Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 88, No. 3
doi:10.1007/s11524-011-9579-0

Sense of Place among Atlanta Public Housing Residents

Griff Tester, Erin Ruel, Angela Anderson, Donald C. Reitzes, and Deirdre Oakley

ABSTRACT *For almost two decades now, cities around the country have been demolishing traditional public housing and relocating residents to subsidized private market rental housing. In this paper, we examine sense of place, consisting of both community and place attachment, among a sample of Atlanta public housing residents prior to relocation (N=290). We find that 41% of the residents express place attachment, and a large percentage express some level of community attachment, though residents of senior public housing are far more attached than residents of family public housing. Positive neighborhood characteristics, such as collective efficacy and social support, are associated with community attachment, and social support is also associated with place attachment. Negative neighborhood characteristics, such as social disorder and fear of crime, are not consistently associated with sense of place. We argue that embodied in current public housing relocation initiatives is a real sense of loss among the residents. Policy makers may also want to consider the possibilities of drawing upon residents' sense of place as a resource for renovating and revitalizing public housing communities rather than continuing to demolish them and relocating residents to other neighborhoods.*

KEYWORDS *Sense of place, Place and community attachment, Public housing transformation*

INTRODUCTION

In 1992, the HOPE VI (Housing Opportunities for People Everywhere) Program was created by the US Department of Housing and Urban Development. This program sought to transform public housing by demolishing the large, spatially concentrated developments and replacing them with mixed-income housing. The Atlanta Housing Authority (AHA) has been at the forefront of such efforts, building 10 nationally acclaimed mixed-income projects between 1994 and 2004, and gaining reputation as a leader in rethinking public housing and addressing its perceived failures.

By the early 1990s, public housing had been deemed a policy failure because it concentrated very poor people by design. Thus, its primary failure was the concentration of poverty.[1] Concentrated poverty is typically associated with a multitude of social and physical ills: high unemployment rates; high school dropout rates; single, female-headed households; high crime rates; and poor physical and mental health.[2–6] Thus, as Greenbaum[1] argues, public housing has become a very

Tester, Ruel, Anderson, Reitzes, and Oakley are with the Department of Sociology, Georgia State University, Atlanta, GA, USA.

Correspondence: Erin Ruel, Department of Sociology, Georgia State University, Atlanta, GA 30303, USA. (E-mail: eruel@gsu.edu)

unpopular welfare program. Furthermore, she states that policies focused on demolishing public housing and relocating former residents into private market rental housing with the help of voucher subsidies have gained wide support from a variety of political perspectives.

Yet research conducted over the last decade has repeatedly demonstrated that public housing residents who relocate with vouchers typically end up in other poor, segregated inner-city neighborhoods that are often within a few miles of the demolished public housing communities.[7–9] These neighborhoods do have lower poverty rates than public housing communities; however, they are still poor. Thus, it is unclear what improvements, if any, former public housing residents experience in terms of quality of life.[10]

Does sense of place play a role in why relocated public housing residents typically do not move far from their former public housing communities? Much of the previous research has neglected this, yet it is possible that the sense of place residents experienced in their former public housing communities plays a role in why they do not relocate to low-poverty neighborhoods, which tend to be located farther away. Research by Fullilove[11] demonstrates the strength of place attachment. She found that after urban renewal policies implemented between the 1970s and 1990s, the attachments that dislocated residents experienced to their former communities led to a health condition she calls "root shock," a form of posttraumatic shock disorder. Further, she found that the dislocated residents were never able to recreate the community ties and support networks lost through the destruction of their places.[11]

The communities destroyed by urban renewal were not public housing projects; rather, they were lower-income, primarily African American communities. Thus, residents did not experience the stigma associated with place that public housing residents face. It is possible that dislocated public housing residents experience root shock as well, particularly if they had strong ties to their public housing community.[12] This may be one possible impediment that explains why relocated residents have experienced little quality of life improvement.

We have a unique opportunity to address the sense of place, including both place attachment and community attachment, among public housing residents in Atlanta who were relocated. In 2007, AHA announced they would eliminate all remaining family-based public housing projects and two senior/disabled high-rise projects by 2010. Using quantitative data from a survey of public housing residents prior to relocation, we ask the following questions: (1) How attached are public housing residents to their public housing places? (2) Does this differ by type of public housing community? (3) What neighborhood characteristics are associated with residents' sense of place?

A major contribution of our paper is to extend the qualitative findings of Manzo et al.[12] on sense of place among public housing residents by testing place and community attachment quantitatively on a larger sample of residents. We further expand this body of literature by examining these attachments to both senior/disabled housing as well as family housing. As a growing body of research finds mixed or inconclusive evidence as to whether these massive relocations improve the lives' of relocated residents, we argue that an increased understanding of residents' sense of place can better inform policy.

BACKGROUND

The literature on place is multidisciplinary, attracting scholars from phenomenological geography, environmental psychology, anthropology, and urban sociology,

among others. It spans at least 50 years of active research, including groundbreaking works by Jacobs, Fried, and Gans.[13–16] In fact, the very diversity of backgrounds and theoretical perspectives has led to the development of numerous place-related concepts that are often used inconsistently, creating tensions and debates within the literature.[17,18] While some scholars have called the literature "messy" because of the various interests and concepts,[18,19] others argue that the diversity of research traditions and concepts strengthen the literature.[20]

Regardless of these tensions, place scholars generally agree that people's relationships to places are fluid, malleable, and evolve over time.[21,22] One emerging consensus is the recognition that setting, location, and space become a *place* as individuals and groups invest them with meaning, value, and affect. At least three different related concepts that are included in the overarching concept of *sense of place*, or the meaning given to a place by a person or group, have been proposed to understand the relationship between people and places: (1) identity, (2) attachment, and (3) dependence.[23]

Place identity[16] focuses on the relationship between self-concept and place. It explores the processes by which individuals create situated self-meanings and bonds to places.[24–26] A cognitive component of place identity refers to a person's identification with a place. A neighborhood identity or city identity communicates shared social meanings about the person and highlights a distinctive characteristic or quality shared with others in the area.[21] In addition, a place identity, similar to identities formed through common role occupancy or social group membership, can be invested with belonging and commitment, and can vary in its relative salience or importance in a person's hierarchy of identities.[23,27]

