An Examination of the Social and Physical Environment of Public Housing Residents in Two Chicago Developments in Transition

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Photographs on cover, from left to right: Wells/Madden photo by Megan Gallagher (2005); Oakwood Shores Development photo by Megan Gallagher (2005); and Dearborn Homes photo by Valerie Wright (2008).
Examining the Physical and Social Environment of Public Housing Residents

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Introduction

Over the past decade, increasing attention has focused on vulnerable populations living in inner-city neighborhoods. Public housing developments have been pinpointed as being particularly troubled communities—rife with violence, drug use, and gangs (Barbrey 2004; Bauman, Hummon, and Muller 1991; Burby and Rohe 1989; Ireland, Thornberry, and Loeber 2003; Popkin et al. 2000). In particular, high-rise urban developments have long been criticized for aiding racial segregation and isolation, as well as substandard construction of buildings and units, resulting in rapidly deteriorating conditions (Bickford and Massey 1991; McNulty and Holloway 2000).

Public housing households are some of the poorest households in the United States, and the concentration of problems that many residents experience in addition to high levels of crime—poor nutrition, obesity, low social capital, illiteracy, racial segregation—have been linked to poor mental health, including high levels of depression and other mental illnesses (Latkin and Curry 2003; Popkin, Cunningham, and Burt 2005; Yen and Kaplan 1999).

This report examines the social and physical environment of residents of two public housing developments in Chicago, Illinois, both of which are part of the U.S. Housing and Urban Development’s (HUD) HOPE VI program. HOPE VI is a program to remove and replace or redevelop some of the poorest quality public housing in the country (Popkin et al. 2004). In Chicago, the Chicago Housing Authority (CHA) uses HOPE VI program funds for their ambitious Plan for Transformation, which HUD approved in February 2000. The transformation effort represents the largest reconstruction effort of public housing in the nation. A key part of the plan is to demolish most of the high-rise developments, which, after decades of deterioration, were deemed nonviable by HUD and have to be demolished (Popkin 2010).

Over the last two decades, the Chicago high-rise developments often made the newspaper headlines with stories of violence and gang warfare, coupled with pictures of unkempt properties and vacant and boarded up units. The Plan for Transformation has helped to replace these images with new mixed-income developments, gentrifying neighborhoods and green spaces. The CHA’s transformation effort has brought about dramatic changes over the past eight years, and has changed the city’s landscape markedly. By the end of 2007, the CHA had demolished most of its high-rise developments, constructing new mixed-income developments in their place. Thousands of CHA households had been relocated with vouchers, either temporarily or permanently.

However, in early 2007, thousands of residents were still living in the remaining traditional developments—even in those buildings slated for demolition. Some of the remaining households were living in developments that were to be renovated, not demolished, and were awaiting temporary relocation (if they chose to return); some households were waiting for units to become available in the mixed-income developments; but a substantial number had failed to meet the screening criteria and, for a variety of reasons, had been unable to make the transition to private market housing with a voucher. Those who remained were still living in extremely dangerous circumstances, often among squatters living in boarded up or vacant units. For these vulnerable, “hard to house” families, housing transformation creates daunting challenges and families may face the real possibility of losing their assistance altogether. Their options for improving their housing quality are severely limited—when their buildings are demolished, they will most likely move to other public housing developments around the city. Some
of these developments may not be much of an improvement from what they were leaving.

In this paper, we take an in-depth look at resident perceptions of their environment; in particular, we focus on perceived levels of fear, violence, physical and social disorder, and housing quality for those residents who were somewhere in the middle of the relocation or renovation as part of Chicago’s Plan for Transformation. We also examine perceptions of features of social capital, such as social cohesion and informal social control, in an attempt to assess whether social capital can remain high even within neighborhoods perceived as crime-ridden and rife with disorder. Research has shown that neighborhoods with high levels of cohesion and social control (i.e., collective efficacy) can act as buffers against crime and disorder. The main questions we attempt to answer are the following: (1) What is the quality of housing and the neighborhood environment for residents in distressed public housing? (2) Do residents, regardless of their distressed environment, perceive their neighborhood to have strong aspects of social capital, such as social cohesion, informal social control, and collective efficacy? (3) Do perceptions of the neighborhood and housing environment influence the mental health of residents? If so, what are the pathways that lead to poor mental health?

