life tables, I estimated childhood expectancies in the five neighborhood states by racial and ethnic group, neighborhood type at birth, and synthetic birth cohort.

Methodological Limitations

Two methodological limitations to the paper are worth noting. First, the individual-level independent variables in this analysis are the racial or ethnic identity of the child and neighborhood type at birth. For describing gross racial and ethnic inequality in childhood exposure to neighborhood poverty, the multi-state life table analysis I perform is adequate. However, this approach makes the simplifying assumption that all individuals within a given life table share the same probabilities of transitioning from one neighborhood type to another. As Quillian (1997:76) notes, "this assumption is convenient but surely incorrect." Indeed, models of racial differences in neighborhood context contend that characteristics of households affect the chances that families will move at all, or experience upward or downward neighborhood

mobility (Alba and Logan 1991). Future research should strive to estimate the effects of household- and metropolitan area-level covariates on racial and ethnic differences in childhood exposure to neighborhood poverty and affluence. Second, I do not distinguish between transitions between neighborhood types that are caused by residential moves, and those that occur when a residentially nonmobile child's neighborhood crosses some poverty threshold from year t-1 to t. In this paper I am interested in estimating racial inequality in childhood expectancy in different neighborhood types, not, for example, in the probability of transitioning between neighborhood types via one or the other mechanism.

Findings

Cross-sectional Findings

Census distributions. Table 1 presents distributions of neighborhood types and distributions of White, Black, and Latino children under age 15 across those types in 1980, 1990, and 2000. The most notable finding from this table is the sharp reduction from 1980 to 1990 in the percentage of low poverty tracts (those with 3 to 10% poverty)—from 48.5% to 37.7%, a decline of 22.1%. That decline was absorbed by increases of 16.5%, 35.4%, and 56.1% in the percentage of moderate, high, and extreme poverty tracts, respectively. From 1990 to 2000, the percentages of affluent tracts declined slightly, low poverty tracts rebounded somewhat, extreme poverty tracts fell back to close to their 1980 levels, and moderate and high poverty tracts held steady.

(Table 1 about here)

Table 1 also shows dramatic levels of racial and ethnic inequality in the distribution of children across neighborhood types. By 2000, nearly 20% of White children lived in affluent neighborhoods, compared to just under 4% for both Blacks and Latinos. At the other end of the distribution, only about 10% of White children lived in the two poorest neighborhood types, compared to 47% of Black and 42% of Latino children. In 1990, fully 19% of Black children

lived in neighborhoods poverty rates of 40% or greater, compared to less than 2% of White children. Ten years later, however, the percentage of Black children living in the poorest neighborhood type had declined by 42%, to a 2000 level of 11%. These findings reflect prior research showing that the concentration of Black poverty increased dramatically during the 1970s and 1980s (Massey and Eggers 1990; Jargowsky 1994), and then declined from 1990 to 2000 (Jargowsky 2003).

What do the cross-sectional findings in Table 1 tell us about total childhood exposure to neighborhood poverty and affluence? In general, cross-sectional data cannot shed light on what happens to individuals and families as they progress through time. As Gramlich, Laren, and Sealand (1992:274) note, "it remains unclear whether the poor people living in poor urban areas are... the same poor people who lived in the same areas at some earlier date." Under certain demographic conditions, however, cross-sectional data yield accurate estimates of life expectancies in given states. Demographers refer to populations as being "stable" when the following conditions prevail over a long period of time: (1) constant or constantly changing age-specific fertility rates; (2) constant age-specific mortality rates; and (3) constant age-specific net migration rates (Preston, Heuveline, and Guillot 2001: 141). In the multi-state framework, if rates of transition to and from the different states remain constant for a sufficient period of time, then life expectancy in a given state would equal the cross-sectional proportion in that state (Preston and Campbell 1993).

Under the assumptions of the stable population model, therefore, we should find that a synthetic cohort of Black or White children born in the mid-1990s can expect to spend shares of childhood in different neighborhood types roughly corresponding to the cross-sectional distributions of children in those types (see Table 1, bottom right-most panel). For example, Black children should expect to spend between 11 and 19% of childhood in extremely poor

neighborhoods, and White childhood expectancy in affluent neighborhoods should equal about 19 or 20% of childhood. To see whether a longitudinal approach diverges from this cross-sectional picture, I present findings from life table analysis in the next section.

Single-period life table estimates. Table 2 and Figures 1 and 2 present childhood expectancies in the five neighborhood types, for a synthetic birth cohort estimated for the 1994 to 1997 period. The top row of Table 2 and Figure 1 pertain to all neighborhood types at birth. Subsequent rows of Table 2 and Figure 2 break the findings down by neighborhood type at birth. Because the original PSID panel contained few Latino families, I cannot observe the birth status for Latino children born from 1976 to 1989, which is necessary for the latter analysis.

