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Patterns of Neighborhood Relocation in a Longitudinal HOPE VI Natural Experiment: The Genes, Environment, and Neighborhood Initiative (GENI) Study

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Abstract

In this paper, the researchers test the underlying tenants of a natural experiment based in federal housing program HOPE VI that (1) youth and their neighborhood characteristics were similar between HOPE VI and control neighborhoods prior to relocation; and (2) that HOPE VI families moved to improved neighborhoods. In testing these assumptions, they advance understanding of patterns of family relocation in HOPE VI programs. The study sample is unique as it is linked to a longitudinal study; this addresses an important limitation of many housing relocation studies which is the lack of pre-relocation data to determine whether groups differed in any substantial way prior to moving.

Background

Housing relocation policies and programs have attempted to address and improve the social, health, education and economic circumstances of residents through neighborhood improvement or relocation. The original intent of the federal housing relocation program known as HOPE VI was to move families to less impoverished neighborhoods and build more sustainable communities, although this was often difficult to achieve.¹ Research on HOPE VI programs, which varied across the United States, generally shows that people moved to nearby, lower poverty neighborhoods that were as racially segregated as their original neighborhoods and still relatively high in poverty. Residents generally reported feeling safer in their new neighborhoods, but still experienced greater residential instability, loss of social support, limited or no improvement in educational and employment opportunities, and no improvements in physical or mental health outcomes.^{2,3}

Natural experiments involving families relocating to new neighborhoods can permit the evaluation of independent effects of neighborhood on risk taking by removing the confound of selection effects, but such opportunities are very rare and difficult to achieve.⁴⁻⁶ The Moving to Opportunity (MTO) studies are the best known example of this type of work. The MTO sought to randomly assign residents of public housing in five cities to a "treatment" group (i.e. these families received Section 8 vouchers to move to a neighborhood with a poverty rate of less than 10%) or two "control" groups, one received regular vouchers (i.e. these families were unlikely to move to low poverty neighborhoods) and the other did not receive vouchers (i.e. these families remained in public housing). Studies of the long-term effects of MTO on youth outcomes show that girls in the experimental group experienced fewer mental health problems, but there were few effects for youth in terms of risky behaviors.⁷ In general, results from MTO indicate that while participants reported feeling safer in their new neighborhoods, there was little impact in

terms of academic achievement for youth, or on physical and mental health outcomes for all ages, except as noted for girls.⁷

The HOPE VI and MTO studies utilized both subjective and objective measures and outcomes. The importance of studying subjective neighborhood factors such as collective efficacy, physical and social disorder, and exposure to violence, when examining adolescent mental health and risky behaviors has been established.⁸⁻¹¹ Low income/socioeconomic status has also been linked to a host of negative health outcomes,¹²⁻¹⁶ but this relationship is partially mediated by neighborhood environment.¹⁷ Many researchers argue that the negative effects of poverty partially manifest themselves as social disorganization.¹⁸⁻²² For example, Cohen et al. (2000) found that a "broken window" index (i.e. housing quality, abandoned cars, trash) explained more of the variance in rates of gonorrhea across neighborhoods than an index of poverty.¹⁵ Neighborhood support is associated with lower levels of individual adolescent problem behaviors, including conduct problems, substance use, and risky sexual behavior.^{23,24} Neighborhood violence is associated with higher levels of individual adolescent problem behaviors.^{25,26} A review of studies by Leventhal & Brooks-Gunn (2000) found that neighborhood disadvantage is associated with greater conduct problems in childhood and adolescence.²⁷

Current Study. The Genes, Environment, Neighborhood Initiative (GENI) study, funded by the NIH, investigates the interplay between neighborhood and genetic factors in predicting a cluster of HIV risk factors among urban impoverished African American youth; this cluster of HIV risk factors includes sexual risk taking, substance use, and externalizing problems. The core of this interdisciplinary project was a natural experiment in which the intent was for a sample of adolescents from an ongoing longitudinal, multiple cohort study to relocate out of an

impoverished public housing development to more advantaged neighborhoods as part of the federal HOPE VI program. By capitalizing on this natural experiment, this study contributes to the understanding of the psychobiology of adolescent risk taking, the role of neighborhoods in HIV risk, and how genetic susceptibility can be moderated by neighborhood environment. By linking the sample to the longitudinal study, this study has the unique ability to examine pre- and post-move trends and trajectories regarding risk behaviors and neighborhood factors; this addresses an important limitation of many housing relocation studies which is the lack of pre-relocation data to determine whether groups differed in any substantial way prior to moving.