The report uses baseline data from the Urban Institute’s evaluation of the Chicago Family Case Management Demonstration.¹ The demonstration, which began in March 2007, is designed to meet the challenges of serving the Chicago Housing Authority’s (CHA) hardest to house residents. It involves a unique partnership of service providers, researchers, and advocates, all with a commitment to finding solutions for the most vulnerable families affected by the CHA’s unprecedented transformation of its distressed public housing developments. The Demonstration serves residents from two CHA developments, Wells/Madden Park and Dearborn Homes, and provides these “hard to house” families with intensive family case management services. More specifically, the demonstration:

- Lowers the case manager–resident ratio from 1:55 to 1:25 with the goal of 80 percent engagement (typical engagement levels do not usually surpass 50 percent).
- Provides case managers with the opportunity to conduct regular follow up visits with residents, on a weekly rather than monthly basis; thus making more intensive work possible with all family members, not just the head of household.
- Encourages consistency in the client-case manager relationship by extending the length of time case managers remain engaged with residents, even after they move, from three months to at least three years.
- Focuses the family’s goals as they relate to the move-in criteria at the new mixed income developments or housing choice vouchers (e.g. work requirement, utility debt, housekeeping; drug tests; children in school, etc.).
- Provides a Transitional Jobs program to serve those who are the hardest to employ and incorporates a financial literacy and matched savings program that allows residents to develop budgeting, financial management, and savings skills.
- Provides residents access to enhanced housing choice education, including workshops and intensive relocation counseling with reduced caseloads.

These features of the demonstration were designed specifically to alter, in a positive way, a number of outcomes for long-time public housing residents. The ultimate goal of these services is to help families in the developments maintain safe and stable housing,
whether in traditional CHA public housing, in the private market with a voucher, or potentially, in new, mixed-income developments. In this framework, this report was written to shed light on the environmental context of hard to house residents in general, but with a strong focus on residents involved in the demonstration.

The report is intended for policymakers and practitioners seeking to understand the depth of environmental stressors facing a large subset of vulnerable families, and for community organizations and grass roots agencies advocating for quality of life improvements for these residents. We intend to show how these stressors impact the health of residents. By sharing this information—even before evaluation data are available—it is our hope that this brief spurs dialog across and between government agencies, community-based organizations, and researchers seeking innovative solutions to improve the quality of life for the hard to house.

We believe the research questions posed in this report are important ones—past research on public housing residents relocating as part of HOPE VI efforts across the country has revealed startlingly high levels of social disorganization, disorder and reported crime and violence within the targeted public housing developments (Popkin HPD article, Popkin and Cove 2007). The Urban Institute’s HOPE VI Panel Study tracked the experiences of a sample of 887 original residents from five developments slated for redevelopment in 1999 and 2000 (including Wells/Madden Park, in Chicago—one of two sites discussed in this report). At baseline (2001), survey respondents in all five sites reported intolerable conditions. Findings from the follow-up survey in 2005 found that residents who relocated out of traditional public housing reported far safer environments. For those who remained in public housing, the story was markedly different with a larger proportion of residents reporting serious problems with gangs and people selling drugs (Popkin and Cove 2007).

Given the unsafe conditions reported by public housing residents in these earlier studies, we examine the relationships among a number of environmental factors for the sample of residents participating in the evaluation of the Chicago Family Case Management Demonstration. Although quality of life is a multi-dimensional term, and the meaning may vary from person to person, most people would agree that a house, or one’s housing—in tangible and intangible ways—factors into an individual’s social and psychological functioning. People typically spend most of their time in their residential setting (Robinson and Godbey 1999). Research on fear and disorder and their influence on quality of life dates back to the late 1970s and early 1980s when researchers linked perceptions of social and physical disorder with increased fear, decreased neighborhood satisfaction and the desire to move (Taylor, Gottfredson, and Brower 1984; Taylor, Shumaker, and Gottfredson 1985). In turn, fear of crime makes people feel vulnerable and isolated, leading to a loss in personal well-being (Garofalo and Laub 1978; Moore and Trojanowicz 1988; Skogan 1990; Robinson et al. 2003). Other studies argue that high levels of fear create anxiety or stress that can indirectly lead to negative physical health consequences such as poor mental health (Cutrona, Wallace, and Wesner 2006; Evans, Wells, and Moch 2003; Ross 1993).
Data for this report were drawn from Wave I ("baseline") of a 2007 household survey to examine housing and quality of life indicators for the residents of the two housing developments, all of whom were offered an enhanced family case management demonstration program. The two housing developments were chosen for the demonstration and for this study because the developments were known to house families with multiple barriers to relocation out of public housing—such as unemployment, histories of lease violations, substance abuse, and contact with the criminal justice system. The sample was all heads of households living in the two developments as of March 2007. The developments are described briefly below, and more detail is provided in Popkin et al. (2008). The completed interview rate was 76.6 percent.