(Table 2 about here)

At mid-1990s rates, Black and Latino children in metropolitan areas can expect to spend nearly 50% of their childhoods in neighborhoods with poverty rates in excess of 20% (the sum of the top two sections in the middle bar in Figure 1). The corresponding figure for White children is about 10%. At the affluent end of the distribution, White children can expect to live nearly 5 times longer in neighborhoods with less than 3% poverty than Black children (20.6% vs. 4.6%), and nearly 20 times longer than Latino children. On average, White children can expect to spend over 90% of childhood in nonpoor neighborhoods (less than 20% poor), whereas this expectancy is only about 50% for Black and Latino children.

(Figure 1 about here)

The findings of this analysis indicate that White children are overwhelmingly advantaged with respect to Black and Latino children in terms of childhood expectancy in affluent and extremely poor neighborhoods. These findings also indicate that the cross-sectional correspond rather well to the period life table findings. If the U.S. population were truly stable with respect to rates of transition into and out of neighborhood types, we should expect Black children to

spend about 15% of childhood in extremely poor neighborhoods. The findings in Table 1 and Figure 1 indicate that, at mid-1990s rates, Black children can expect to spend about 16.5% of childhood in such neighborhoods. Similarly, under the stable population model we would expect White children to spend about 19% of childhood in affluent neighborhoods. The period life table findings suggest that at mid-1990s rates, White children can expect to spend almost exactly that long in such neighborhoods (20.6%).

The bottom three rows of Table 2 and Figure 2 present findings for Black and White children by neighborhood type at birth. These findings indicate the extent to which Black and White children are "trapped" in poor neighborhoods (or remain in nonpoor neighborhoods) from birth, versus experiencing substantial upward and downward neighborhood mobility throughout childhood. For Black and White children I estimated childhood expectancies in the five neighborhood types by poor and nonpoor birth statuses. In addition, I estimated childhood expectancies for children born in "moderate poverty" neighborhoods, since this is the only neighborhood type in which a substantial fraction of both Black and White children were born.

(Figure 2 about here)

To begin with, there are large racial differences in the probability of being born into a nonpoor neighborhood. From 1994 to 1996, about 82% of White children were born in neighborhoods with less than 20% poverty (the sum of the first three "White" columns in row 1 of Table 2). Only about 44% of Black children were born in such neighborhoods. At one extreme of the distribution, White children were 3.7 times more likely than Black children and 9.5 times more likely than Latino children to be born in an affluent neighborhood. At the other, Black children were 3.9 times more likely than White children and 1.3 times more likely than Latino children to be born in an extremely poor neighborhood.

However, once neighborhood type at birth is held constant, inequality between Black and White children declines relative to all birth neighborhood types. For children born in poor neighborhoods (greater than 20% poor), White childhood expectancy in such neighborhoods is less than 20% lower than that for Black children (41.6% + 7.0 = 48.6% for White children; 44.4% + 23.2% = 67.5% for Black children—row 5 of Table 2), yielding a White:Black ratio of 0.72. For all neighborhood types at birth, the equivalent ratio is 0.197 (9.6% ÷ 48.4%). Thus, White/Black inequality is much lower (i.e., the White:Black ratio of childhood expectancy in poor neighborhoods is closer to 1.0) for children born in poor neighborhoods than for children of all birth statuses. However, of the 67.5% of childhood that Black children born in poor neighborhoods can expect to spend in such neighborhoods, more than one-third of this expectancy (23.2%) is in extremely poor neighborhoods. By contrast, even White children born in poor neighborhoods can expect to spend only about 7% of childhood in the poorest neighborhood type.

For children born in nonpoor neighborhoods, the White:Black ratio of childhood expectancy in nonpoor neighborhoods is 1.18. For all neighborhood types at birth, the equivalent ratio is 1.75. Thus, again, the White:Black ratio is closer to 1.0 after controlling for neighborhood type at birth. Whereas all White children born can expect to spend about 4.5 times longer than Black children in the most affluent neighborhood type, this ratio drops to 2.2 for children born in nonpoor neighborhoods. Finally, although Black children born in nonpoor neighborhoods can expect to spend only about 3.8% of childhood in the poorest neighborhood type (compared to 16.5% for all neighborhood types at birth), White children's exposure to such neighborhoods is virtually zero (about 8/1000 of a child-year, the equivalent of about 3 child-days).

The only neighborhood type in which a substantial proportion of both Black and White children were born is the "moderate poverty" type. About 23% of White children and 27% of Black children were born in this type from 1994 to 1996. Even among children born in this neighborhood type, White children can expect to spend much longer in nonpoor neighborhoods (97% vs. 73% of childhood), and much less time in poor neighborhoods (3% vs. 27%).

Thus, at mid-1990s rates, there is a great deal of racial inequality in children's exposure to neighborhood poverty and affluence throughout childhood. Although inequality persists even when controlling for neighborhood type at birth, racial differences in childhood expectancy appear to be driven largely by the chances of being born in a nonpoor or poor neighborhood. Put differently, Black children born in nonpoor neighborhoods don't appear to suffer dramatically higher rates of downward neighborhood mobility than equivalent White children. However, given that White children are nearly three times more likely than Black children to be born into nonpoor neighborhoods (81.7% vs. 43.8%), aggregate racial inequality in childhood expectancy remains high.