The focus of this paper, and the first step in meeting the GENI study objectives, is to determine whether there are differences in pre- and post- relocation neighborhood environment between the treatment and control groups and between the pre- and post-relocation neighborhoods of the HOPE VI treatment participants. Pre-relocation data allows for statistical control of between-group pre-relocation differences and within-subject pre-post relocation contrasts, so findings can be attributed to the move and not to other factors. Rigorous study of the effects of neighborhoods on health and health behaviors requires the inclusion of both subjective and objective measures, with research demonstrating that each explain unique variance.²⁸⁻³³ GENI data include subjective measures that focus on an individual's experience of personal and community violence/trauma and perceptions of collective efficacy and neighbor disorder. We also obtained objective measures from the U.S. Census Bureau. As such, our study tests not only the underlying assumptions of the GENI natural experiment, but contributes to understanding of patterns of relocation within HOPE VI programs.

Methods

Design

This project built on a 14-year, federally-funded, longitudinal, multiple cohort study of the effects of poverty on African American youth in Mobile, Alabama, known as the Mobile Youth Survey (MYS; PI: J. Bolland); the MYS has been described in detail elsewhere.³⁴⁻³⁶ The adolescents and caregivers were from the most impoverished neighborhoods in the Mobile, AL metropolitan statistical area.

Studies of neighborhood effects on adolescent risk behaviors have been severely limited by selection bias.³⁷ We sought to overcome this limitation by using a natural experiment in which a subset of MYS families, the HOPE VI families, relocated to other neighborhoods (i.e. "treatment condition"). We planned to contrast "treatment" families to a primary "control" group of families who remained in public housing, as well as to a secondary, smaller, "control" group of families who relocated to other public housing neighborhoods. The HOPE VI efforts in Mobile were complicated by the fact that the final relocation date (August 2005) coincided with the arrival of Hurricane Katrina, which strained the housing market due to hurricane-related damage as well as from people moving into Mobile from other cities that had even greater damage. As a result, many of the HOPE VI families moved to other public housing developments rather than private sector housing. Even so, these other public housing developments differ from one another on such factors as population density and rates of criminal and youth risk behaviors.

Recruitment

Adolescents were initially identified to participate in GENI as HOPE VI participants based on the address they provided in their MYS interview matching them to the public housing community targeted for HOPE VI. We expected that the GENI sample would include three

groups of youth who previously participated in the MYS: (1) A "treatment" group consisting of HOPE VI youth who relocated to private-sector housing; (2) a "control" group that included youth remaining in other, comparable public housing; and (3) a second "control" group of youth who relocated from HOPE VI into other public housing. We excluded families who did not previously participate in the MYS. This allowed us to capitalize on the MYS retention protocols for identifying and recruiting participants into the study when they were selected for their assessment. This also allowed us to use pre-relocation MYS data to compare pre-relocation variables between the HOPE VI and control groups.

After completion of their GENI interview, data used for determining membership in the treatment or control groups were obtained from several sources: caregiver report of addresses the adolescent(s) lived at since January 2004; records from the Mobile County Public School System (MCPSS); and records from the Mobile Housing Board (MHB). Since the addresses from the caregiver report sometimes did not match the addresses used to identify and recruit HOPE VI participants, we used MCPSS and MHB to verify participant addresses. Addresses were geocoded, allowing us to link neighborhood of residence with U.S. census tract and block data.

The final achieved sample consists of 592 adolescents aged 13 through 18 and 432 primary caregivers. Almost all adolescents (98.8%) were African American and 48.8% were male (Table 1).