Place attachment, defined as an affective bond between people and places,[28] originates with Tuan's work.[29,30] Place attachment is generally believed to be created and maintained through people's interactions with their environment and the people in that environment.[17,28] These attachments or emotional bonds to places occur at the individual and community levels.[31] At the individual level, attachment is associated with individuals' behavioral, cognitive, and emotional experiences with and in their environment.[32]

Community attachment refers to a sense of bondedness, or a feeling of being socially a part of one's neighborhood or community, and a sense of rootedness, or attachment to the physical community or neighborhood.[33] This attachment can provide personal and group identity, a sense of security and comfort, and can help residents develop a sense of community.[26,32,34,35] Kasarda and Janowitz[36] define community attachment in terms of three indicators: (1) a sense of being "at home" or belonging to the area; (2) an interest in knowing what goes on in the area; and (3) being sorry if forced to move away. Guest and Lee[37] distinguish two dimensions of community attachment: (1) community sentiments, which refer to feelings of emotional or psychological ties to place, as reflected in how much a person would miss the area if they moved away; and (2) community evaluations, or a person's overall satisfaction with the community. Lalli[38] conceptualize attachment as feelings of belonging, which correspond with a general sense of place.[23] Attachment has been included with familiarity, continuity, and commitment as a subscale of urban-related identity.[23] However, as Jorgensen and Stedman[23] point out, the summary statistics suggest that the five dimensions of the Urban Identity Scale are best represented by Lalli's concept of attachment.[38]

Lastly, place dependence, or individuals' perceived strength of association with their places, relates to how well places serve the goals of people, though dependence

may also limit people's ability to achieve their goals.[23,39] This measure is based on comparisons of alternative places. The broader sociopolitical environment also shapes people's range of experiences in and with places.[22,40] It impacts individuals' and groups' self-esteem, efficacy, their ability to control their environment, to meet their everyday life goals, and, ultimately, to affect their well-being.[14,21,41]

Similarly, while residence has been the focus of much of the place research, it is now acknowledged that the residence is only one of a variety of important places.[22] Studies have shown that people have strong relationships with their neighborhoods or communities[14,36]—including relationships with, and attachments to, public places. Such places can include playgrounds, town squares,[35,42,43] and parks and nature preserves,[44–46] as well as mundane places, such as local restaurants or drugstores.[47] In fact, some scholars argue that place attachment may be central to a well-functioning community and may assist in community revitalization efforts.[14,32,48]

However, not all individuals exhibit a sense of place. Recent research has shown that people's emotional relationships with places may vary. Some people, such as travelers and/or nomads, may not necessarily identify with, or attach to, any places, including the home or place of residence.[49] Thus, places are sources not just of belonging and positive affect but may also generate neutral or negative feelings.[22] This variety of experiences can create a sense of belonging and "insiderness," or one of alienation and "outsiderness."[22,35,50–53]

Length of residence or long-term interactions and experiences with a locality, which may pass from generation to generation, are also central to a sense of place—and more specifically community attachment, or one's sense of rootedness in one's community.[36,54] This may explain why older adults, who tend to spend more time in their communities, are often more tied to their communities.[32,36,55–58] For those who spend much of their time in one neighborhood (such as older persons or the unemployed), their neighborhoods may become their most salient environmental context, though this dependence does not necessarily lead to attachment.[59–62]

However, long-term exposure is not always necessary for people to feel a strong sense of place. Tuan's[30] work shows that intense experiences with or in a place may also create ties between people and places, even when experiences have not occurred over a long period of time. Likewise, people may connect to a place through shared stories and memories, even when they do not have personal experiences with the place.[63]

Involvement in the local community or neighborhood is also associated with a sense of place.[31] Involvement increases social cohesion and feelings of social control (collective efficacy) and allows residents to develop an identity with their community.[34,48] Likewise, the built environment can play a role in people's sense of place.[31] People tend to be less tied to their neighborhoods if they are disordered physically,[64] deteriorated,[65] or have high levels of crime.[66] However, physical disorder or decay may not necessarily or always reflect a lower sense of place.[56,67]

Manzo et al.[12] note that this body of research has rarely examined the place attachment and the sense of community that residents have created in their public housing communities. There are as many reasons why public housing residents experience a sense of place as there are reasons why they do not. Public housing residents have more environmental problems to accommodate. At the same time, they have fewer resources they can use to leave their environment, which makes them dependent on their places. Previous research has shown that public housing residents tend to live in more disadvantaged neighborhoods, experiencing violence, crime, and social disorder, which may impede the creation of ties to place.[68,69]

Living in public housing is stigmatizing, which may mean residents feel ambivalent toward their home and community.[1,70] This stigma, however, applies primarily to family public housing and not to senior public housing.[71]

Venkatesh argues that the stigma attached to public housing is due to geographic isolation.[72,73] "The Projects" are typically sequestered to specific areas in a city where poor minorities live. Isolation leads residents to create a sense of cultural identification with their place. This also leads to a dependence on each other within the projects—a dependence that includes the sharing of resources in order to make ends meet—and leads to greater ties to place.[72,74,75] Based on residents' relationships of mutual support, which helps them manage their daily lives and contribute to their well-being, they also develop a sense of community.[12] Longer tenure in public housing and greater involvement in their communities increase this sense of community.[12]

Post-relocation studies have found that public housing residents miss the social support and social ties they experienced in public housing and have a difficult time creating new ties in their new places.[12,72,76–78] Research by Greenbaum[77] found that former public housing residents felt safer in their public housing communities due to their sense of place and the shared social support ties that took place there. The loss of those ties may create feelings of acute distress among relocated residents.[77] Likewise, the HOPE VI Panel Study found that while many residents ended up in neighborhoods that were less poor overall, they were still by and large in very segregated areas.[79,80]

These findings, like other studies[81,82] that situated the lived experiences of public housing residents at the center of their analysis, contradict the common external view of public housing communities, one suggesting that they are places of severe distress and detrimental to residents' well-being. Therefore, we expect to find, on average, that Atlanta public housing residents will associate a positive sense of place toward both place attachment and community attachment with their public housing communities. We also expect to find that residents of senior public housing will have created a greater sense of place compared with residents of family public housing due to greater dependence on place and lower levels of stigma attached to senior public housing. Similar to Manzo et al.,[12] the public housing residents represented in our study are very low-income. However, unlike the public housing residents Manzo et al. studied, the residents in this study are not racially diverse. Ninety-four percent in our study are Black. Additionally, 78% of the heads of household in our study are women, compared with 69% in Manzo et al.[12]

In this sense, as a more homogeneous group, our examination of public housing residents' place and community attachment is a more rigorous critical test of the expectation that public housing residents do not develop attachments to public housing. Additionally, consistent with the literature on sense of place, we expect to find that positive neighborhood characteristics increase community and place attachment, while negative neighborhood characteristics have the opposite effect. We also expect that dilapidated housing will be associated with decreased community and place attachment. At the same time, length of time living in public housing will be associated with increased community and place attachment. Table 1 lists all of our hypotheses.