One way to gauge the effect of neighborhood type at birth is to ask what childhood expectancies in the different neighborhood types would be if Black and White children were equally likely to be born into poor and nonpoor neighborhoods. Note that the second row of Table 2 is essentially a weighted average of the third and fifth rows, where the weights are the percentages of Black and White children born into nonpoor and poor neighborhoods. It is therefore possible to standardize the unconditional distribution of childhood expectancies for Black and White children using the joint distribution of neighborhood type at birth for both Blacks and Whites. To do this, I first estimated the joint neighborhood birth distribution to be 64.7% in nonpoor neighborhoods and 35.3% in poor neighborhoods. I then estimated conditional childhood expectancies in the five neighborhood types using this joint distribution. Finally, I

used the following formula to estimate π , the percentage of the total racial inequality in childhood expectancy that is due to racial differences in the probability of being born into a poor or nonpoor neighborhood:

$$\hat{\pi} = \left(1 - \frac{\sum_{i=1}^{5} \left(L_{i}^{W'} - L_{i}^{B'}\right)^{2}}{\sum_{i=1}^{5} \left(L_{i}^{W} - L_{i}^{B}\right)^{2}}\right) \times 100,$$
(6)

where $L_i^{W'}$ and $L_i^{B'}$ are child-years in neighborhood type i using the joint birth distribution for White and Black children, respectively, and L_i^{W} and L_i^{B} are child-years in neighborhood type i from the observed birth distribution, for White and Black children, respectively. Note that if the only difference between Black and White children's experiences were differences in their birth distributions, then standardizing the birth distribution would make the numerator of equation 6 zero, and thus 100% of the inequality would be explained by differences in the birth distributions. If, on the other hand, the numerator and denominator were equal (i.e., $L_i^{W'} = L_i^{W}$ and $L_i^{B'} = L_i^{B}$ for all i), this would mean that none of the differences in Black and White children's neighborhood experiences could be explained by differences in the birth distributions.

Using equation 6, I calculated that about 75% of the total Black/White difference in childhood expectancy across neighborhood types is due to racial differences in the neighborhood birth distributions. The remainder, or 25%, reflects higher rates of upward neighborhood mobility for White children and higher rates of downward neighborhood mobility for Black children. Thus, Black/White inequality in neighborhood context is largely related to the effects of racial differences in the probability of being born into a poor neighborhood.

Cross-period Findings

The findings I have presented thus far pertain only to synthetic birth cohorts defined as of the mid-1990s. This is a particularly interesting period in which to study racial inequality in

neighborhood conditions, because the mid-1990s comprised the heart of a large economic expansion during the Clinton administrations. This recovery resulted in record low unemployment and poverty rates for African Americans (Patterson 1997:30-31). Although residential segregation was continuing its steady decline (Fischer et al. 2004; Timberlake and Iceland 2005), Blacks remained in the mid-1990s the most segregated racial/ethnic group in the U.S. Thus, the combination of improving economic conditions and high levels of residential segregation produced rapid declines in the concentration of poverty, as predicted theoretically by Massey and Fischer (2000) and demonstrated empirically by Jargowsky (2003; also see Table 1).

Using the period life table approach, I compared the mid-1990s period with the nearly two decades that preceded it, from the mid-1970s onward. This latter period has been extensively studied by researchers because of changes in the concentration of Black poverty and within-racial group economic segregation during those two decades (Wilson 1987; Jargowsky 1996). To see how racial inequality in childhood exposure to neighborhood poverty and affluence has changed over time, I calculated three-year moving averages of childhood expectancies in the five neighborhood types from 1976 to 1997. Findings for Whites appear in Figure 3, and Figure 4 presents findings for Blacks.

(Figure 3 about here)

(Figure 4 about here)

The findings suggest that for the most part, childhood expectancies have remained relatively stable over time, with several exceptions. First, White childhood expectancy in affluent neighborhoods increased rapidly from the late 1980s to the early 1990s, likely reflecting both increasing income bifurcation among Whites (Farley 1996) and increasing economic segregation among Whites during the 1980s (Jargowsky 1996). Second, although Black childhood expectancy in high and extreme poverty neighborhood remained relatively constant over time,

hovering between 50 and 60% (the sum of the top two sections in Figure 4), the share of childhood expectancy in extremely poor neighborhoods increased dramatically in the late 1980s, during the economic recession associated with the administration of George H.W. Bush, and then declined rather sharply during the Clinton recovery.

These figures indicate that the mid-1980s to mid-1990s were by and large very beneficial for White children, at least in terms of their exposure to neighborhood affluence. By contrast, the late 1980s were especially hard on African American children from the perspective of duration of exposure to neighborhood poverty; however, the solid economic recovery of the 1990s appears to have had salutary effects on Black children's exposure to neighborhood poverty and affluence.