Wells/Madden

The Wells/Madden Park community is located on the near south side of the city, close to Lake Michigan on the east and to the sites of the former Robert Taylor and Stateway Gardens Homes on the west. The development, now empty, sits in the historic Bronzeville neighborhood, which has been undergoing rapid gentrification after many years of decline. There are expensive condominiums within blocks of the development, as well as a traditional CHA development (Lake Parc Place) and two new CHA mixed-income communities (Lake Park Crescent and Jazz on the Boulevard).

The Wells community, built between 1941 and 1970, was one of the CHA’s largest public housing CHA development, now slated for demolition. All around the development is evidence of the rapid complexes. The site included approximately 3,000 public housing units in four developments: the Ida B. Wells Homes, a low-rise development first opened in 1941 to house black war workers, the Wells Extensions, Madden Homes, and the high-rise Darrow Homes (Bowly 1978). Wells became notorious in 1994 when two young boys pushed a five-year old out the window of a vacant apartment in one of the high-rises, reportedly because he refused to steal candy for them (Jones, Newman, and Isay 1997). The CHA received a HOPE VI grant in 2000 to convert the site into a mixed-income community as part of the Plan for Transformation.

The Wells community became increasingly troubled over the years. The HOPE VI Panel Study, discussed earlier, documented that by 2005, most of the residents remaining in Wells’ few occupied buildings tended to be those who were “hard to house,” i.e. long-term public housing residents with lower incomes, and poor physical and mental health (Popkin, Levy, and Buron 2009). At the beginning of the Demonstration in 2007, fewer than 300 households remained on the site; the rest had relocated with vouchers, to a mixed income development, or moved to other CHA developments. All of the residents were African-American. By August 2008, the CHA made a series of decisions in response to rapidly deteriorating conditions that led the agency to close the entire development. Much of the old development is now gone and a new mixed-income community called Oakwood Shores is gradually rising nearby.

Dearborn Homes

The Dearborn Homes are located on State Street, about a mile south of the Loop. Immediately to the north sits the Ickes Homes, another large, troubled gentrification that has spilled over from the booming South Loop community—new grocery stores, a
Starbucks, gourmet restaurants, and a hotel now situated on the block between Dearborn and Ickes.

Dearborn was one of the CHA’s first high-rises; the development opened in 1950 and was comprised of 800 units in a mix of six- and nine-story buildings (Bowly 1978). Dearborn and Ickes were the northern anchor of the State Street corridor, Chicago’s notorious four-mile stretch of public housing high-rises that included the Robert Taylor Homes and Stateway Gardens. During the first phases of the Plan for Transformation, the CHA used both Dearborn and Ickes as “relocation resources”—replacement housing for residents from other developments that were being demolished who had failed to meet the criteria for temporary vouchers or mixed-income housing. The resulting influx of residents from Taylor and Stateway Gardens created a volatile situation, with multiple gangs competing for territory within the two developments and a demoralized population of legal residents who were aware that they had been “left behind.” In 2007, there were approximately 270 families still living in Dearborn; some were long-term residents, and the rest were relocatees. All were African-American. The development was split between competing gangs, with one group controlling the northern end (27th Street side) of the development, and another controlling the southern (29th Street side).