Data collection

Participation in GENI involved an approximately two and a half hour interview for both the adolescent and his/her caregiver. We conducted interviews between March 2009 and October 2011. Whenever possible, measures were collected using an audio computerized selfadministered interview (ACASI) approach, which removed the need for interviewers to ask

sensitive questions, or through interviewer-administered questionnaires for less sensitive measures. Written parental consent/permission and youth assent were obtained. Caregivers and adolescents were compensated \$40 and \$30, respectively, for their participation and to offset travel costs.

Neighborhood ecology. The Neighborhood Ecology measure was adapted from the 14item Neighborhood Problems scale used in the Chicago Youth Development Study (CYDS).⁸ Respondents were asked to agree or disagree with a series of statements about their neighborhood and relationships with their neighbors. The original instrument used a four-point response scale (strongly disagree, disagree, agree, strongly agree) while the revised version used either agree or disagree. The scale was administered to both caregivers and adolescents. The Neighborhood Ecology scale can be split into subscales based on the physical (e.g., "There is too much graffiti in my neighborhood") and social (e.g., "There is too much drug use in my neighborhood") environment. Reliability for both adolescent report (total: $\alpha = .83$; physical $\alpha =$.71; social $\alpha = .82$) and caregiver report (total: $\alpha = .85$; physical $\alpha = .74$; social $\alpha = .81$) was good.

Exposure to violence was adapted from the CYDS scale of the same name and was administered to caregivers and adolescents. The phrase "…in your neighborhood" was added to the end of all but the last question. Some revisions to questions occurred. For example, "Have you seen anyone shot or killed" was revised into two questions: "Have you EVER seen anyone get shot or stabbed/cut in your neighborhood?" and "Has a close friend of yours or family member EVER been killed in your neighborhood?" The phrase "or rape" was added to the question about being a victim of sexual assault. A question about being forced to do something sexual against your will by someone you knew was added. Three questions were not included in

the revised document; these questions pertained to witnessing other violent crime, being the victim of violent crime, and being the victim of nonviolent crime. If a respondent answered yes to any question, they were then asked whether they had experienced that event in the last 12 months. Reliability was adequate for both adolescent ($\alpha = .76$ for both ever exposed and exposed in last 12 months) and caregiver ($\alpha = .71$ for ever exposed, $\alpha = .65$ for exposed in last 12 months) reports.

Collective efficacy. The Collective Efficacy scale was adapted from previous work by Sampson, Raudenbush, and Earls³⁸ and Morenoff, Sampson, and Raudenbush³⁹. The first four/five items on the adolescent/caregiver versions comprise the Informal Social Control (ISC) scale (e.g., "How likely is it that your neighbors would get involved or intervene if children were skipping school and hanging out on a street corner?") while the latter five items on each version comprise the Social Cohesion and Trust (SCT) scale (e.g., "How strongly do you agree with the statement "People around here are willing to help their neighbors"). The only change to the original Collective Efficacy instrument was that the question "How likely is it that your neighbors would get involved or intervene if the fire station closest to your home were threatened with budget cuts?" was dropped from the adolescent version. Therefore, adolescents received the 9-question version and caregivers received a 10-question version. Reliability was good for the total scale ($\alpha = .70$ for adolescents, .84 for caregivers) and acceptable for the subscales given the small number of items (ISC: $\alpha = .85$ for adolescents, .86 for caregivers; SCT: $\alpha = .60$ for adolescents, .66 for caregivers).

MYS neighborhood measures. As part of the MYS, participants were asked a question about neighborhood safety ("How much of the time do you feel unsafe in your neighborhood?") as well as eleven questions about their feelings about their neighborhood (e.g., "I have friends in

my neighborhood I can depend on."). Other analyses have used the MYS neighborhood feelings items.⁴⁰ The neighborhood feelings questions were combined to create a neighborhood feelings scale.