Summary and Conclusions

In this study I estimated racial differences in the duration of childhood exposure to neighborhood poverty and affluence. I found that, at rates prevailing in the mid-1990s, Black and Latino children can expect to spend a much larger share of childhood in extremely poor neighborhoods than White children. Conversely, White children on average can expect to spend the lion's share of childhood in affluent and low poverty neighborhoods. Conditioning on neighborhood type at birth reduced White/Black inequality substantially, suggesting that a major cause of racial differences in childhood exposure to neighborhood poverty is Black children's higher likelihood of being born into poor neighborhoods. Over time, there has been some shifting of childhood expectancy from high poverty to extreme poverty for Black children, and from low poverty to affluent for White children. However, for the most part racial inequality in childhood expectancy in nonpoor (less than 20% poverty) and poor (greater than 20% poverty) neighborhoods remained relatively stable from the mid-1970s to the mid-1990s.

There are at least three implications of this study for racial stratification research. First, it provides a renewed emphasis on context and environment as an indicator of racial inequality in socioeconomic status. Politicians and the general public have focused a great deal of attention on declining racial inequality in individual- and family-level indicators of socioeconomic status, and during the economic boom of the 1990s, African Americans experienced a great deal of success on indicators like these. For example, the Black/White gap in educational achievement has declined—as of 1995 Blacks had less than a one percent lower chance of graduating from high school than Whites did, and Blacks experienced a tenfold increase in rates of college completion from 1940 to 1995 (Patterson 1997:20-21). In 1995 the Black poverty rate was the lowest it had ever been, and the Black unemployment rate was the lowest it had been since 1972 (Patterson 1997:30-31). Finally, Black/White occupational inequality declined steadily and substantially from 1940 to 1990 (King 1992).

However, the findings of this research suggest that massive levels of inequality remain in the neighborhood contexts to which children are exposed as they progress through childhood. Furthermore, the evidence suggests that at best, this inequality has remained constant over the past three decades. Further research is needed to determine the effects of different durations of exposure to neighborhood poverty and affluence, and whether these effects vary by stage in child development. For example, do two years in a poor neighborhood matter more, less, or the same from age 0 to 2 than from age 14 to 16? Increasing scholarly focus on durations of exposure to neighborhood conditions has become all the more imperative in light of recent evidence on the effects of long-term exposure to poor neighborhoods on child outcomes. Two recent studies using cross-sectional data (Furstenberg et al. 1999; Duncan, Boisjoly, and Harris 2001) found few and small effects of neighborhood context on adolescent outcomes. However, other evidence

suggests that long-term exposure to neighborhood context has substantial effects on child outcomes (Rubinowitz and Rosenbaum 2000; Furstenberg 2001; Harding 2003; Turley 2003).

Thus, the accretion of experiences growing up in particular kinds of neighborhoods likely has effects on outcomes in later adolescence and young adulthood that are not detectable either in the cross-section or at younger ages. Research must continue to identify the specific mechanisms by which neighborhoods affect the life chances of children (see Sampson, Morenoff, and Gannon-Rowley 2002); however, what is apparent from the present study is that whatever duration effects residence in poor and nonpoor neighborhoods have, Black and Latino children face massive disadvantages compared to White children.

Second, given the fact that most Black children do not reside in poor families, it is evident that a large proportion of the child-years spent in poor neighborhoods are being spent by nonpoor Black children. Ethnographic evidence has shown that Black middle class teenagers face profoundly different neighborhood environments than their White counterparts (Anderson 1999; Pattillo-McCoy 1999). This evidence and the present study should serve to inform debates about the causes of Black middle class children's continued poorer performance in school and in the labor market compared with their White middle class peers.

Finally, the findings of this research suggest that a major cause of racial differences in childhood expectancy in poor and affluent neighborhoods is racial differences in the neighborhood birth status distribution, in addition to higher rates of upward neighborhood mobility for Whites and of downward neighborhood mobility for Blacks (South and Crowder 1997). At mid-1990s rates, Black children born in nonpoor neighborhoods can expect to spend over 80% of childhood in such neighborhoods (see Table 2 and Figure 2); thus, it appears that once Black families make their way to nonpoor neighborhoods, they are nearly as likely as White families to raise their children for the duration of childhood in such neighborhoods. This

interpretation is consistent with recent evidence from residential mobility programs, which shows that once poor Black families from public housing projects are placed in nonpoor neighborhoods, they are overwhelmingly likely to remain in nonpoor neighborhoods 10 to 15 years later (DeLuca and Rosenbaum 2002).

However, the weight of historical and contemporary racial socioeconomic inequality, combined with housing discrimination and mutual racial avoidance, has resulted in Black children's much greater likelihood of starting out life in poor neighborhoods. Massey and colleagues have shown that the combination of higher poverty rates among Black families and continuing high levels of residential segregation has produced extremely high levels of poverty concentration for Blacks (Massey, Gross, and Shibuya 1994; Massey and Fischer 2000). I conclude that in order for racial inequality in childhood exposure to neighborhood poverty to diminish substantially, the probability of birth into poor neighborhoods for Black children must be reduced. Thus, public policy should be directed at reducing levels of Black poverty, improving the conditions of neighborhoods where Blacks currently live, through increased investment in education and employment opportunities, and increasing the integration of American neighborhoods.