DATA AND METHODS

In 2007, the Atlanta Housing Authority announced plans to demolish all the remaining family public housing and two senior public housing high rises (senior housing includes younger people with disabilities) with no immediate plans for

TABLE 1 Hypotheses to be tested

1	Public housing residents, on average, express positive community and place attachment.
2	Residents of senior housing projects have greater community and place attachment compared to family housing residents.
3	Greater social support in the public housing community is associated with increased community and place attachment.
4	Greater collective efficacy is associated with increased community and place attachment.
5	Greater social disorder is associated with decreased community and place attachment.
6	Greater fear of crime is associated with decreased community and place attachment.
7	As housing becomes more dilapidated, community and place attachment decreases.
8	Greater tenure in public housing is associated with increased community and place attachment.

replacement of low-income units. Eligible residents were relocated into the private rental market with voucher subsidies (formerly Section 8). Residents could relocate to the neighborhood of their choice; however, these choices were constrained by the willingness of landlords to take voucher tenants.

We initiated a prospective, longitudinal study of Atlanta's public housing residents who were to be relocated. A sample of 314 public housing residents from six public housing communities (four family developments and two senior/disability high rises) was collected. A baseline survey was administered using face-to-face computer-assisted interviews. Due to difficultly in building trust with the residents, particularly with regard to assuaging their fears that they would lose their voucher if they talked with us, we were not able to collect a completely random sample. We began by sending recruitment letters to a random sample of leaseholders. After three attempts to gather the random sample in each community, we opened up the study to residents who wanted to participate. Our final sample consisted of 182 randomly chosen respondents (58% response rate) and 132 non-randomly chosen respondents. We tested for differences between the random and the non-random portions of the sample on all variables included in the study and found no significant differences. We included a dummy variable called random, however, to control for whether or not a given respondent was selected randomly in the regression analyses. All respondents were age 18 or older, and more than 90% were the leaseholders. Sampling weights were created and used in all analyses to adjust for the complex sampling design.

The baseline survey covered many aspects of the residents' lives while living in public housing. Many questions were adopted from prior public housing relocation studies for comparison purposes. We investigated current neighborhood, apartment and fear of crime characteristics, household composition, social support, transportation, demographic, health, psychosocial characteristics, financial strain, and other socioeconomic issues.

Fourteen cases were missing on one or more of our two outcome variables and were dropped. We construct several scales in this analysis. In order to minimize the cases lost through listwise deletion, we mean imputed missing observations for respondents that answered the majority of the items on a scaled question before creating the scale. For example, in a scale with five items, if a respondent answered three or more of the five we mean imputed the missing items before creating the scales. If, however, they answered less than three of the five questions, we dropped that case altogether. Ten additional cases were dropped on scale formation. Our final sample size consists of 290 respondents.

Constructs

We present the variables included in this analysis in Table 2. We measure two aspects of sense of place: community attachment and place attachment. Community attachment is measured as a scale created by summing six Likert scale items together. The six items are adapted from Reitzes's research findings regarding identification with community.[27] The six statements assess the level of agreement (strongly disagree, disagree, no opinion, agree, and strongly agree) on: "When I'm in my neighborhood I feel: (1) I'm in a place that is my home; (2) I'm in a place that holds a lot of meaning to me; (3) I'm in a place where I belong; (4) I'm in a place I'd miss if I had to leave; (5) I'm in a place I am proud of; and (6) I'm in a place that's important to me." The Cronbach's alpha for this scale is 0.92. The scale ranges from 6 (low community attachment) to 30 (high community attachment), with a mean of 17.66.

Place attachment is measured using a single question, "Which would you prefer, to fix up your public housing community (1) or to relocate (0)." Forty-one percent of the sample preferred to renovate rather than relocate from public housing. Using a single item to measure this concept is a weakness of our current study, but others have used single items as well. For example, Kasarda and Janowitz,[36] in their seminal research, used a single measure, "Supposing that for some reason you had to move away from…(Home Area), how sorry or pleased would you be to leave?" as one of three indicators of community attachment.

Independent Variables

We include four neighborhood-level variables: social support, collective efficacy, fear of crime, and social disorder. We created the social support scale by summing the

TABLE 2 Means, standard deviations, and ranges of variables included in the models (weighted)

N = 290	Mean/Prop.	SD	Range
Outcomes			
Community attachment[a]	17.66	7.02	6.00–30.00
Place attachment (Prefer to renovate public housing = 1)	0.41	0.49	0.00–1.00
Neighborhood level			
Social support[a]	3.87	2.08	0.00–8.00
Collective efficacy[a]	15.53	5.89	5.00–25.00
Fear of crime[a]	23.46	9.36	7.00–35.00
Social disorder[a]	23.18	5.16	9.00–35.00
Household level			
Sum of household conditions	2.02	1.83	0.00–6.00
Family housing project	0.73	0.44	0–1.00
Tenure (years) in public housing	6.33	6.97	0–38.00
Individual level			
Self-esteem[a]	18.94	5.99	10.00–42.00
Mastery[a]	14.54	4.78	6.00–27.00
Self-rated health is fair or poor	0.35	0.48	0.00–1.00
No financial strain (ref)	0.39	0.49	0.00–1.00
Moderate financial strain	0.46	0.50	0.00–1.00
Serious financial strain	0.15	0.36	0.00–1.00
Randomly selected into sample	0.57	0.50	0.00–1.00

[a]Variable is standardized with mean = 0 and standard deviation = 1 in the regression analyses

following eight yes/no items: "Have you received any of the following help from a neighbor or friend in your public housing community or given it: (1) advice, encouragement, or moral support; (2) babysitting or childcare; (3) transportation, errands, or shopping; and (4) housework, yard work, repairs, or other work around the house?" The scale ranges from 0 (no social support) to 8 (complete social support), with a mean of 3.87.