The housing authority received a HOPE VI grant for rehabilitation in 2008. As is the case with in several other CHA developments (Trumbull Park, Lowden Homes, Wentworth Gardens), the development is slated to remain traditional public housing, rather than becoming mixed-income. By 2009, the CHA rehabilitated and reopened nine and will ultimately have 14 buildings (all public housing) at Dearborn. This redevelopment activity meant that some Dearborn residents would have to be relocated—some for a second time—during the course of the Demonstration.

Findings from the Baseline Household Survey

Household Characteristics and Health

The results of the Wave I survey illustrate the very high level of need that existed among residents in Wells and Dearborn. Table 1 provides basic household characteristics of the residents in Wells and Dearborn. Generally, these two developments have similar resident populations.

On average, the heads of households were single women in their mid-to-late 40s. The average size of the household was approximately three individuals with more than half of the households housing children under 18. Approximately 12 percent of leaseholders were elderly (62 or over). The average household had lived in their development for 26.6 years, with an average length of residence a little over two years longer for Wells residents than for Dearborn. Less than a third of residents were working either full or part-time, although just under half were receiving public assistance (mainly SSI). As a result, the average income of a household in Wells and Dearborn was under $10,000 a year. Despite these low income statistics, a majority (60 percent) reported having either a high school diploma or GED. When comparing characteristics of households across the two developments, only two statistically significant differences between the Wells and Dearborn populations are found. First, Dearborn residents were more likely than Wells residents to report receiving food stamps (78 percent versus 66 percent), although given the low employment rates at both developments, the reasons for the difference are not clear. Secondly and not surprisingly, although
virtually all the respondents were long-term CHA residents, Wells residents reported having lived in their community longer, reflecting Dearborn’s status as a “relocation resource” for residents from other CHA properties (table 1).

With regard to health, more than half the residents rated their health as poor or fair (see figure 1). About a quarter reported having been diagnosed at some point in their lives with asthma; half reported being diagnosed with hypertension. Nearly three-fourths were overweight or obese. National-level data from the National Center for Health Statistics\(^2\) show that for some of these measures, the residents in our study have much higher rates of health problems than a national sample of American Americans living in poverty. For instance, among a 2006 national sample of African American respondents living below the poverty level, only 29.9 percent reported their health to be fair or poor. Among a 2005 national sample of African American respondents living below the poverty level, only 13.8 percent had had a lifetime diagnosis of asthma.

With regard to mental health, figures 2 and 3 show how residents responded when asked about their anxiety levels. When asked about whether they worried more than others in the last year, almost half of residents in each site (45 percent in Wells and 46 percent in Dearborn) reported that they did (figure 2).\(^3\) In addition, 35 percent of residents in Wells and 31 percent in Dearborn responded that they had felt worried or anxious for an entire month or longer over the last year (figure 2).

### Table 1: Household Characteristics

<table>
<thead>
<tr>
<th></th>
<th>COMBINED</th>
<th>Wells</th>
<th>Dearborn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of leaseholder</td>
<td>47.5</td>
<td>47.6</td>
<td>47.2</td>
</tr>
<tr>
<td>Percent female</td>
<td>82%</td>
<td>84%</td>
<td>80%</td>
</tr>
<tr>
<td>Median household size</td>
<td>2.9</td>
<td>3.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Mean number of years lived in development*</td>
<td>26.6</td>
<td>27.2</td>
<td>25.7</td>
</tr>
<tr>
<td>Percent of elderly respondents (age 62 or older)</td>
<td>12%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Percent of households with children under age 18</td>
<td>53%</td>
<td>50%</td>
<td>57%</td>
</tr>
<tr>
<td>Percent of respondents without a high school diploma or GED</td>
<td>41%</td>
<td>41%</td>
<td>42%</td>
</tr>
<tr>
<td>Percent of respondents with a household income less than $10,000</td>
<td>70%</td>
<td>69%</td>
<td>71%</td>
</tr>
<tr>
<td>Percent of respondents who are unemployed</td>
<td>69%</td>
<td>69%</td>
<td>70%</td>
</tr>
<tr>
<td>Percent of respondents who received some type of public assistance (SSI, SSDI, TANF) in the past year</td>
<td>47%</td>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>Percent of respondents receiving food stamps in past year*</td>
<td>71%</td>
<td>66%</td>
<td>78%</td>
</tr>
</tbody>
</table>

* Difference between the two developments is statistically significant at the .05 level.

