

Social Context and Youth Competence:  
Exploring the interplay among Parental Perceptions and Objective Features of  
Community Environment

September 27, 2003

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## ABSTRACT

The goal of this paper is to further our understanding of the role of community factors by examining the influence of neighborhood characteristics on youth outcomes. Prior research has utilized measures of structural features of the community and has evaluated their associations with youth outcomes (Brooks-Gunn et al, 1993; Kowaleski-Jones, 2000). Other research has related perceptions of community environment to problematic youth development (Aneshensel and Sucoff, 1996). Our work seeks to bridge these two streams of research by considering the effects of both objective and subjective measures of community environment for youth development.

Data are drawn from the 1990 Census and the 1997 Panel Study of Income Dynamics Child Development Supplement to form a sample of approximately **1349** children aged 6 through 12. Because PSID data is geographically clustered, we model our data using hierarchical linear models. Preliminary results indicate that community characteristics moderate the relationship between parental perceptions of the neighborhood and measures of child well-being.

### **Extended Abstract**

Researchers and policy-makers have been interested in understanding the connections between child and place; specifically, the ways in which neighborhoods influence youth development. The goal of this paper is to further our understanding of the role of community factors by examining the influence of neighborhood characteristics on youth outcomes. Prior research has utilized measures of structural features of the community and has evaluated their associations with youth outcomes (Brooks-Gunn, Duncan, Klebanov, & Sealand, 1993; Kowaleski-Jones, 2000). Other research has related perceptions of community environment to problematic youth development (Aneshensel and Sucoff, 1996). Our work seeks to bridge these two streams of research by 1) considering the main effects both of census-related factors and subjective measures of parental perceptions of neighborhood quality on youth development and 2) exploring how census factors moderate the influence of parental perceptions on child well-being. This work is in the tradition of prior work that has tracked the interplay among perceived and objective neighborhood characteristics on adult outcomes (Ross, Mirowsky, and Pribesh, 2001).

We to study parental perceptions and objective features of neighborhood social climate based on prior research (Furstenberg, 1993) that suggests that parental observation of their immediate social climate translates into differential child outcomes. Based on interview data, this research suggested that parental perceptions of high levels of social cohesion and social control resulted in parental willingness to invest in local institutions and services for youth in the community. These results suggest that parental perceptions of the neighborhood social climate are linked to parental management of their children.

In a more recent study, Furstenberg and colleagues (1999) examined the associations between family management and youth outcomes. This research also revealed a great deal of variation within neighborhoods, suggesting that good communities are most helpful in situations where there are ample family resources and that youth success is also boosted in situations where families were strong but communities were not. Results from this study are highly suggestive but ultimately limited by a lack of national data.

The analyses included in this paper reflect our aim of evaluating the interplay among subjective and objective characteristics of the neighborhood and how they interact to influence youth competence. Data are drawn from the 1990 Census and the 1997 Panel Study of Income Dynamics Child Supplement. We expect to find significant associations between census and parent based measures of neighborhoods and youth outcomes. Specifically, we anticipate that parents' perceptions of their neighborhood's social climate will have a stronger or weaker association with youth competence, depending on objective features of the community environment. For example, parents may feel a strong link with and trust in their neighbors, reflecting their immediate environment and translating into a positive benefit for children. However, the presence of low-SES neighbors may dampen moderate the influence of parental perceptions of integration on child well-being.

Much of the research in this area has struggled with issues of selection bias. Because families can choose the neighborhoods in which they live, the quality of a child's neighborhood may be associated with unmeasured family-level factors that influence the outcomes of children. If these family-level factors are not controlled, their omission will bias estimates of the association between neighborhood characteristics and child outcomes. Specifically, families who are more "motivated" to provide for their children may select better neighborhoods in which to live. In this case, it is difficult to determine whether a positive association between neighborhood quality and improved child outcomes reflects the influence of neighborhood factors, or the unobserved family-level factors that led parents to choose that specific neighborhood. Conversely, it is possible that families whose children are having difficulties will move to better neighborhoods in order to attempt to improve the development of children. In this case, families would be selecting into better neighborhoods on the basis of "negative" characteristics.

One possible remedy to this problem is to include a wide variety of family background measures as controls when using neighborhood characteristics to predict children's outcomes, with the hopes of capturing factors that might influence both residential choice and respondent

outcomes. In this paper, information on family structure, income and other measures are collected over a multi-year period prior to the outcome year in order to account for distal and enduring parental characteristics that may influence both neighborhood choice and child outcomes. In addition, our study includes a control indicating whether families have moved to a different neighborhood specifically to improve outcomes for their children.

## **DATA**

We use the 1997 Child Development Supplement to the Panel Study of Income Dynamics (PSID-CDS). The PSID Child Development Supplement is an important new national source of high quality information about economic conditions and family process. In 1997, the PSID supplemented its core data collection with data on parents and a maximum of two of their zero- to 12-year-old children, a project known as the Child Development Supplement. The objective was to produce a comprehensive, nationally representative, and longitudinal database of children and their families that researchers could use to study the dynamic process of early human capital formation. The supplement includes reliable, age-graded assessments of the cognitive, behavioral, and health status of 3,500 children obtained from the primary caregiver (usually the mother), a second caregiver, an absent parent, the teacher, the school administrator, and the child.

### **Dependent Measures**

*Reading and math ability.* To assess children's academic achievement, the PSID-CDS administered the Woodcock-Johnson (Revised) test battery, measuring letter-word identification, passage comprehension, calculation, and applied problem solving. For the purposes of our study, the first two were averaged into a score of reading comprehension, and the second two were averaged into a score of math comprehension.