Footnotes

¹ In order to match 1990 tract codes from the GMF to 2000 tract codes on the NCDB, I used the tract matching procedures described in Crowder and South (2005). I thank Kyle Crowder for his generosity in providing me with the tract matching data.

² This neighborhood type might be more precisely labeled "extremely nonpoor," since it is not necessarily true that neighborhoods with low poverty rates are affluent in other respects. It turns out that the average median family income in 2000 in affluent neighborhoods fell between the 91st and 92nd percentiles of the family income distribution. Thus, I am confident that this neighborhood type corresponds well to the concept of "affluent."

References

- Addams, Jane. 1910. Twenty Years at Hull-House. New York: Macmillan Company.
- Alba, Richard D. and John R. Logan. 1991. "Variations on Two Themes: Racial and Ethnic Patterns in the Attainment of Suburban Residence." *Demography* 28:431-453.
- Anderson, Elijah. 1999. Code of the Street: Decency, Violence, and the Moral Life of the Inner City. New York: W.W. Norton & Company.
- Bellair, Paul E. and Vincent J. Roscigno. 2000. "Local Labor-Market Opportunity and Adolescent Delinquency." *Social Forces* 78:1509-38.
- Brooks-Gunn, Jeanne, Greg J. Duncan, Pamela Kato, and Naomi Sealand. 1993. "Do Neighborhoods Influence Child and Adolescent Behavior?" *American Journal of Sociology* 99:353-95.
- Browning, Christopher R., Tama Leventhal, and Jeanne Brooks-Gunn. 2004. "Neighborhood Context and Racial Differences in Early Adolescent Sexual Activity." *Demography* 41:697-720.
- Clark, Kenneth B. 1965. Dark Ghetto: Dilemmas of Social Power. New York: Harper and Row.
- Connell, James P. and Bonnie L. Halpern-Felsher. 1997. "How Neighborhoods Affect

 Educational Outcomes in Middle Childhood and Adolescence: Conceptual Issues and an

 Empirical Example." In *Neighborhood Poverty Volume I: Context and Consequences for Children*, edited by Jeanne Brooks-Gunn, Greg J. Duncan, and J. Lawrence Aber. New

 York: Russell Sage Foundation.
- Crowder, Kyle D. 2001. "Racial Stratification in the Actuation of Mobility Expectations:

 Microlevel Impacts of Racially Restrictive Housing Markets." *Social Forces* 79:1377-96.

- Crowder, Kyle and Scott J. South. 2005. "Race, Class, and Changing Patterns of Migration between Poor and Nonpoor Neighborhoods." *American Journal of Sociology* 110:1715-63.
- DeLuca, Stefanie and James E. Rosenbaum. 2002. "If Low-Income Blacks Are Given a Chance to Live in White Neighborhoods, Will They Stay? Examining Mobility Patterns with Quasi-Experimental Data." Working Paper No. WP-02-28. Evanston, IL: Institute for Policy Research, Northwestern University.
- Drake, St. Clair and Horace R. Cayton. 1945. *Black Metropolis: A Study of Negro Life in a Northern City*. New York: Harcourt, Brace, and Co.
- Duncan, Greg J., Johanne Boisjoly, and Kathleen Mullan Harris. 2001. "Sibling, Peer, Neighbor, and Schoolmate Correlations as Indicators of the Importance of Context for Adolescent Development." *Demography* 38:437-47.
- Elliott, Delbert S., William Julius Wilson, David Huizinga, Robert J. Sampson, Amanda Elliott, and Bruce Rankin. 1996. "The Effects of Neighborhood Disadvantage on Adolescent Development." *Journal of Research in Crime and Delinquency* 33:389-426.
- Farley, Reynolds. 1996. *The New American Reality: Who We Are, How We Got Here, Where We're Going*. New York: Russell Sage Foundation.
- Fitzgerald John, Peter Gottschalk, and Robert Moffitt. 1998. "An Analysis of Sample Attrition in Panel Data: The Michigan Panel Study of Income Dynamics." *Journal of Human Resources* 33:251-99.
- Furstenberg, Frank F., Jr. 2001. "Beyond Neighborhoods: A Follow-Up of the Philadelphia Study." Paper presented at the annual meeting of the American Sociological Association.

 Anaheim, CA, August, 2001.

- Furstenberg, Frank F., Jr., Thomas D. Cook, Jacquelynne Eccles, Glen H. Elder, Jr., and Arnold Sameroff. 1999. Managing to Make It: Urban Families and Adolescent Success. Chicago: University of Chicago Press.
- Gramlich, Edward, Deborah Laren, and Naomi Sealand. 1992. "Moving into and out of Poor Urban Areas." *Journal of Policy Analysis and Management* 11:273-87.
- Harding, David J. 2003. "Counterfactual Models of Neighborhood Effects: The Effect of Neighborhood Poverty on Dropping Out and Teenage Pregnancy." American Journal of Sociology 109:676-719.
- Harris, David R. 1999. "All Suburbs Are Not Created Equal: A New Look at Racial Differences in Suburban Location." Report No. 99-440. Ann Arbor, MI: Population Studies Center at the Institute for Social Research, University of Michigan.
- Heuveline, Patrick. 2003. Personal correspondence, June 30. . 2004. Personal correspondence, March 12. Heuveline, Patrick, Jeffrey M. Timberlake, and Frank F. Furstenberg, Jr. 2003. "Shifting Child Rearing to Single Mothers: Results from 17 Western Nations." *Population and* Development Review 19:47-71. Jargowsky, Paul A. 1994. "Ghetto Poverty among Blacks in the 1980s." *Journal of Policy* Analysis and Management 13:288-310. . 1996. "Take the Money and Run: Economic Segregation in U.S. Metropolitan Areas."