Source: Chicago Family Case Management Demonstration Baseline Survey Data
Number of Respondents: 344
Figure 1: Health and Mental Health

- Fair or Poor Self-Ranked Health: 54%
- Overweight or obese: 71%
- Hypertension: 48%
- Asthma: 26%
- Depression+: 18%

+ The measure for depression was based on a scale derived from the CIDI-12, or Composite International Diagnostic Interview Instrument. The series includes two types of screener questions that assess the degree of depression and the length of time it has lasted. The index is then created by summing how many of the six items respondents reported feeling for a large share of the past two weeks. A respondent score of three or higher on the index indicates a major depressive episode.

Difference between sites not shown. (There are no statistically significant differences between developments on these items).

Source: Chicago Family Case Management Demonstration Baseline Survey Data

Number of Respondents: 344
Figure 2: Anxiety in Past 12 Months, by Site

There are no statistically significant differences between developments on these items.
Source: Chicago Family Case Management Demonstration Baseline Survey Data
Number of Respondents: 344

Figure 3: Anxiety in Past Month, by Site

There are no statistically significant differences between developments on these items.
Source: Chicago Family Case Management Demonstration Baseline Survey Data
Number of Respondents: 344
Anxiety levels based on the past month were lower (figure 3); 17 percent of residents in Dearborn and 14 percent of residents in Wells reported feeling nervous. Less than ten percent of residents in both developments reported feeling so down that they could not be cheered up. The only statistically significant difference in responses to anxiety in the past month was that a higher percentage of residents in Wells reported feeling calm and peaceful (50 percent) than Dearborn (43 percent).

Economic stressors were also assessed (figure 4). Residents were asked whether in the past 12 months financial hardship had caused them to: (1) skip meals, (2) miss telephone bill payments, (3) miss rent payments, or (4) receive an eviction notice or threat of eviction. Residents in Dearborn generally reported a higher level of economic stress than in Wells, although the differences were not statistically significant. Of these four indicators of economic stress, paying rent late was reported to be an issue with a larger percentage of residents in both sites (40 percent in Dearborn, 36 percent in Wells). Notably, at least 15 percent of residents in both sites faced the threat of eviction at some time in the last year. Reflecting on these percentages shown in figure 4, it may not be surprising that residents reported high levels of anxiety over the last 12 months (figure 2).

Perceptions of Neighborhood Crime and Disorder

The baseline survey provides a revealing snapshot of the neighborhood conditions in 2007. Residents were asked whether or not they found the following to be big problems in their neighborhood: loitering, drugs, gangs, and shootings. Across the board, the majority of respondents reported high levels of social and physical disorder, and crime. When broken down by site, over 50 percent of residents in both developments reported drug use, drug selling and gangs to be a big problem (figure 5). However,
in all instances, residents of Wells consistently, and significantly, reported higher levels of perceived crime problems than Dearborn. Seventy-seven percent of residents in Wells indicated that loitering was a big problem, compared with 49 percent in Dearborn. Perceived drug problems were also significantly higher at Wells. Eighty-seven percent of residents living in Wells indicated that drug dealing was big problem, and 85 percent indicated that drug use was a big problem, compared with 63 and 68 percent at Dearborn, respectively. Both gangs and shootings were perceived to be bigger problems at Wells than at Dearborn, with 66 percent indicating that gangs were a problem and 66 percent indicating that shootings were a problem at Wells (compared with 53 and 30 percent at Dearborn).

These crime statistics are startling on two levels. The magnitude of residents who indicated big crime problems illustrates that crime has most likely touched the lives of the majority of residents in some way—whether as victims, offenders or simply witnesses, suggesting neighborhood environments across the two developments where drug use, loitering, and gang violence are commonplace. The Project on Human Development in Chicago Neighborhood (PHDCN) survey of 8,7000 Chicago residents provides a good comparison; only 36 percent of residents indicated that drug dealing with a big problem and only 28 percent of residents indicated that loitering was a big problem. The significantly higher rate reported by residents of Wells and Dearborn indicates that perceived crime problems are unusually high for a typical Chicago community. More illustrative of the difference in neighborhood conditions is the magnitude of the

![Figure 5: Perceived Crime Problems in Neighborhood, by Site](chart.png)

*Difference between the two developments is statistically significant at the .05 level.