We created the collective efficacy scale by summing five Likert scale (very unlikely to very likely) items in which respondents were asked "How likely it is that their neighbors would try to do something if: (1) children were skipping school or hanging out; (2) children were spray painting on a local building; (3) children were showing disrespect to an adult; (4) a fight brook out in front of their home; and (5) the fire station closest to them was threatened with budget cuts." The collective efficacy scale has a Cronbach's alpha of 0.84. The scale ranges from 5 (very unlikely) to 25 (very likely), with a mean of 15.53.

The fear of crime scale was a summation of seven items, from not at all afraid to very afraid, concerning the possibility of the following statements: "(1) someone would break into their home while at home; (2) break in while away; (3) have something taken from them by force; (4) threaten with a weapon; (5) beaten by a stranger; (6) finding out that someone was robbed near their home; and (7) being robbed or mugged." The fear of crime scale has a Cronbach's alpha of 0.94. It ranges from 7 (no fear) to 35 (very afraid), with a mean of 23.46.

The social disorder scale was constructed by summing the following seven Likert scale (strongly disagree to strongly agree) statements: "(1) People do not respect rules or the law here; (2) There is too much crime and violence in this neighborhood; (3) Too many abandoned or run down buildings here; (4) The police are usually not available when you actually need them; (5) There's not enough public transportation in this area; (6) Parents do not supervise their children around here; and (7) Too many people here cannot find jobs." The scale has a Cronbach's alpha of 0.72. It ranges from 9 (low social disorder) to 35 (high social disorder), with a mean of 23.18.

We also created an index of a number of poor household conditions by summing eight items, including: (1) having pests; (2) having uncorrected water damage; (3) having nonworking appliances; (4) having plumbing problems; (5) having problems with heating systems; (6) having broken windows; (7) having electrical problems; and (8) having peeling paint in or around the apartment. The index of poor housing conditions ranges from 0 to 7 poor household conditions, with an average of two conditions.

Family public housing projects were located in qualitatively distinct neighborhoods compared with senior public high-rise housing, the latter having much lower poverty levels. Therefore, we include a dummy variable (family=1, senior=0) to capture this distinction. To control for any problems between the random and non-random portions of our sample, we include a dummy variable for the random (1) versus non-random (0). Tenure in residents' public housing apartment is measured in years. Tenure ranges from <1 year to 38 years, with an average of just over 6 years.

Finally, we control for poor health, financial strain, self-esteem, and mastery. Self-reported health status is measured as poor health using a dummy variable with 1=fair or poor health and 0=good or better health. We measure financial strain by asking the question: In the last 12 months, at the end of most months, what was your household's financial situation? Response categories include: We had more

than enough money left over, we had some money left over, we had just enough to make ends meet, and we did not have enough to make ends meet. The first two response categories reflect no financial strain. The third response reflects moderate financial strain and the fourth response reflects severe financial strain. We use Rosenberg's[83] 10-item self-esteem scale. The Cronbach's alpha is 0.81. The scale ranges from 10 (very low self-esteem) to 42 (high self-esteem), with a mean of 18.94. We measure locus of control using six items from Gecas'[84] mastery scale. The Cronbach's alpha was 0.75. The scale ranges from 6, little or no mastery, to 27, high mastery, with a mean of 14.74. We do not control for age since it is highly correlated with the family versus senior housing dummy variable. The sample is also over 95% Black, 78% female, and 94% single, so these are not included as controls either.

Analysis

We assess the first two hypotheses about sense of place with descriptive data found in Table 3. The remaining hypotheses are addressed in Table 4, which regress our two measures of sense of place on neighborhood and individual characteristics. Community attachment is a continuous measure; therefore, we use ordinary least squares (OLS) regression to estimate the models. Our measure of place attachment is a binary measure, and we model the probability of preferring to renovate the existing public housing community versus preferring to relocate in a logistic regression model. All scales are standardized prior to running the analyses.

The modeling strategy may appear to imply causation, but that is not our intention. With cross-sectional data, we cannot determine causation. We are interested in how neighborhood characteristics, housing quality, and tenure in public housing are *associated* with the development of a sense of place. Furthermore, we cannot generalize: Atlanta public housing may be very different from public housing in other cities. Despite this, however, our test of sense of place among public housing residents contributes to further understanding resident outcomes of current—and perhaps future—public housing transformation policies.

RESULTS

Table 3 presents the percentage of residents who agree or strongly agree with each of the items that comprise the community attachment scale. The columns present

TABLE 3 Community attachment and place attachment by type of housing structure

N=290	All agree (%)	Family agree (%)	Seniors agree (%)
Community attachment			
I feel I am in a place…			
that is my home	58.49	47.50	87.12
holds a lot of meaning to me	52.49	45.33	71.60
where I belong	38.97	24.49	77.55
I'd miss if I had to leave	41.28	29.20	73.45
That I am proud of	41.78	27.94	74.78
That's important to me.	53.40	46.22	83.17
Place attachment			
Desire to renovate	41	32	63
Desire to relocate	59	68	37

Data are weighted. Differences between family and senior housing are significant

TABLE 4 Regressing community attachment and place attachment on neighborhood, housing, and individual characteristics: coefficients and (standard errors)

	Community attachment			Place attachment		
$N=290$	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Intercept	−0.059 (0.05)	0.351* (0.12)	0. 514* (0.16)	−0.312* (0.13)	0.086 (0.34)	−0.376 (0.45)
Neighborhood level						
Social support	0.081 (0.05)	0.138* (0.05)	0.119* (0.05)	0.287* (0.12)	0.410* (0.13)	0.411* (0.14)
Collective efficacy	0.384*** (0.05)	0.328*** (0.05)	0.296 *** (0.05)	0.172 (0.13)	0.108 (0.14)	0.052 (0.14)
Fear of crime	−0.027 (0.05)	0.019 (0.05)	0.012 (0.05)	−0.099 (0.14)	−0.043 (0.14)	−0.103 (0.15)
Social disorder	−0.274*** (0.06)	−0.118 (0.06)	−0.153* (0.06)	−0.393* (0.15)	−0.189 (0.17)	−0.237 (0.18)
House level						
No. of poor housing conditions		−0.062* (0.03)	−0.065* (0.03)		0.061 (0.07)	0.078 (0.08)
Family housing project		−0.637*** (0.13)	−0.601*** (0.13)		−1.189** (0.35)	−1.133* (0.38)
Tenure in years		0.022** (0.01)	0.022** (0.01)		0.044* (0.02)	0.049* (0.02)
Individual-level variables						
Self-esteem			0.144* (0.06)			0.329 (0.18)
Mastery			0.039 (0.06)			−0.155 (0.18)
Self-rated health is poor or worse			−0.010 (0.10)			0.321 (0.29)
Moderate financial strain			−0.090 (0.10)			0.667* (0.30)
Serious financial strain			−0.217 (0.15)			−0.287 (0.45)
Randomly selected			−0.160 (0.10)			−0.045 (0.29)
Adj. R^2/max rescaled R^2	0.30	0.39	0.41	0.10	0.18	0.24