U.S. census data. Using methods described in a review of how neighborhood affects youth health and well-being,²⁷ we used 2000 and 2010 U.S. Census data in combination with participant reported addresses to objectively assess neighborhood environment. We formed factor scores based on low socioeconomic status (SES; percentage of unemployed residents, families living below the poverty line, families headed by a single parent, and households receiving public assistance), high SES (percentage of residents with a college degree, residents classified as professional or management, families with income of \$75,000 or higher, and median family income), residential stability (percentage of residents in the same home since 1995 and percentage of housing units that are owner occupied) and racial makeup (percentage of African American residents) for each participant based on their location.

Analyses

Census tract-level data. Participants were asked to provide all residential addresses beginning with January 2004. In order to research the impact of changing neighborhoods on risk outcomes, we matched addresses with their census tract data. Factor scores were calculated at the census tracts level rather than at the participant level. Once factor scores were calculated at the tract level, they were then applied to individual participants based on their address data. Because there were varying numbers of individuals in each tract, these scores no longer maintained a normalized distribution (i.e., mean of 0 and standard deviation of 1). Addresses reported for the time between 2000 and 2005 were matched with data from the 2000 U. S. Census. Addresses reported after 2005 were matched with data from the 2010 U. S. Census.

Census tracts were categorized in several ways. First, census tracts were designated at post-relocation as having any HOPE VI participants, any control group participants, or no GENI participants. Second, the top six tracts for HOPE VI participant relocation were identified, representing 47% of HOPE VI participants. Finally, and similar to an Atlanta housing study,³ the census tracts were designated as high/medium/low- or non- receiving based on the number of HOPE VI participants who moved into each tract: 13 or more participants for high receiving (HR) tracts; 5-12 participants for medium receiving (MR) tracts; 1-4 participants for low receiving (LR) tracts; 0 for non-receiving (NR) tracts. NR tracts were further delineated based on whether any GENI control participants lived there (NR-G). T-tests and ANOVAs were used to compare mean values of the different census tract categorizations.

Treatment/control group differences. Independent samples t-tests and chi-square difference tests were used to test whether youth in the HOPE VI program and control youth were comparable before the relocation. We report significance of findings both with and without a Bonferonni correction for multiple testing.

Results

Pre-relocation neighborhood and individual differences. To test a central premise of our "natural experiment," that youth in the HOPE VI program and control group were comparable before the relocation, we compared HOPE VI participants and controls using self-reported MYS demographic and pre-move risk factors from the 2003 and 2004 MYS surveys (data not shown). Independent sample t-tests indicated no differences on age, feelings about their neighborhood, conduct problems, drug use, and number of different sex partners at either 2003 or 2004. Using chi-square difference tests, there were no differences in gender, race, school attendance, receipt

of free school lunch, absence of mother, absence of father, household structure, smoking in past 30 days, alcohol use in past 30 days, marijuana use in past 30 days, cocaine use in past 30 days, school expulsion in previous year, arrest in previous year, physical fight in past 90 days, carrying a knife in past 90 days, and sex in past 90 days at either 2003 or 2004. In 2003, participants from the control sample had a greater likelihood of being suspended compared to HOPE VI participants (29.3% vs. 17.1%, p < .05), and were less likely to have never used a condom during sex in the last 90 days (13.8% vs. 29.5%, p < .05). There were no differences found at 2004 for school suspensions or condom use. In 2004, controls were less likely to have spent time with a gang member compared to HOPE VI participants (14.8% vs. 23.8%, p < .05), but not at 2003. These differences are no longer significant after adjusting for multiple testing.

Comparisons of pre-move 2000 census data revealed a different environment for HOPE VI and control participants. Prior to the move, HOPE VI participants lived in census tracts with more indicators of low SES (2.57 vs. 1.09, p < .001), fewer indicators of high SES (-1.29 vs. - .80, p < .001), less residential stability (-1.56 vs. -.67, p < .001), and a higher African American population (98.9% vs. 84.7%, p < .001).