*Behavior problems.* This measure consists of items that are drawn from the Achenbach and Edlebrock behavior problems inventory (BPI; Achenbach & Edlebrock, 1981), measuring both externalizing and internalizing behavior. Examples of internalizing behavior are whether the child is: unhappy, sad, or depressed; complains no one loves him/her; or demands a lot of attention. Examples of externalizing behavior include whether the child is: disobedient at home, stubborn, sullen, or irritable, or has a strong temper.

*School adjustment.* PSID-CDS asks teachers to complete an extended BPI on each child, including both standard BPI items and others that are specific to the classroom. In creating the teacher-report measures, we left out the standard BPI items and performed a Principal Components analysis with Varimax rotation, using SPSS 11.5, on the remaining items. Two factors emerged which explained 73% of the variance: classroom-adaptive behavior (item examples: instructs peers, communicates stories to peers, rephrases questions, easily understood, good listener; eigen value 7.54) and acting up in class (item examples: academic underachiever, goes through the motions, makes excessive demands, acts up in class; eigen value 2.00). Rather than using factor scores, we calculated scale values from the sum of the means of all valid standardized items. Pearson alpha for classroom-adaptive behavior was .96; for acting up, .84.

### Community Characteristics

Community resources and risk factors are measured, at the Census tract level, with several characteristics abstracted from the 1990 Census. Information about a Census tract is merged to the PSID-CDS geocoded data. Although most work suggests that the presence of high-SES neighbors is a key predictor of child success, a consensus currently does not exist on other important Census-based predictors. Accordingly, this research utilizes several measures of community characteristics, allowing us to compare the effectiveness of each characteristic. We follow the example of Duncan and Aber (1997) and perform a factor analysis on a wider range of Census-based measures in order to create meaningful indexes of community characteristics that may be important predictors of youth well-being. Factor analysis was used to derive six neighborhood factors.

Poverty/unemployment is the percent of non-elderly below poverty level, female civilian employment rate, percentage of males over 16 years old employed less than half of the past year, percentage below poverty level, adult unemployment rate, percentage of individuals over the age of 24 with less than 12 years of school, percentage of males not in the labor force, percentage of women working more than half of the past year (reverse coded). Race/family structure is the percentage of families with children which are female-headed, percentage of non-Latino black, percentage of non-Latino white (reverse-coded), percentage of families with children living as subfamilies, ratio of two parent families with children relative to total number of children (reverse-coded). Low SES is the percentage of individuals with a college degree (reverse-coded),

percentage in executive or professional occupations (reverse-coded), percentage of families with income greater than \$50,000 (reverse-coded), percentage of individuals older than 24 years of age with exactly 12 years of education. Residential instability is the percentage of rental units, the percentage of units in structures with five or more units, the percentage of individuals age five or more who lived in the same house five years ago (reverse-coded). Immigration is the percentage of foreign-born and the percentage of individuals of Latino descent. Youthfulness is the percentage of individuals aged 0 to 17, and the percentage of individuals aged 65 or more (reverse-coded).

### Measures of Parental Perceptions of Neighborhood Social Climate

*Integration.* This measure consists of three separate items asked of a child's primary caregiver: how many good friends live in neighborhood, how many adults in neighborhood do you talk to regularly, and how many children or teenagers in the neighborhood do you know by name? In order to blunt the impact of hyperbolic responses (e.g. 3000 family members in the neighborhood) these figures were log-transformed. They were then standardized and summed into a single measure of integration.

*Social Control.* This measure consists of 8 items, measured on a scale of 1 (very likely) to 4 (very unlikely). These items include: how likely is it that a neighbor would do something if someone was breaking into your home, trying to sell drugs to your children, there was a fight in front of your house, your kids were getting in trouble, a child was disrespecting an adult, a child was playing with matches, a child was painting graffiti, a child was stealing something. These items are combined in a scale with an alpha of .93.

### Statistical Procedures

With this data, we use Hierarchical linear modeling (HLM; Raudenbush and Bryk, 2002; Bryk, Raudenbush, and Congdon, 1996) because it HLM controls for the clustering of cases within larger units (in this case, neighborhood) and allows data about those larger units to be included without inflating the probability of type I error. These models take advantage of the clustered nature of the data, in which families are grouped within neighborhoods, and allow us to more completely explore the linkages between family characteristics, parental reports of neighborhoods, and Census-based measures of community characteristics.

## Preliminary Results

Our preliminary results suggest that residing in a community with a higher proportion of lower socioeconomic neighbors is associated with lower parental perceptions of community integration. Residing in a community with higher proportions of youth contributes to decreased perceptions of neighborhood social control. Residing in a community with higher proportion of low SES neighbors is also associated with lower scores on both math and reading achievement. However, the effects of perceived social control on youth reading achievement are attenuated in communities that score higher on our “youthfulness” factor.

Regarding child behavior, we find that having higher concentrations of immigrants in the census tract are associated with better classroom skills and fewer instances of acting out. Parental perceptions of community control are associated with lower levels of classroom acting out behavior. The positive effects of social control on classroom adaptive behavior are increased in situations where the youth live in communities with higher concentration of immigrants, while. The protective effects are diminished when youth live in communities with higher numbers of single parent families and where there are higher concentrations of youth.

These results are preliminary but suggest a complex relationship among objective and subjective measures of community environment for youth competence. Perceptions and structural characteristics blend together to affect youth in ways that merit better comprehension. This paper provides some insights on these processes, and their implications for youth.



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