



# WHERE CHILDREN GROW UP: UNDERSTANDING HOW NEIGHBORHOODS EFFECT CHILD OUTCOMES

Special Report

University of Pittsburgh Office of Child Development  
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In the pursuit of a fuller understanding of what influences children's development and outcomes that shape their futures, the characteristics of the neighborhoods in which they live are receiving more attention than ever before.

The study of neighborhoods and their effects on children has reached new heights for several reasons: acceptance of a more contextual framework in developmental psychology; recent brain research that suggests that children's development is strongly influenced by experience and environment; a rising interest in risk factors experienced by children, such as poverty, and protective factors, such as affluence; and growing evidence that the accumulation of such factors affects the outcomes of children.

Research offers an intriguing glimpse into the role neighborhoods play in the lives of children, but it is far from complete. In some cases, findings are more the result of theoretical work than empirical evidence, and the pathways by which neighborhoods influence children and adolescents remain ripe for closer study.

## Do Neighborhoods Matter?

When neighborhoods are studied to determine their effects on child and adolescent outcomes, the outcome yardsticks used most often are school readiness and achievement, behavioral and emotional problems, and sexuality and child-bearing.

In general, the effects of a neighborhood are most often associated with the socioeconomic status (SES) of its residents. But the quality of a neighborhood has an effect over and above the SES of individual families, although neighborhood effects tend to be small, often accounting for no more than 5-10% of the variance in child and adolescent outcomes.

## School Readiness

Living among high-SES neighbors is consistently found to be associated with children being better prepared to enter school and with positive school achievement.

High SES is a factor that considers such neighborhood characteristics as percentage of professional workers and managers, percentage of residents earning more than \$30,000 a year, and the percentage of college-educated

residents.

When the SES of neighbors is high, young and early school-age children tend to have higher IQs, verbal ability, and reading recognition scores. In the Infant Health and Development Program (IHDP), no neighborhood effects were seen until children in the multi-site program for low-birth weight, premature infants turned three years old. Then, researchers noted, living in a high-SES neighborhood tended to have a positive effect on children's IQ scores.<sup>1</sup>

Among adolescents, those living in high-SES neighborhoods are more likely to complete high school, attend college, and finish more years of schooling than those living in middle-income neighborhoods.<sup>2</sup> In Chicago's Gautreaux Project, children of the low-income families who were moved from public housing to the more affluent suburbs were more likely to stay in school, enroll in college preparatory classes, and to go on to college than their peers who remained in the city.<sup>3</sup>

Studies also suggest that an exodus of neighbors employed in professional fields can spell trouble for neighborhood children. One study reported that higher school drop-out rates were seen when the number of professional or managerial workers fell below 5% of a neighborhood's population.<sup>4</sup>

## Behavioral and Emotional Problems

Behavior problems among children have been associated with several neighborhood characteristics, such as the SES of neighbors and the stability of the neighborhood. However, the findings are less consistent than those reported for cognitive and school outcomes.

Evidence suggests that living among neighbors of low SES is associated with poorer mental health of children and adolescents, more so for externalizing behaviors, such as acting out and aggression, than for internalizing behaviors, such as depression and withdrawal. Among three-year-olds, living in neighborhoods with few professionals and managers is associated with more internalizing and externalizing behavior problems.<sup>5</sup>

Among adolescents, regional studies, such as the Pittsburgh Youth Study, suggest that higher levels of criminal and

delinquent behavior are associated with growing up in neighborhoods where SES is low and welfare and unemployment rates are high. In Baltimore, African American teenagers who moved out of high-poverty districts were found less likely to be arrested for violent crimes, such as assault and rape, than peers who continued to live in poor neighborhoods.<sup>6</sup>

### **Sexuality and Childbearing**

Research suggests that various indicators of neighborhood SES may be associated with sexual activity among adolescents. For example, the likelihood of babies born to adolescents and unmarried women is higher in neighborhoods where few professional and managerial workers live.<sup>7</sup>

On the other hand, ample neighborhood resources is associated with lower risk of childbearing among unmarried women. Job opportunities, a neighborhood resource, has been linked to several sexuality outcomes among adolescent females. The timing of first intercourse and the risk of premarital sexual activity are associated with whether adolescent females are employed,<sup>8</sup> a finding researchers believe is largely due to the fact that those who work receive more adult monitoring and supervision.