Pre-and post-relocation differences for HOPE VI participants. Post-move factor scores were assigned to each participant based on the census tract participants reported moving to as part of the HOPE VI program. To determine if HOPE VI participants moved to better or worse neighborhoods, we calculated the difference pre- and post- move on these four variables. Based on the literature,^{41,42} we considered a change of a half-standard deviation or greater in either direction to be a meaningful change. Using those criteria, 73.9% of HOPE VI participants showed a decrease in low SES indicators (1.9% saw an increase), 80.3% showed an increase in high SES indicators (13.4% saw decrease), 75.2% showed an increase in residential stability

(5.7% saw decrease), and 38.2% moved to more racially diverse tracts (no one moved to less diverse tracts). Cumulatively, 96.8% of the HOPE VI participants moved to tracts that were an improvement, according to at least one census indicator. Therefore, there was not a second planned control group of HOPE VI participants who moved to less advantaged neighborhoods; this resulted in one treatment (n=158) and one control group (n=434). Note that the new neighborhoods were still impoverished based on national norms, just less impoverished than their prior HOPE VI public housing community.

Post-relocation group differences in objective neighborhood measures. At the time of the study interview, participants lived in 64 of Mobile's 114 census tracts. The HOPE VI participants lived in 41 tracts and the control participants lived in 57 tracts; there were 34 tracts that had both HOPE VI and control participants. The census tracts with any GENI participants, regardless of HOPE VI or control group status, had significantly worse census indicators – higher percentage of racial segregation, less residential stability, more indicators of low SES and fewer indicators of high SES – than the other Mobile tracts (Table 2). The top six HOPE VI receiving tracts showed significantly worse census indicators, except for residential stability, than tracts with GENI participants as well as compared to all Mobile tracts.

Examination of receiving tracts by number of participants who moved there shows that as the tracts increase from low to medium to high receiving, the census indicators worsen for racial segregation, low SES and high SES (Table 3). The NR group without any GENI participants is generally the group responsible for the differences, although there are significant differences between the LR, MR, and HR groups for low SES.

Group differences in subjective neighborhood measures. Post-relocation, there were no significant differences between the groups in adolescent reports of neighborhood disorder,

collective efficacy or exposure to violence (Table 4). Based on caregiver reports, past year exposure to violence was significantly better for the HOPE VI group than the control group. Using MYS data on neighborhood safety and feelings about one's neighborhood (data not shown), both HOPE VI and control group participants felt significantly safer in their neighborhood at the time of the GENI interview than prior to the HOPE VI relocation; neither group showed significant differences in their feelings about their neighborhood at pre- and postrelocation.

Discussion

An important limitation of many relocation studies is the lack of pre-relocation data to determine whether groups differed in any substantial way prior to moving. Pre-relocation data allows for statistical control of between-group pre-relocation differences and within-subject pre-post relocation contrasts, so findings can be attributed to the move and not to other factors. Another limitation of many studies, particularly observational studies, is the inability to account for differences between groups.⁴³ The GENI study overcomes these limitations by taking advantage of a rare natural experiment, where some families who had participated in an ongoing longitudinal study, the MYS, were relocated to more advantaged neighborhoods.

The goal of the GENI study is to understand the psychobiology of adolescent risk taking, the role of neighborhoods in risk taking behaviors, and how genetic susceptibility can be moderated by neighborhood environment. However, before understanding how neighborhood affects or moderates health risk, it is critical to understand the changes that participants experienced in regard to pre- and post-relocation neighborhood characteristics. Due to the fact that our study was linked to a longitudinal study, we were able to assess and compare HOPE VI

and comparison group participants on pre-move demographic and risk factors. We found that the two groups were similar on all factors. However, using objective census data, HOPE VI participants started off in worse environments than the control group participants. As we have pre-relocation data available, our analyses of health outcomes and risk behaviors will enable us to statistically control for census tract differences between the groups prior to relocation while knowing that the groups were similar on subjective measures.

One important question was whether the HOPE VI participants moved to better neighborhoods. Based on objective census data, almost all of them unequivocally moved to better, albeit still impoverished, neighborhoods. Even so, when examining differences among census tracts based on whether there were any GENI, HOPE VI or control group participants, we found that the top six census tracts where HOPE VI residents moved to had even worse SES and racial segregation indicators than other tracts in the metropolitan area or even only tracts with GENI participants.