American Sociological Review 61: 984-98.

. 1997. Poverty and Place: Ghettoes, Barrios, and the American City. New York: Russell Sage Foundation.

- ______. 2003. Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s. Report for the "Living Cities Census Series." Washington, DC: The Brookings Institution.
- Jargowsky, Paul A. and Mary Jo Bane. 1991. "Ghetto Poverty in the United States, 1970-1980."

 In *The Urban Underclass*, edited by Christopher Jencks and Paul Peterson. Washington,

 DC: The Brookings Institution.
- Jencks, Christopher and Susan E. Mayer. 1990. The Social Consequences of Growing up in a Poor Neighborhood." In *Inner-City Poverty in the United States*, edited by L. E. Lynn, Jr. and M. G. H. McGeary. Washington, DC: National Academy Press.
- Kim, Yong-Seong and David Padot. 1999. "Documentation for the 1970, 1980 and 1990 PSID Geocode Match Files." Third Edition. Ann Arbor, MI: Economic Behavior Program, Survey Research Center, Institute for Social Research, The University of Michigan.
- King, Mary. 1992. "Occupational Segregation by Race and Sex, 1940-1988." *Monthly Labor Review* 115:30-37.
- Lee, Barrett and Karen Campbell. 1997. "Common Ground? Urban Neighborhoods as Survey Respondents See Them." *Social Science Quarterly* 78:922-936.
- Logan, John R. and Richard D. Alba. 1993. "Locational Returns to Human Capital: Minority Access to Suburban Community Resources." *Demography* 30:243-267.
- Massey, Douglas S. and Mitchell L. Eggers. 1990. "The Ecology of Inequality: Minorities and the Concentration of Poverty, 1970 1980. *American Journal of Sociology* 95:1153-88.
- Massey, Douglas S. and Mary J. Fischer. 2000. "How Segregation Concentrates Poverty." *Ethnic and Racial Studies* 23:670-691.
- Massey, Douglas S., Andrew B. Gross, and Kumiko Shibuya. 1994. "Migration, Segregation, and the Concentration of Poverty." *American Sociological Review* 59:425-45.

Palloni, Alberto. 2001. "Increment-Decrement Life Tables." In Demography: Measuring and Modeling Population Processes, by S. H. Preston, P. Heuveline, and M. Guillot. Oxford, UK: Blackwell Publishers. Panel Study of Income Dynamics (PSID). 1987. User's Guide. Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan. . 1998. Guide to the 1993 Interviewing Year. Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan. . 2005. Panel Study of Income Dynamics, Waves 1976 to 1997 [MRDF]. Ann Arbor MI: Institute for Social Research [producer]. Survey Research Center [distributor]. Park, Robert E. and Ernest W. Burgess. [1925] 1984. The City. Chicago: University of Chicago Press. Patterson, Orlando. 1997. The Ordeal of Integration: Progress and Resentment in America's "Racial" Crisis. Washington, DC: Civitas/Counterpoint. Pattillo-McCoy, Mary. 1999. Black Picket Fences: Privilege and Peril Among the Black Middle Class. Chicago: University of Chicago Press. Preston, Samuel H. and Cameron Campbell. 1993. "Differential Fertility and the Distribution of Traits: The Case of IQ." *American Journal of Sociology* 98:997-1019. Preston, Samuel H., Patrick Heuveline, and Michel Guillot. 2001. Demography: Measuring and Modeling Population Processes. Oxford, UK: Blackwell Publishers. Quillian, Lincoln. 1997. The Dynamics of Concentrated Urban Poverty. Unpublished Doctoral Dissertation. Cambridge, MA: Harvard University. . 1999. "Migration Patterns and the Growth of High-Poverty Neighborhoods, 1970-1990.

American Journal of Sociology 105:1-37.