*$p \leq 0.05$; **$p \leq 0.001$; ***$p \leq 0.0001$

findings for the entire sample, then for family communities, and lastly for senior communities. Results capture emotional attachment, sense of belonging, and identification as home. Over 58% of the sample agree or strongly agree that they felt public housing is home. In addition, over 50% of the sample agrees that public housing is meaningful and important to them. Likewise, over 41% say they would miss it if they had to leave and that they are proud of their places. Perceptions of public housing being a place they belong receive the lowest level of agreement at just under 39%. Place attachment shows that 41% prefer to fix up their public housing community rather than relocate, and 59% prefer to relocate. These percentages show that while not everyone is attached to their communities or places, a large percentage express a strong sense of place in public housing.

Examining community and place attachment by housing type shows an interesting pattern. Residents of senior/disabled housing express far greater community and place attachment than do residents of family housing. Among the family residents, there is evidence of identification with home and that their places are important and meaningful to them, with just over 45% agreeing with these three items. However, only 29% would miss public housing if they had to leave. Likewise only 28% are proud of their homes, and <25% feel as if they belong in public housing. Finally, only 32% prefer to renovate public housing over relocating.

The seniors, by comparison, feel a strong sense of place, with 87% feeling like they are in a place that was their home, and 83% say it is important to them. Well over 70% agree or strongly agree with the four remaining items on belonging, meaning, missing, and pride.

The fact that levels of sense of place among Atlanta public housing residents differ between those living in family projects and those living in senior/disabled projects may be partially due to location. The family projects, for the most part, are located on the outskirts of Atlanta's downtown, while the senior high rises are right in the downtown area. In addition, as mentioned previously, the family communities have higher poverty rates than the senior communities. This is consistent with the literature demonstrating that neighborhood characteristics and tenure yield varying degrees of sense of place. But how are these factors associated with community and place attachment?

The first half of Table 4 presents an OLS regression of community attachment on neighborhood characteristics, housing problems, tenure, and individual-level characteristics. Model 1 regresses the outcomes on the neighborhood characteristics. Both social support and collective efficacy are positively associated with community attachment, but only the coefficient for collective efficacy is significant. A one-standard-deviation increase in collective efficacy is associated with a 0.384-standard-deviation rise in community attachment. Both fear of crime and social disorder are negatively associated with community attachment, but only the coefficient for social disorder is statistically significant. A one-standard-deviation increase in social disorder is associated with a 0.274-standard-deviation decline in community attachment.

Model 2 added housing-level variables. Net of housing characteristics, both social support and collective efficacy are positively and significantly associated with community attachment, but neither fear of crime nor social disorder is significantly associated with community attachment. A one-standard-deviation increase in social support and collective efficacy are associated with increases in community attachment of 0.138 and 0.328 standard deviations, respectively. Net of neighborhood characteristics, the number of poor housing conditions is negatively and significantly

associated with community attachment. More specifically, a one-unit increase in the number of poor housing conditions is associated with a decline of 0.062 in community-attachment score. Consistent with Table 3, living in family public housing is significantly associated with lower community attachment (–0.637) compared with living in senior housing. Finally, a 1-year increase in tenure in public housing is significantly associated with a 0.022 greater community attachment (averaged across both family and senior housing).

Model 3 added individual-level controls. Net of these, social support and collective efficacy are positively and significantly associated with community attachment, though the estimates are somewhat attenuated (b=0.119 and b= 0.300, respectively). On average, a one-standard-deviation increase in social disorder is significantly associated with a 0.153-standard-deviation decline in community attachment. Number of poor housing conditions and living in family public housing remain significantly and negatively associated with community attachment (b=–0.065 and b=–0.601, respectively), and tenure remains significantly and positively associated with it (b=0.022), net of neighborhood and individual-level characteristics. Of the individual-level characteristics, only self-esteem is significantly associated with community attachment, where a one-standard-deviation increase in self-esteem is associated with a 0.144 increase in community attachment.

The second half of Table 4 presents results from the logistic regressions on place attachment. We define this as the probability of preferring to renovate public housing versus relocating. In model 1, social support is significantly and positively associated with place attachment, while social disorder is significantly and negatively associated with it. More specifically, a one-standard-deviation increase in social support is associated with a 33% (b=0.287) increase in the probability of wanting to renovate public housing. Likewise, a one-standard-deviation increase in social disorder is associated with a 32% decline (b=–0.393) in the probability of wanting to renovate the public housing community. Neither collective efficacy nor fear of crime is significantly associated with place attachment.

In model 2, net of housing-level variables, social support remains significantly and positively associated with place attachment (b=0.410). Conversely, the effect of social disorder is no longer significantly associated with place attachment. Net of neighborhood characteristics, living in family public housing is significantly and negatively associated with place attachment (b=–1.189) compared with living in senior housing. Tenure is significantly and positively associated with place attachment, with a 1-year increase in public housing tenure associated with a 5.5% increase in the probability of preferring to renovate public housing rather than relocating (b=0.044).

In model 3, net of the individual-level variables, social support and tenure continue to be significantly and positively associated with place attachment (b=0.411 and b= 0.049, respectively), while living in family housing remains significantly and negatively associated with it (b=–1.133). Of the individual-level characteristics, only moderate financial strain is significantly and positively associated with place attachment (b= 0.667) compared to those with no financial strain.

DISCUSSION

We took advantage of a unique opportunity to test findings concerning sense of place quantitatively on a sample of Atlanta public housing residents. We first asked whether public housing residents experienced sense of place, measured as place and community attachment. Then we asked what aspects of the home and neighborhood environment

were related to community and place attachment. Our findings support our first hypotheses that on average, public housing residents do experience sense of place. Likewise, we found that residents of senior public housing experience a far greater sense of place than do residents of family public housing. This finding is consistent with the previous place literature: sense of place does not develop for everyone, and for some it may actually be negative. In our case, the fact that senior public housing evokes less stigma than family public housing may explain the differences we found. In addition, Atlanta senior public housing is located more conveniently near downtown and is more racially and economically integrated into the city.