However, post-relocation subjective measures of neighborhood disorder, collective efficacy, and exposure to violence were no different between the two groups of adolescents. Using MYS data for some of the GENI participants, both groups of adolescents reported feeling less unsafe in their current neighborhood. These findings are consistent with a review of HOPE VI program research which showed limited improvements for residents, particularly at the individual level compared to the community level.⁴⁴ As described earlier, neighborhood effects have been shown in other research to impact adolescent risk behaviors; since there are no significant differences in subjective neighborhood measures between the two groups, it will be informative to examine whether there are differences in health and well-being between the

HOPE VI and control groups and what factors may be mediating or moderating these differences.

As we move forward with examining health and risk behavior outcomes as well as gene by environment interactions in our sample, we now have a clear understanding of how the neighborhood variables changed for study participants pre- and post-relocation. Prior research has demonstrated the importance of understanding neighborhood environment when examining health and behavior outcomes. While there are some limitations in terms of availability of comparable neighborhood data at different time points, the available information allows us to better recognize the role of how various factors affect the risky behavior of adolescents in our sample.

Variable	% (No.)			
Adolescent Characteristics	Overall	HOPE VI	Controls	
Sex				
Male	48.8 (289)	47.5 (75)	49.2 (211)	
Female	51.2 (303)	52.5 (83)	50.8 (218)	
African American	98.8 (584)	98.1 (155)	99.1 (425)	
Age*				
13	1.7 (10)	2.5 (4)	1.6 (7)	
14	19.1 (113)	10.1 (16)	22.6 (97)	
15	20.5 (121)	17.7 (28)	20.5 (88)	
16	20.5 (121)	30.4 (48)	17.2 (74)	
17	20.6 (122)	30.4 (48)	17.9 (77)	
18	17.6 (104)	8.9 (14)	20.0 (86)	
School Attendance Status ^a				
Yes, regular school program	80.5 (475)	69.0 (109)	84.1 (361)	
Yes, vocational/technical	0.7 (4)	.6 (1)	.7 (3)	
Yes, special education for limited abilities	0.2 (1)	0 (0)	.2 (1)	
Home schooling	0.3 (2)	1.3 (2)	0 (0)	
Not in school	4.2 (25)	10.1 (16)	2.1 (9)	
Dropout	3.7 (22)	6.3 (10)	2.8 (12)	
GED program	4.9 (29)	9.5 (15)	3.3 (14)	
Graduated/completed school	3.7 (22)	1.9 (3)	4.4 (19)	
Other	1.7 (10)	1.7 (10) 1.3 (2)		
Caregiver Characteristics				
Currently Working				
Yes	40.4 (239)	40.7 (48)	41.2 (128)	
No	59.6 (352)	59.3 (70)	58.8 (183)	

Table I. Participant Demographics (N=592 Adolescents)

Educational Level ^b			
Less than high school	47.9 (283)	50.5 (59)	43.9 (137)
High school graduate	27.9 (165)	33.3 (39)	26.6 (83)
Some college/specialized training	18.8 (111)	10.3 (12)	23.4 (73)
College graduate or higher	5.4 (32)	6.0 (2)	6.1 (19)
Marital Status			
Married	17.6 (104)	15.4 (18)	21.2 (66)
Never married/no live-in partner	53.9 (318)	51.3 (60)	51.4 (160)
Separated/divorced/widowed	25.6 (151)	28.2 (33)	24.8 (77)
Live-in partner	2.9 (17)	5.1 (6)	2.6 (8)
Amount Lived on Past Year			
<\$10,000	50.7 (299)	47.0 (55)	52.2 (163)
\$10,000-\$19,999	33.6 (198)	33.3 (39)	31.7 (99)
\$20,000-\$29,999	8.8 (52)	10.3 (12)	8.7 (27)
\$30,000 or more	6.9 (41)	9.4 (11)	7.4 (23)
Relationship to Child			
Biological mother	74.5 (441)	72.0 (85)	72.1 (225)
Other female	16.9 (100)	17.8 (21)	17.6 (55)
Any male	8.6 (51)	10.2 (12)	10.3 (32)

*Mean age=15.9 (sd=1.42)

^a Chi-square testing shows that school attendance status was significantly different between HOPE VI and control group participants, p<..001. ^b Chi-square testing shows that caregiver educational level was significantly different between HOPE VI and control

group participants, p<..05.