### **How Neighborhoods Influence Development**

Theoretical work more than empirical research shapes much of what social scientists know about how neighborhoods influence the development and outcomes of children and adolescents.

The prevailing belief is that neighborhood influences are often indirect. Resources such as income, for example, may indirectly affect young children by influencing the behavior of parents.

Research suggests that the potential mechanisms through which neighborhoods influence children and youth include:

- Institutional resources, such as schools, child care, medical facilities, and job opportunities.
- Relationships, particularly those between parents and children.
- Norms/collective efficacy, including the extent of social connections that exist in a neighborhood and whether those who live in the neighborhood effectively monitor behavior according to shared values.

### **Institutional Resources**

An important neighborhood characteristic is the availability of child care, health care, and learning and recreation opportunities; the quality of those resources; and whether residents can afford to take advantage of them.

Generally, community learning activities, such as libraries, family resource centers, and literacy programs, are seen

influencing children's development, especially school readiness and achievement. But among three year olds, one study found that learning experiences at home influenced school readiness more than learning experiences children received outside the home.<sup>9</sup>

Parents seem to perceive these resources as important. When they cannot find them in their communities, many seek them elsewhere. In one study, such resource-seeking was found to be more common among disadvantaged African-American families than the practice of restricting children to the lean resources available in their neighborhoods.<sup>10</sup>

### **Child Care**

Child care is a neighborhood resource of growing importance given recent trends that include more demanding work schedules, greater numbers of mothers in the workplace, and the employment demands of welfare-to-work reform.

Whether child care is affordable and accessible and whether it is of high quality are factors that have been shown to influence children's learning experiences, behavioral functioning, and physical health. For example:

- Young children whose caregivers provide ample verbal and cognitive stimulation, who are sensitive and responsive, and who give them generous amounts of attention and support are more advanced in all realms of development compared with children who fail to receive these inputs.<sup>11</sup>
- Children in high-quality child care classrooms have better receptive language skills and better math skills. They also have better math skills when they enter kindergarten, although the effects tend to be less significant by second grade.<sup>12</sup>

### **Schools**

Schools are potential mechanisms of neighborhood influences that affect children and adolescents. Quality of education, climate, and other characteristics of schools that contribute to the developmental outcomes of children are shaped by neighborhood resources.

Just how strong an influence schools are remains unclear. Most available studies do not examine school and neighborhood characteristics in ways that reveal how school characteristics interact with neighborhood factors.

Research does suggest, however, that neighborhood characteristics have implications for schools and students. Among fifth and sixth grade students, for example, school factors, such as the availability and acceptance of alcohol and cigarettes, school safety, and attachment to school, were found to be associated with neighborhood characteristics, including median income, safety, and lifetime use of alcohol and cigarettes.<sup>13</sup>

## Medical Services

Although access to medical services is clearly a community resource important to the health of children, the extent of its role in the development of children is unclear. Most studies that examine the link between health outcomes, such as low birth weight, and neighborhood characteristics fail to measure the extent of the medical services available to residents. Nevertheless, one study found that children living in poor neighborhoods are likely to have more emergency room visits and fewer doctor visits than children in affluent neighborhoods.<sup>14</sup>

## Employment

Employment is an important neighborhood resource, although its impact, as reported in studies, is mixed.

Large survey samples tend to emphasize the negative consequences of adolescent employment, such as increases in problem behavior and drug and alcohol use. However, among low-income youth, several benefits are seen, including economic gains and greater adult monitoring. Such gains are associated with increased school engagement and lower levels of criminal and delinquent behavior.

Job opportunities in neighborhoods may also shape children's aspirations and perceptions of employment. Life in poor neighborhoods may not reflect the traditional view of the American work ethic and how children reconcile such contradictions might influence outcomes, such as schooling, teenage sexuality, and juvenile crime.<sup>15, 16</sup>

## Parent-Child Relationships

Children's relationships with their parents are important to their development, and certain characteristics of parents can influence how neighborhood factors affect their children.