At the same time, our negative neighborhood characteristics do not explain the lower attachment of family residents. However, the lower levels of positive neighborhood characteristics (as compared with seniors) do not explain it either. Further research on this puzzling finding is needed.

On the other hand, our third hypothesis that social support and collective efficacy are positively associated with greater sense of place is supported across both family and senior public housing communities. We found that social support is associated with both community and place attachment, but collective efficacy is only associated with community attachment. These findings confirm earlier research demonstrating that increased social control leads to increased identification with community among residents.[26,34–64]

Our next two hypotheses are not supported. First, social disorder is associated with community attachment, but not place attachment. This is consistent with research finding evidence of lower attachment to disordered or deteriorated neighborhoods.[65,66] We acknowledge, however, that because we measure place attachment by a single binary item, there is the possibility that our findings could be the result of measurement error. Second, fear of crime is not associated with either community or place attachment. Generally, we found that positive neighborhood characteristics increase attachment, but negative characteristics do not play a large role in decreasing attachment.

Crime is one of the major concerns that policy makers have with public housing and a reason given for wanting to deconcentrate poverty. Yet, fear of crime did not detract from public housing residents' sense of place. This is consistent with prior findings that public housing residents felt safer in their public housing communities despite the greater level of crime because of the social ties and support they receive there.[77]

We found mixed support for dilapidated housing conditions as well. Poor housing conditions are associated with community attachment, but not place attachment. Again, measurement may be an issue. Alternatively, however, housing conditions may not be as important for heightened sense of place compared with neighborhood characteristics.

Our final hypothesis, that tenure increases sense of place, is supported. Specifically, we found that the longer the tenure in public housing, the greater the community attachment and the greater the probability of desiring to renovate rather than relocate. This is consistent with prior place research concerning the positive correlation between length of residence and sense of place.[12,36,54]

CONCLUSION

While some of our findings are mixed, the overall theme speaks to the importance of social support and community ties that public housing residents create *in* public housing. Of the neighborhood characteristics, social support is most consistently

and positively associated with place attachment. It also confirms others' findings that social relationships generate a sense of local participation and involvement, as well as reduce a sense of local distress and decay, and contribute to creating a sense of community and identification with neighbors. Policy makers appear to assume these ties—i.e., the social capital created and used to "make ends meet"—are dysfunctional because they do not help residents move up the socioeconomic ladder.[1,81] But this assumption ignores the everyday lived experiences of public housing residents and how important these ties are for surviving with few formal resources.[1,72,85] Therefore, it is possible that losing these ties through relocation may lead to increased stress and a lowered ability to cope in the new relocated environment. This, in turn, may explain the lack of consistent evidences concerning broader quality of life improvements among former public housing residents post-relocation.[86–88]

Lastly, we found that embodied in relocation is a real sense of loss. This confirms findings of the large body of research, not only that concerning public housing[12,72,77] but also on the effects of urban renewal as well.[11] Dislocation can cause distress and root shock. It can disrupt community and can be difficult for the relocated residents to create new communities and social ties. Perhaps this is one reason why so many former public housing residents move just a few miles from their public housing site.

As Greenbaum argued,[1] few disagree that public housing sites are undesirable living situations, but the situation is a symptom, not a cause of the residents' poverty. Work opportunities, integration with the rest of the city—perhaps through incentives to build better quality low-income housing—and finding ways to reduce the stigma associated with public housing seem to be better policy objectives. Policy makers may want to reconsider current policies that require relocation and think about how to harness the positive sense of place found among public housing residents as a resource for renovating and revitalizing public housing communities. Likewise, as cities around the country continue to implement policies affecting public housing and the residents who live there, urban and community scholars should continue studying public housing residents' sense of place, and, if applicable, after relocation.

ACKNOWLEDGMENTS

Support for this study was provided by the Partnership for Urban Health, the Center for Metropolitan and Urban Studies, and the College of Arts and Sciences of Georgia State University. Griff Tester can be contacted at socgmt@langate.gsu.edu.

REFERENCES

1. Greenbaum S. Social capital and deconcentration: theoretical and policy paradoxes of the Hope VI program. *N Am Dialogue*. 2002; 5(1): 9–13.
2. Jargowsky PA. *Poverty and Place: Ghettos, Barrios, and the American City*. New York, NY: Russell Sage; 1997.
3. Massey DS. American apartheid: segregation and the making of the underclass. *Am J Sociol*. 1990; 96: 329–358.
4. Massey DS, Denton NA. The dimensions of residential segregation. *Soc Forces*. 1988; 60: 281–315.
5. Wilson WJ. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago, IL: University of Chicago Press; 1987.