Source: Chicago Family Case Management Demonstration Baseline Survey Data

Number of Respondents: 344
difference between Wells and Dearborn responses. On average, residents in Wells indicated 23 percentage points higher with regard to levels of perceived neighborhood crime. As mentioned earlier in the section describing the developments, the residents were surveyed when Wells was in the midst of closing down completely. Unlike most of its other HOPE VI sites, the CCHA used a staged relocation plan—the site was not cleared before new construction began and original buildings were left standing with some buildings fully or just partially occupied (Popkin, 2010). Most of the buildings throughout the neighborhood had been demolished or were boarded up, the latter which can provide a haven for drug dealers and squatters. A recent study that conducted in-depth interviews with residents living in Wells during the phased demolition found that residents reported pervasive violence (Popkin 2010).

Perceptions of crime only tell part of the story of neighborhood conditions; as discussed earlier, the perception of neighborhood physical disorder can play a large role in determining resident satisfaction and quality of life. Residents at both Wells and Dearborn were asked whether or not they believed the following signs of physical disorder were big problems in their neighborhood: graffiti, trash, and vacant apartments (figure 6). In all instances, residents at Wells indicated higher levels of physical disorder. Fifty-one percent of residents at Wells reported graffiti was a big problem, compared to 43 percent in Dearborn. Fifty-four percent responded positively that trash was a big problem, compared to 31 percent at Dearborn. The largest difference was in reference to vacant apartments, where 78 percent of respondents at Wells indicated a problem, compared with only 49 percent in Dearborn. Again, these statistics indicate a much higher level of neighborhood disorder than the typical Chicago neighborhood. The Project on Human Development in Chicago Neighborhood found that in 2000, 21 percent of residents indicated that graffiti was a large problem, 27 percent indicated that trash was a large problem, and 16 percent indicated that vacant houses were a large problem.

![Figure 6: Perceived Physical Disorder in Neighborhood, by Site](image)

- **Graffiti**: 43% at Dearborn, 51% at Wells
- **Trash**: 31% at Dearborn, 54% at Wells
- **Vacant apartments**: 49% at Dearborn, 78% at Wells

*Difference between the two developments is statistically significant at the .05 level.
Source: Chicago Family Case Management Demonstration Baseline Survey Data
Number of Respondents: 344
Given respondents’ perceptions of physical disorder and crime, it is not surprising that residents at Wells indicate higher levels of fear than do residents at Dearborn. Figure 7 shows the results of how residents responded when asked questions about fear: residents’ unease at night and residents’ fear of walking outdoors in their neighborhoods. Fifty-three percent of residents of Wells and 38 percent of Dearborn respondents reported that fear of crime always or sometimes keeps them from walking outside. With regard to fear at night, 41 percent of Wells residents and 28 percent of Dearborn resident reported that they feel very unsafe or somewhat unsafe outside their building at night.

These results suggest that not only do individuals feel high levels of fear but they also may change their behavior in response to it. These levels of fear may have implications for residents’ physical health and fitness by reducing the likelihood that residents would walk places in their neighborhood and hence, reap the health benefits of physical activity. Indeed, a separate study by the authors using these data examined the relationship between fear, physical activity, and health and found that residents who were more fearful reported lower levels of health (see Roman et al. 2009). Other recent research examining the influence of neighborhood characteristics on physical activity found that across a number of crime factors, feeling unsafe had the largest influence on physical inactivity (Harrison, Gemmell and Heller 2007). One study that in an area characterized by high homicide rates, African-American women were 2.4 times more likely to do any type of physical activity if they perceived their
neighborhood to be extremely or somewhat safe from crime (Wilbur et al. 2003a).