		TT	T (HODELH		
	Tracts w/GENI	Tracts without	Top 6 HOPE VI	Other Tracts	All Other Tracts
	(n=64)	GENI(n=50)	Tracts $(n=6)$	w/GENI $(n=58)^a$	$(n=108)^{a}$
	(11 0 1)	GEI (II 50)		W/GERI (II 50)	(1 100)
	M(SD)	M (SD)	M(SD)	M (SD)	M (SD)
Racial Segregation					
	62 53 (31 15)	22 15 (21 68)***	87 58 (19 10)	59 95 (31 11)*	42 45 (33 00)**
(0/ D1 - 1)	02.55 (51.15)	22.13 (21.00)	07.50 (17.10)	59.95 (51.11)	42.45 (55.00)
(% Black)					
Residential Stability	21 (.95)	.27 (1.01)*	38 (1.01)	19 (.95)	.02 (1.00)
	1 (, (1.01)			
L. SES	20 (1.0()	52 ((1)***	21((110))	21 (97)***	12 (04)***
Low SES	.39 (1.06)	52 (.61)***	2.16 (1.18)	.21 (.87)***	12 (.84)***
High SES	- 25 (87)	32 (1 07)**	-1.06(14)	- 16 (87)***	06 (99)***
	(.07)		1.00(.11)		

Table II. Tract Group Differences in Census Variables

^aCompared to Top 6 HOPE VI tracts

*p<.05, **p<.01, ***p<.001

Outcome	High Receiving (HR) (N=1)	Medium Receiving (MR) (N=9)	Low Receiving (LR) (N=31)	Non Receiving -GENI (NR-G) (N=23)	Non Receiving (NR) (N=50)	ANOVA Results		
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	(df=3)	p- value	Scheffe
Racial Segregation (% Black)	97.60 (-)	86.66 (16.04)	60.47 (29.89)	54.37 (33.13)	22.15 (21.68)	19.32	<.001	NR vs. NR-G***, NR vs. LR***, NR vs. MR***, NR vs. HR**
Residential Stability	-2.22 (-)	06 (.59)	18 (1.08)	21 (.81)	.27 (1.01)	2.81	<.05	NR vs. HR*
Low SES	3.74 (-)	1.48 (.95)	.22 (.82)	.05 (.91)	52 (.61)	20.52	<.001	NR vs. LR**, NR vs. MR***, NR vs. HR***, NR-G vs. MR***, NR-G vs. HR***, LR vs. MR***, LR vs. HR***, MR vs. HR***
High SES	-1.19 (-)	96 (.21)	15 (.82)	05 (.97)	.32 (1.07)	4.33	<.01	NR vs. MR**

Table III. Tract Group Differences in Census Variables based on Receiving Level

*p<.05, **p<.01, ***p<.001

	Hope VI	Control
	Mean (SD)	Mean (SD)
Adolescent Report		
Neighborhood disorder, physical	5.00 (2.19)	4.87 (2.25)
Neighborhood disorder, social	3.87 (2.07)	3.86 (2.05)
Collective efficacy, informal social control	3.33 (1.17)	3.47 (1.19)
Collective efficacy, social cohesion and trust	3.09 (0.74)	3.09 (.79)
Exposure to Violence, past 12 months	1.63 (1.77)	1.81 (1.95)
Caregiver Report		
Neighborhood disorder, physical	2.83 (2.34)	3.19 (2.33)
Neighborhood disorder, social	2.21 (2.16)	2.34 (2.05)
Collective efficacy, informal social control	2.53 (1.10)	2.62 (1.19)
Collective efficacy, social cohesion and trust	2.85 (0.73)	2.88 (0.82)
Exposure to Violence, past 12 months	1.14 (1.45)*	1.51 (1.58)

Table IV. Post-Relocation GENI Subjective Neighborhood Measures

*p<.05 from control group

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