- _____. 2003. "How Long Are Exposures to Poor Neighborhoods? The Long-Term Dynamics of Entry and Exit from Poor Neighborhoods." *Population Research and Policy Review* 22:221-49.
- Rankin, Bruce H. and James M. Quane. 2002. "Social Contexts and Urban Adolescent

 Outcomes: The Interrelated Effects of Neighborhoods, Families, and Peers on African
 American Youth." *Social Problems* 49:79-100.
- Riis, Jacob A. 1890. *How the Other Half Lives: Studies among the Tenements of New York*. New York: Charles Scribner's Sons.
- Rosenbaum, Emily and Samantha Friedman. 2001. "Differences in the Locational Attainment of Immigrant and Native-Born Households with Children in New York City." *Demography* 38:337-48.
- Rubinowitz, Leonard S. and James E. Rosenbaum. 2000. *Crossing the Class and Color Lines:*From Public Housing to White Suburbia. Chicago: University of Chicago Press.
- St. John, Craig and Shana M.B. Miller. 1995. "The Exposure of Black and Hispanic Children to Urban Ghettos: Evidence from Chicago and the Southwest." *Social Science Quarterly* 76:562-76.
- Sampson, Robert J., Jeffrey D. Morenoff, and Felton Earls. 1999. "Beyond Social Capital:

 Spatial Dynamics of Collective Efficacy for Children." *American Sociological Review*64:633-60.
- Sampson, Robert J., Jeffrey D. Morenoff, and Thomas Gannon-Rowley. 2002. "Assessing 'Neighborhood Effects:' Social Processes and New Directions in Research." *Annual Review of Sociology* 28:443-78.

- Small, Mario Luis and Katherine Newman. 2001. "Urban Poverty after *The Truly Disadvantaged*: The Rediscovery of the Family, the Neighborhood, and Culture." *Annual Review of Sociology* 27:23-45.
- South, Scott J. and Eric P. Baumer. 2000. "Deciphering Community and Race Effects on Adolescent Premarital Childbearing." *Social Forces* 78:1379-1407.
- South, Scott J. and Kyle D. Crowder. 1997. "Escaping Distressed Neighborhoods: Individual,
 Community, and Metropolitan Influences." *American Journal of Sociology* 102:1040-84.
 1998. "Avenues and Barriers to Residential Mobility Among Single Mothers." *Journal of Marriage and the Family* 60:866-77.
- South, Scott J. and Glenn D. Deane. 1993. "Race and Residential Mobility: Individual Determinants and Structural Constraints." *Social Forces* 72:147-167.
- Timberlake, Jeffrey M. and John Iceland. 2005. "Change in Racial and Ethnic Residential Inequality in American Cities, 1970 to 2000. Paper presented at the 2005 annual meeting of the American Sociological Association, Philadelphia, PA.
- Turley, Ruth L. 2003. "When Do Neighborhoods Matter? The Role of Race and Neighborhood Peers." *Social Science Research* 32:62-79.
- White, Michael J. 1987. *American Neighborhoods and Residential Differentiation*. New York: Russell Sage Foundation.
- White, Michael J. and Sharon Sassler. 2000. "Judging Not Only by Color: Ethnicity, Nativity, and Neighborhood Status." *Social Science Quarterly* 81:997-1013.
- Wilson, William J. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: The University of Chicago Press.

Table 1. Distributions of Neighborhood Types and White, Black, and Latino Children in Each Type: U.S. Metropolitan Areas, 1980 to 2000

	"Nonpoor" (0% to 20% in poverty)										"Poor" (20% to 40% in poverty)						
	Affluent (< 3%)			Low poverty (3% to < 10%)			Moderate poverty (10% to < 20%)			High poverty (20% to < 40%)			Extreme poverty (≥ 40%)				
	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000		
Tracts																	
Number	5,963	7,684	6,908	24,209	21,243	20,974	11,439	11,400	12,098	6,221	7,355	8,465	1,631	2,750	2,166		
% of total	12.1	15.2	13.6	48.9	42.1	41.4	23.1	22.6	23.9	12.6	14.6	16.7	3.3	5.5	4.3		
% of population	on under	age 18															
White	14.9	19.1	19.6	55.3	48.1	49.5	21.8	22.1	20.8	7.1	9.1	8.8	0.9	1.6	1.3		
Black	1.5	3.2	3.6	14.7	18.8	21.6	27.0	24.1	27.9	41.3	35.0	36.1	15.6	18.9	10.8		
Latino	2.7	4.0	4.0	23.3	22.3	22.9	31.0	28.2	30.9	33.5	34.2	34.9	9.4	11.3	7.3		

Source: Author's calculations from 1980 to 2000 U.S. census data.

Table 2. Childhood Exposure to 5 Neighborhood Types, by Neighborhood Status at Birth: PSID Children, by Race/Ethnicity

	"Nonpoor" (0% to 20% in poverty)										"Poor" (20% to 40% in poverty)						
	Affluent (< 3%)			Low poverty (3% to < 10%)			Moderate poverty (10% to < 20%)			High poverty (20% to < 40%)			Extreme poverty (≥ 40%)				
Indicator of exposure	White	Black	Latino	White	Black	Latino	White	Black	Latino	White	Black	Latino	White	Black	Latino		
Neighborhood type at birth ^a	23.5	3.4	7.3	46.0	5.9	36.6	19.1	22.7	25.6	10.1	37.8	26.3	1.4	30.3	4.3		
Childhood expectancy ^b by neighborhood type at birth:																	
All types	27.0	4.7	4.9	43.2	19.9	23.4	22.3	33.2	39.7	6.7	27.5	26.7	0.8	14.7	5.3		
Nonpoor	29.0	20.9		44.6	25.3		23.2	33.8		3.1	15.6		0.1	4.4			
Moderate poverty	2.8	1.2	n.a.	29.7	30.5	n.a.	63.0	42.0	n.a.	4.5	20.6	n.a.	0.1	5.6	n.a.		
Poor	3.3	1.3		25.6	20.3		7.9	23.8		57.2	35.4		6.0	19.1			