A parent's mental health, level of irritability, physical health, and coping skills may play a role in determining the impact of neighborhood characteristics on children when those factors influence the way the parent behaves. For example, a study among African American families living in poor neighborhoods found that levels of parental efficacy mediated the use of family management strategies, such as monitoring and supervision, within the home and community. Such findings suggest that neighborhood disadvantage could influence mental and physical health of parents, which could affect parenting and, in some respect, the outcomes of their children.<sup>17</sup>

Also, the amount of social support available to parents may influence the degree of stress parents who live in dangerous and impoverished neighborhoods experience. The level of stress among parents can influence the way they parent.

Several empirical studies have linked neighborhood

characteristics to harsh and controlling parenting behaviors. For example:

- Parents who report living in more dangerous neighborhoods also report using more harsh control and verbal aggression with their children than parents who live in less dangerous neighborhoods.<sup>18</sup>
- Parents who moved to middle income neighborhoods reported using less harsh disciplinary practices than parents who stayed in poor neighborhoods.<sup>19</sup> Those who stayed in poor neighborhoods often set more restrictive neighborhood boundaries for their children, including restrictions on the peers with whom they are allowed to associate.

## In the Home

Living in a poor neighborhood is associated with lower-quality home environments as determined by cleanliness, safety, available space, and other factors. Such households are likely to have their largest influence on children's physical health. For example, higher rates of child injury, likely due to unsafe play areas within the home, is associated with living in poor neighborhoods.<sup>20</sup>

Exposure to violence in the home and in the neighborhood is another concern. In disadvantaged neighborhoods, children are at greater risk of being exposed to high levels of violence, which can affect their physical and mental health.<sup>21</sup>

## Norms/Collective Efficacy

Social connections arising from trust and shared values are vital to neighborhoods. Collective efficacy describes the breadth of a neighborhood's social connections and the extent to which residents are willing and able to monitor the behavior of others, particularly children and adolescents.

Studies that examine collective efficacy measure it in a number of ways. Some of the more telling factors include how likely neighbors are to intervene in situations such as children skipping school, a fight in front of their house, and a threat to close the local fire station because of budget cuts. Social cohesion is evaluated by how strongly residents feel neighbors are willing to help neighbors, whether they believe residents share similar values, and other factors.

Collective efficacy has been associated with lower rates of community violence and lower delinquency rates among adolescents.<sup>22</sup> And experts believe collective efficacy is critical for supervising and controlling adolescent peer groups, including youth gangs.

The influence of peers is believed to become stronger when a community lacks the will or ability to regulate the behavior of peer groups. Exposure to troublesome peers begins early. Studies suggest preschool children get more exposure to aggressive peers in their neighborhoods than in

child-care and family events. Children in low SES families and in single-parents families are more likely to be exposed to aggressive peers.<sup>23</sup>

Finally, serious risks found in certain neighborhoods – violence, crime, and easy access to drugs and alcohol, in particular – may also influence the development of children and adolescents. These risks are more likely to be widespread in neighborhoods where collective efficacy is weak and norms are lacking. Perhaps it is not surprising that the chief reason parents want to leave public housing neighborhoods is concern for the safety of their children.<sup>24</sup>

Available research, despite some shortcomings, strongly suggests that neighborhood characteristics play a key role in the development of children, particularly neighborhood SES, the availability of learning and other resources, and the collective efficacy of residents. More research is needed to better understand how various characteristics exert their influence. It is clear, however, that when working to improve children's chances for a bright future, the neighborhoods they grow up in must be considered

### References

Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, *126* (2), 309-337.

*This Special Report, written by Jeffery Fraser, is largely based on the above-referenced report. It is not intended to be an original work but a summary for the convenience of our readers. References noted in the text follow:*

<sup>1</sup> Brooks-Gunn, J., Duncan, G.J., Klebanov, P.K., & Sealander, N. (1993). Do neighborhoods influence child and adolescent development? *American Journal of Sociology*, *99*, 353-395.

<sup>2</sup> Duncan, G.J. (1994). Families and neighbors as sources of disadvantage in the schooling decisions of White and Black adolescents. *American Journal of Education*, *103*, 20-53.

<sup>3</sup> Rosenbaum, J.E., Kuliekie, M.J., & Rubinowitz, L.S. (1988). White suburban schools' responses to low-income Black children: Sources of successes and problems. *Urban Review*, *20*, 28-41.