6. Wilson WJ. *When Work Disappears: The World of the New Urban Poor*. New York, NY: Knopf; 1996.
7. Oakley D, Burchfield K. Out of the projects, still in the hood: the spatial constraints on public housing residents' relocation in Chicago. *J Urban Aff*. 2009; 31(5): 589–614.
8. Popkin S, Cunningham M. CHA Relocation Counseling Assessment Final Report. *Metropolitan Housing and Communities Center, The Urban Institute*. http://www.urban.org/UploadedPDF/CHArelocation.pdf. Accessed June 15, 2010
9. Goetz E. Testimony to the United States Housing of Representatives, Committee on Financial Services, Subcommittee on Housing and Community Opportunity, Washington, DC, Hearing on *Academic perspectives on the future of public housing*. http://www.house.gov/apps/list/hearing/financialsvcs_dem/goetz.pdf. Accessed July 29, 2009
10. Soloman R. Public Housing Reform and Voucher Success: Progress and Challenges. Washington, DC: The Brookings Institution Metropolitan Policy Program. http://www.brookings.edu/metro/pubs/20050124_solomon.pdf. Accessed June 14, 2010
11. Fullilove MT. *Root Shock: How Tearing Up City Neighborhoods Hurts America, and What We Can Do About It*. New York, NY: Ballantine Books; 2004.
12. Manzo LC, Kleit RG, Couch D. Moving three times is like having your house on fire once: the experience of place and impending displacement among public housing residents. *Urban Stud*. 2008; 45: 1855–1878.
13. Jacobs J. *The Death and Life of Great American Cities*. New York, NY: Random House; 1961.
14. Fried M. Grieving for a lost home. In: Duhl LJ, ed. *The Urban Condition: People and Policy in the Metropolis*. New York, NY: Basic Books; 1963: 151–171.
15. Gans HJ. *People and Plans: Essays on Urban Problems and Solutions*. New York, NY: Basic Books; 1968.
16. Proshansky HM. The city and self-identity. *Environ Behav*. 1978; 10: 147–170.
17. Trentelman CK. Place attachment and community attachment: a primer grounded in the lived experience of a community sociologist. *Soc Nat Resour*. 2009; 22: 191–210.
18. Hidalgo MC, Hernandez B. Place attachment: conceptual and empirical questions. *J Environ Psychol*. 2001; 21: 273–281.
19. Beckley TM. The relative importance of sociocultural and ecological factors in attachment to place. In: Kruger LE, ed. *Understanding Community–Forest Relations*. Portland, OR: U.S. Department of Agriculture Forest Service Pacific Northwest Research Station; 2003: 105.
20. Patterson ME, Williams DR. Maintaining research traditions on place: diversity of thought and scientific progress. *J Environ Psychol*. 2005; 25: 361–380.
21. Twigger-Ross CL, Uzzell DL. Place and identity processes. *J Environ Psychol Psychology*. 1996; 16: 205–220.
22. Manzo LC. Beyond house and haven: toward a revisioning of emotional relationships with place. *J Environ Psychol*. 2003; 23: 47–61.
23. Jorgensen BS, Stedman RC. Sense of place as an attitude: lakeshore owners attitudes toward their properties. *J Environ Psychol*. 2001; 21: 233–248.
24. Cuba L, Hummon DM. A place to call home: identification with dwelling, community and region. *Sociol Q*. 1993; 34(1): 111–131.
25. Moore RL, Graefe AR. Attachment to recreation settings: the case of rail-trail users. *Leis Sci*. 1994; 16: 17–31.
26. Manzo LC, Perkins DD. Finding common ground: the importance of place attachment to community participation and planning. *J Plan Lit*. 2006; 20(4): 335–350.
27. Reitzes DC. Urban identification and downtown activities: a social psychological approach. *Soc Psychol Q*. 1986; 49: 167–179.
28. Altman I, Low SM. *Place Attachment*. New York, NY: Plenum; 1992.
29. Tuan Y. Place: an experiential perspective. *Geog Rev*. 1975; 65(2): 151–165.
30. Tuan Y. *Space and Place: The Perspective of Experience*. Minneapolis, MN: University of Minnesota Press; 1977.

31. Hummon D. Community attachment: local sentiment and sense of place. In: Altman I, Low SM, eds. *Place Attachment*. New York, NY: Plenum; 1992: 253–278.
32. Brown BB, Perkins DD. Disruptions in place attachment. In: Altman I, Low SM, eds. *Place Attachment*. New York, NY: Plenum; 1992: 279–304.
33. Riger S, Lavrakas JP. Community ties: patterns of attachment and social interactions in urban neighborhoods. *Am J Community Psychol*. 1981; 9(1): 55–66. Cited by: Manzo LC, Perkins DD. Finding common ground: the importance of place attachment to community participation and planning. *J Planning Literature*. 2006; 20(4): 335 -350.
34. Brown BB. Territoriality. In: Stokols D, Atlman I, eds. *Handbook of Environmental Psychology*. New York, NY: Wiley; 1987: 505–531.
35. Chawla L. Childhood place attachments. In: Altman I, Low S, eds. *Place Attachment*. New York, NY: Plenum; 1992: 63–86.
36. Kasarda JD, Janowitz M. Community attachment in mass society. *Am Sociol Rev*. 1974; 39: 328–229.
37. Guest AM, Lee BA. Sentiment and evaluation as ecological variables. *Sociol Perspect*. 1983; 26(2): 159–184.
38. Lalli M. Urban-related identity. *J Environ Psychol*. 1992; 12: 285–303.
39. Stokols D, Shumaker SA. People in places: a transactional view of settings. In: Harvey J, ed. *Cognitive, Social Behavior and Environment*. Hillsdale, NJ: Erlbaum; 1981.
40. McAuley WJ. History, race and attachment to place among elders in the rural all-black towns of Oklahoma. *J Gerontol*. 1998; 53: 35–45.
41. Imrie R. Disability, embodiment and the meaning of home. *Hous Stud*. 2004; 19(5): 745–763.
42. Low SM, Altman I. Place attachment: a conceptual inquiry. In: Altman I, Low SM, eds. *Place Attachment*. New York, NY: Plenum; 1992.
43. Low SM. *On the Plaza: The Politics of Public Space and Culture*. Austin, TX: University of Texas Press; 2000.
44. Pellow D. Spaces that teach: attachment to the African compound. In: Altman I, Low SM, eds. *Place Attachment*. New York, NY: Plenum; 1992.
45. Frederickson LM, Anderson DH. A qualitative exploration of the wilderness experience as a source of spiritual inspiration. *J Environ Psychol*. 1999; 19(1): 21–39.
46. Wickham TD. *Attachments to Places and Activities: The Relationship of Psychological Constructs to Customer Satisfaction* [dissertation]. University Park, PA: Pennsylvania State University; 2000.
47. Hester R. Sacred structures and everyday life: a return to Manteo, North Carolina. In: Seamon D, ed. *Dwelling, Seeing and Designing: Toward a Phenomenological Ecology*. New York, NY: State University of New York Press; 1993: 271–298.
48. Brown B, Perkins DD, Brown G. Place attachment in a revitalizing neighborhood: individual and block levels of analysis. *J Environ Psychol*. 2003; 23(3): 259–271.
49. Giuliani M. Towards an analysis of mental representation of attachment to the home. *J Archit Plann Res*. 1991; 8(2): 133–146.
50. Rowles GD. Place and personal identity in old age. *J Environ Psychol*. 1983; 3: 299–312.
51. Cresswell T. *In Place/Out of Place: Geography, Ideology and Transgression*. Minneapolis, MN: University of Minnesota Press; 1996.
52. Fried M. Continuities and discontinuities of place. *J Environ Psychol*. 2000; 20: 193–205.
53. Gustafson P. Roots and routes: exploring the relationship between place attachment and mobility. *Environ Behav*. 2001; 33(5): 667–686.
54. Galliano SJ, Loeffler GM. Place assessment: how people define ecosystems. In: Quigley TM, ed. *General Technical Report PNW-GTR-462*. Portland, OR: U.S. Department of Agriculture Forest Service Pacific Northwest Research Station; 1999.
55. Sampson RJ. Local friendship ties and community attachment in mass society: a multilevel systemic model. *Am Sociol Rev*. 1989; 53: 766–779.
56. Taylor RB. Neighborhood responses to disorder and local attachments: the systemic model of attachment, social disorganization, and neighborhood use value. *Sociol Forum*. 1996; 11: 41–74.