Notes: Sample sizes for row 1 (*ns*) are 312 for Whites, 276 for Blacks, and 288 for Latinos. For the "All types" row 2 (child-years) they are 5,673 for Whites, 4,863 for Blacks, and 5,144 for Latinos. Child-years for Whites and Blacks, respectively, for the "Nonpoor" row: 4,086 and 1,562; the "Moderate poverty" row: 944 and 956; and the "Poor" row: 355 and 2,421.

n.a.: Neighborhood status at birth not available for Latino children prior to 1990.

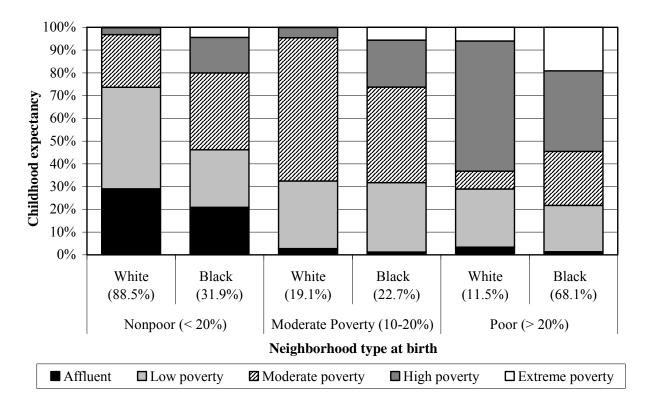
Observed percentages born in neighborhood type from January 1, 1994 to December 31, 1996 for White and Black children, January 1, 1992 to December 31, 1994 for Latino children. A chi-squared test of the null hypothesis that the three birth status distributions are equal was rejected at *a* = .0001.

Period life table estimates of percentage of childhood (birth to exact age 18) expected to be lived in neighborhood type. Periods are 1994 to 1997 for White and Black children, and 1992 to 1995 for Latino children.



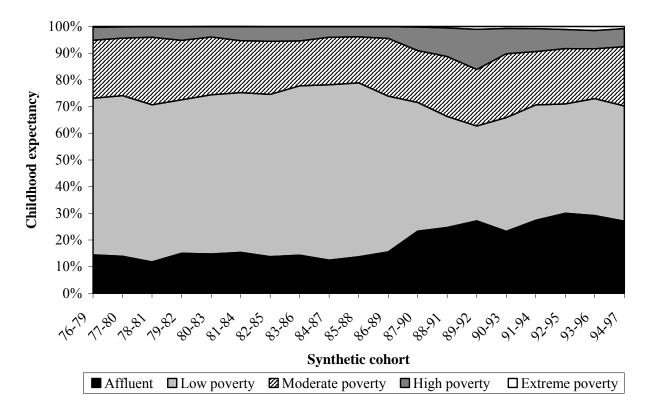
Note: Figures from synthetic birth cohorts estimated for the periods indicated in the figure.

Figure 1. Childhood Expectancy in 5 Neighborhood Types: PSID Children, by Race/Ethnicity



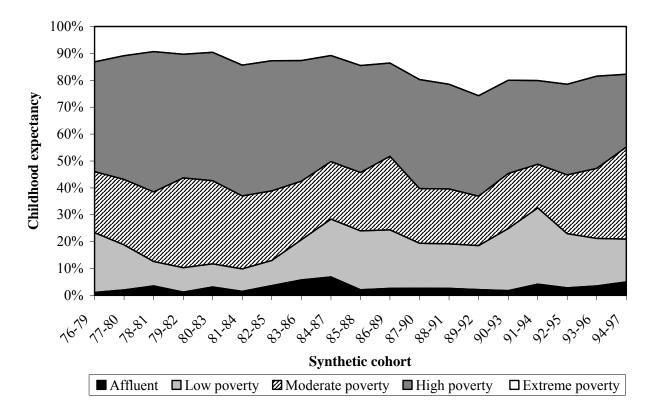
Note: Figures from a synthetic birth cohort estimated for the 1994 to 1997 period. Percentages of each birth cohort born in various neighborhood types shown in the figure.

Figure 2. Childhood Expectancy in 5 Neighborhood Types, by Neighborhood Status at Birth: PSID Children, by Race



Note: Figures are three-year moving weighted averages for synthetic birth cohorts estimated from period multi-state life tables.

Figure 3. Childhood Expectancy in 5 Neighborhood Types: White PSID Children, 1976 to 1997



Note: Figures are three-year moving weighted averages for synthetic birth cohorts estimated from period multi-state life tables.

Figure 3. Childhood Expectancy in 5 Neighborhood Types: Black PSID Children, 1976 to 1997