Neighborhood Inequality, Social Environment, and Health

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Overview

- The current state of neighborhood inequality
- Why does neighborhood inequality matter?
  Neighborhood effects on youth outcomes
- The mechanisms of neighborhood influence
- Columbus, OH as a case study - the Adolescent Health and Development in Context study
Neighborhood Inequality in the US

- Profound differences across neighborhoods

<table>
<thead>
<tr>
<th></th>
<th>Most advantaged</th>
<th>Least advantaged</th>
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<td>Average annual income</td>
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### Neighborhood Inequality in the US

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Consequences of High Poverty Neighborhoods

- Crime/Violence
- STD/HIV
- Teen pregnancy/childbirth
- Low birth weight
- Infant mortality
- Psychological distress
- Reduced physical health
- Diminished educational outcomes/school leaving
Consequences of High Poverty Neighborhoods – MTO

- Long-term economic prospects

The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment*

Raj Chetty, Nathaniel Hendren, and Lawrence F. Katz
Harvard University and NBER
August 2015

Abstract

The Moving to Opportunity (MTO) experiment offered randomly selected families living in high-poverty housing projects housing vouchers to move to lower-poverty neighborhoods. We present new evidence on the impacts of MTO on children’s long-term outcomes using administrative data from tax returns. We find that moving to a lower-poverty neighborhood significantly improves college attendance rates and earnings for children who were young (below age 13) when their families moved. These children also live in better neighborhoods themselves as adults and are less likely to become single parents. The treatment effects are substantial: children whose families take up an experimental voucher to move to a lower-poverty area when they are less than 13 years old have an annual income that is $3,477 (31%) higher on average relative to a mean of $11,270 in the control group in their mid-twenties. In contrast, the same moves have, if anything, negative long-term impacts on children who are more than 13 years old when their families move, perhaps because of the disruption effects of moving to a very different environment. The gains from moving fall with the age when children move, consistent with recent evidence that the duration of exposure to a better environment during childhood is a key determinant of an individual’s long-term outcomes. The findings imply that offering vouchers to move to lower-poverty neighborhoods to families with young children who are living in high-poverty housing projects may reduce the intergenerational persistence of poverty and ultimately generate positive returns for taxpayers.
Context and physiological stress
Structural factors and potential mediators

Economic disadvantage

Collective efficacy

Orgs Amenities

Violence Disorder

Social networks

Social ecologies

Racial segregation

Residential instability

Foreign born composition
Adolescent Health & Development in Context (AHDC)

- Effects of sociospatial & institutional exposures on risk behavior, victimization, and health
- Representative sample of urban youth ages 11-17 and caregivers in Franklin County, OH (N=1400).
- Co-investigators
  - Kate Calder (OSU Statistics)
  - Jodi Ford (OSU Nursing)
  - Elizabeth Cooksey (OSU CHRR)
  - Mei-Po Kwan (UIUC Geography)
Challenges to Neighborhood Effects Research

- Which mechanisms are most important in explaining the link between structural disadvantage and wellbeing?
- Do neighborhoods capture exposures?
AHDC Study Design
(Repeated Over 2 Waves)

Visit One: Entrance Survey
- Main Caregiver & Youth Surveys
- Youth: Network Partners
- Both: Routine Locations

EMA/GPS Week
- Youth: smartphone for 1 week
- EMA: 5 Short Surveys/Day
- GPS Location Tracking
- Nightly saliva (cortisol)

Visit Two: Exit Survey
- Youth: Space/Time Diary
- Caregiver: Community Survey
- Hair cortisol Epstein-Barr virus
Locations of Routines for AHDC Caregivers

“Now, I would like for you to think of the places you go to during a typical week, including weekends

- Workplace
- School/college
- Library
- Church or other place of worship
- Grocery store
- Relative’s house
- Friend’s house
- Recreation center/park/sports facility
- Restaurant
- Store or other business
- Civic/neighborhood organization
- Someplace else
Collect XY coordinate data for routine activity locations
Location Reports

- 8,579 location reports from ~1400 CGs
Study area – within I270
Mean = .30
Mean = .32
Percent of Population without a HS Degree

Mean = .14
Mean = 0.21
Potential mechanisms – violence/disorder

Violent Crime Rate (2005–2012) [Log-Scale]
Potential mechanisms – violence/disorder

% of Locations where Caregivers Know Someone was Attacked

longitude

latitude
Potential mechanisms – violence/disorder
Potential mechanisms – violence/disorder

Caregiver-Rated Physical Disorder (Log-Scale)
Potential mechanisms – ecologies
Potential mechanisms – collective efficacy / monitoring
Potential mechanisms – collective efficacy / willingness to intervene

Locations where Caregivers think Neighbors would Come to the Defense of the Threatened
Potential mechanisms – collective efficacy / trust

Locations where Caregivers Trust People on Nearby Streets
Potential mechanisms – social networks