57. Lawton MP. Knowledge resources and gaps in housing the aged. In: Tilson D, ed. *Aging in Place: Supporting the Frail Elderly in Residential Environments*. Glenview, IL: Scott Foresman & Co.; 1990: 287–309.
58. Fuhrer U, Kaiser FG, Hartig T. Place attachment and mobility during leisure time. *J Environ Psychol*. 1993; 13(4): 309–321.
59. Lawton MP, Yaffe S. Victimization and fear of crime in elderly public housing tenants. *J Gerontol*. 1980; 35: 768–779.
60. Carp FM. Neighborhood quality perception and measurement. In: Newcomer RJ, Lawton MP, Byerts TO, eds. *Housing an Aging Society: Issues, Alternatives and Policy*. New York, NY: Van Nostrand Reinhold; 1986: 127–140.
61. Ward R, LaGlory M, Sherman S. *The Environment and Aging*. Tuscaloosa, AL: University of Alabama Press; 1988.
62. LaGlory M, Fitzpatrick K. The effects of environmental context on elderly depression. *J Aging Health*. 1993; 4: 459–479.
63. Backlund EA, Williams DR. A quantitative synthesis of place attachment research: Investigating past experience and place attachment. In: Murdy J, ed. *Proceeding of the 2003 Northeastern Recreation Research Symposium*. Newton Square, PA: USDA Forest Service, Northeastern Research Station; 2004: 320–325.
64. McGuire KB. The reliability and validity of a questionnaire describing neighborhood characteristics relevant to families and young children living in urban areas. *J Community Psychol*. 1997; 25: 551–566.
65. LaGrange RL, Ferraro KF, Supancic M. Perceived risk and fear of crime: role of social and physical incivilities. *J Res Crime Delinq*. 1992; 29: 311–334.
66. Sampson RJ, Raudenbush SW, Earls FJ. Neighborhoods and violent crime: a multi-level study of collective efficacy. *Science*. 1997; 277: 918–924.
67. Taylor RB, Shumaker SA, Gottfredson SD. Neighborhood-level links between physical features and local sentiments: deterioration, fear of crime, and confidence. *J Archit Plann Res*. 1985; 2: 261–275.
68. Ross CE, Mirowsky J. Neighborhood disadvantage, disorder and health. *J Health Soc Behav*. 2001; 42: 358–276.
69. Hill TD, Ross CE, Angel RJ. Neighborhood disorder, psychophysiological distress, and health. *J Health Soc Behav*. 2005; 46: 170–186.
70. Clampet-Lundquist S. HOPE VI relocation: moving to new neighborhoods and building new ties. *Hous Policy Debate*. 2004; 15(2): 415–447.
71. Vale LJ. *From the Puritans to the Projects: Public Housing and Public Neighbors*. Cambridge, MA: Harvard University Press; 2000.
72. Venkatesh S. *The Robert Taylor Homes Relocation Study: A Research Report from the Center for Urban Research and Policy*. New York, NY: Columbia University; 2002.
73. Venkatesh S, Celimli I. Tearing down the community. *Shelter Force*. 2004; 138: 1–9.
74. Edin K, Lein L. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work*. New York, NY: Russell Sage Foundation Publications; 1997.
75. Edin K, Lein L. Work, welfare, and single mothers' economic survival strategies. *Amer Rev of Sociol*. 1997; 62: 253–266.
76. Pashup J, Edin K, Duncan G, Burke K. Participation in a residential mobility program from the client's perspective: findings from Gautreaux Two. *Hous Policy Debate*. 2005; 16(3/4): 361–391.
77. Greenbaum S. Poverty and the willful destruction of social capital: displacement and dispossession in African American communities. *Rethinking Marxism*. 2008; 20(1): 42–54.
78. Kleit RG. Neighborhood relations in suburban scattered-site and clustered public housing. *J Urban Aff*. 2001; 23(3–4): 409–430.
79. Buron L, Popkin SJ, Levy D, Harris LE, Khadduri J. *The HOPE VI Resident Tracking Study: A Snapshot of the Current Living Situation of Original Residents from Eight Sites*. Washington, DC: Urban Institute; 2002.

80. Holin MJ, Buron L, Locke G, Cortes A. *Interim Assessment of the HOPE VI Program Cross-Site Report*. Washington, DC: Prepared by Abt Associates for the U.S. Department of Housing and Urban Development, 2003.
81. Vale LJ. Empathological places: residents' ambivalence toward remaining in public housing. *J Planning Education and Res*. 1997; 16(3): 159–175.
82. Crump J. Deconcentration by demolition: public housing, poverty, and urban policy. *Environ Plan D*. 2002; 20(5): 581–596.
83. Rosenberg M. Perceptual obstacles to class consciousness. *Soc Forces*. 1953; 32(1): 22–27.
84. Gecas V. The social psychology of self-efficacy. *Annu Rev Sociology*. 1989; 15: 291–316.
85. Lopez ML, Stack C. Social capital and the culture of power: lessons from the field. In: Saegert S, Thompson JP, Warren MR, eds. *In Social Capital and Poor Communities*. New York, NY: Russell Sage; 2001: 31–60.
86. Kling J, Liebman J, Katz L, Sanbonmatsu L. *Moving to Opportunity and Tranquility: Neighborhood Effects on Adult Economic Self-sufficiency and Health from a Randomized Housing Voucher Experiment*. Cambridge, MA: National Bureau of Economic Research and Harvard University; 2004.
87. Manjarrez CA, Popkin SJ, Guernsey E. *Poor Health: Adding Insult to Injury*. Washington, DC: Urban Institute; 2007.
88. Rubinowitz LS, Rosenbaum JE. *Crossing the Class and Color Lines: From Public Housing to White Suburbia*. Chicago, IL: University of Chicago Press; 2002.