<sup>4</sup> Crane, J. (1991). The epidemic theory of ghettos and neighborhood effects on dropping out and teenage childbearing. *American Journal of Sociology*, *96*, 1126-1159.

<sup>5</sup> Brooks-Gunn, Duncan, Klebanov, & Sealander, op. cit.

<sup>6</sup> Ludwig, J., Duncan, G.J., & Hirschfield, P. (1998). *Urban poverty and juvenile crime: Evidence from a randomized housing-mobility experiment*. Unpublished manuscript.

<sup>7</sup> Brooks-Gunn, Duncan, Klebanov, & Sealander, op. cit.

<sup>8</sup> Billy, J.O., Brewster, K.L., & Grady, W.R. (1994). Contextual effects on the sexual behavior of adolescent women. *Journal of Marriage and the Family*, *56*, 387-404.

<sup>9</sup> Klebanov, P.K., Brooks-Gunn, J., McCarton, C.M., & McCormick, M.C. (1998). The contribution of neighborhood and family income upon developmental test scores over the first three years of life. *Child Development*, *69*, 1420-1436.

<sup>10</sup> Elder, G.H., Eccles, J.S., Ardelt, M., & Lord, S. (1995). Inner-city parents under economic pressure: Perspectives on the strategies of parenting. *Journal of Marriage and the Family*, *57*, 771-784.

<sup>11</sup> Lamb, M.E. (1998). Nonparental child care: Context, quality, correlates. In W. Damon, I.E. Sigel, & K.A. Renninger (Eds.), *Handbook of Child Psychology*, *4*: Child Psychology in Practice, 5th Edition, pp.73-134. New York: John Wiley & Sons, Inc.

<sup>12</sup> Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Culkin, M.L., Howes, C., Kagan, S.L., Yazejian, N., Byler, P., Rustici, J., & Zelazo, J. (1999). *The children of the Cost, Quality, and Outcomes, Study go to school: Technical report*.

<sup>13</sup> Ennett, S.T., Flewelling, R.L., Lindrooth, R.C., & Norton, E.C. (1997). School and neighborhood characteristics associated with school rates of alcohol, cigarette, and marijuana use. *Journal of Health and Social Behavior*, *38*, 55-71.

<sup>14</sup> Brooks-Gunn, J., McCormick, M.C., Klebanov, P.K., & McCarton, C. (1998). Young children's health care use: Effects of family and neighborhood poverty. *Journal of Pediatrics*, *132*, 971-975.

<sup>15</sup> Billy, Brewster, Grady, op. cit.

<sup>16</sup> Ogbu, J.U. (1991). Minority coping responses and school experience. *Journal of Psychohistory*, *18*, 433-456.

<sup>17</sup> Elder, Eccles, Ardelt, & Lord, op. cit.

<sup>18</sup> Earls, F., McGuire, J., & Shay, S. (1994). Evaluating a community intervention to reduce the risk of child abuse: Methodological strategies in conducting neighborhood surveys. *Child Abuse and Neglect*, *18*, 473-485.

<sup>19</sup> Briggs, X.S. (Ed.) (1997). *Yonkers revisited: The early impacts of scattered-site public housing on families and neighborhoods*. New York: Teachers College.

<sup>20</sup> Durkin, M.S., Davidson, L.L., Kuhn, L., O'Connor, P., & Barlow, B. (1994). Low-income neighborhoods and the risk of severe pediatric injury: A small-area analysis in North Manhattan. *American Journal of Public Health*, *84*, 587-592.

<sup>21</sup> Martinez, J.E., & Richters, P. (1993). The NIMH, Community Violence Project: II. Children's distress symptoms associated with violence exposure. *Psychiatry*, *56*, 22-35.

<sup>22</sup> Sampson, R.J., Raudenbush, S.W., & Earls, F. (1997, August 15). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, *277*, 918-924.

<sup>23</sup> Sinclair, J.J., Pettit, G.S., Harest, A.W., Dodge, K.A., & Bates, J.E. (1994). Encounters with aggressive peers in early childhood: Frequency, age difference, and correlates of risk behaviour problems. *International Journal of Behavioral Development*, *17*, 675-696.

<sup>24</sup> Briggs, X.S. (1997). Moving up versus moving out: Neighborhood effects in housing mobility programs. *Housing Policy Debate*, *8*, 195-234.

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