**Perceptions of Social Capital**

Over the last twenty years, sociologists and criminologists have argued that social capital is an important feature of orderly and prosperous neighborhoods. Disorganized neighborhoods, on the other hand, lack the ability to foster informal social control, thereby facilitating increased opportunities for crime (Bursik and Grasmick 1993; Kornhauser 1978; Sampson 1985, 1986; Sampson, Raudenbush, and Earls 1997). Collective efficacy, one aspect of social capital, is the linkage of trust and shared norms to the willingness of residents to act together toward a pro-social collective goal (Sampson, Raudenbush, and Earls 1997). Research has shown that neighborhoods with high levels of collective efficacy are also neighborhoods that have low rates of crime and intimate partner violence, where residents have higher levels of health and education, and outcomes are better for children. Below, we describe levels of collective efficacy, social cohesion and social control at the individual level for residents of Dearborn and Wells, as well as describe resident responses to each survey item that comprises these measures. Examining these features of neighborhood social organization are important, not only because high levels of cohesion and control can buffer against crime, but also because recent research suggests neighborhood disorder has a strong indirect effect on resident mental health (Ross and Mirowsky 2009) through mistrust and feelings of powerlessness.

Residents at both Wells and Dearborn were asked a battery of questions to assess levels of social cohesion (five survey items) and informal social control (five survey items), together which comprise collective efficacy. Social cohesion refers to bonds of trust and assistance felt within each neighborhood. Residents were asked to agree or disagree with the following statements: *people in this neighborhood generally get along with each other; people in this neighborhood can be trusted; this is a close-knit neighborhood; people in this neighborhood share the same values; and people around here are willing to help their neighbors.*

Informal social control refers to values and norms that regulate behavior. Residents were asked to agree or disagree with the following statements about whether their neighbors were likely to intervene in various situations: if the fire station closest to their house is shut down; if there is fighting in front of their home; if children disrespect an adult; if children spray-paint graffiti; and if children skip school.

Figure 8 summarizes resident responses to these questions. It should be noted, that the sociological literature generally defines collective efficacy as a neighborhood level construct (by averaging resident responses within some defined neighborhood boundary), although a number of studies measure collective efficacy at the individual level. Residents of both Wells and Dearborn report low levels of social cohesion. Eighty percent of residents in Dearborn responded that they do not trust their neighbors, 76 percent in Wells. Reports that neighbors share values are also low, with 67 percent of residents in Dearborn and 72 percent of residents in Wells indicating that they do not feel as though neighbors have shared values. Responses about the willingness to help one’s neighbors are more ambivalent, with roughly fifty percent in Wells reporting that their neighbors would be willing to help other neighbors, with slightly more in Dearborn. However, the overall picture of reported social cohesion in both neighborhoods appears low; a national survey in 2000 on civic engagement found that 80 percent of individuals feel a strong sense of community. Moreover, in the national survey, 88 percent of
individuals on average say that they trust their neighbors or that they trust their neighbors a lot.\textsuperscript{5} With regard to the survey responses of demonstration residents, there is no statistically significant difference in responses to social cohesion between Dearborn and Wells, despite the large differences in perceptions of neighborhood disorder described earlier.

Table 2 shows the levels of reported collective efficacy for respondents in Wells and Dearborn. As stated above, collective efficacy represents resident perceptions regarding the likelihood that neighborhoods would act for the betterment of their community, and thus is measured by averaging the responses to all ten survey items (social control and cohesion) for each respondent.\textsuperscript{6} Over forty percent of residents had collective efficacy scores around the mean, with scores ranging between 2 and 2.9 on a scale of 1 to 4. A larger percentage of residents fell into the category reporting low levels of collective social control. Indeed, the large percentages of residents in Wells reporting disagreement with these features of social control suggest.

<table>
<thead>
<tr>
<th>Generally get along well</th>
<th>Neighbors can be trusted</th>
<th>Close-knit neighborhood</th>
<th>Neighbors share same values</th>
<th>Willing to help neighbors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dearborn</td>
<td>Wells</td>
<td>Dearborn</td>
<td>Wells</td>
<td>Dearborn</td>
</tr>
<tr>
<td>53%</td>
<td>66%</td>
<td>56%</td>
<td>76%</td>
<td>46%</td>
</tr>
</tbody>
</table>

\textsuperscript{5}Difference between the two developments is statistically significant at the .05 level.
Source: Chicago Family Case Management Demonstration Baseline Survey Data
Number of Respondents: 344

There are more differences across sites with regard to informal social control (figure 9). Residents in Wells reported greater doubt that their neighbors would react if children skipped school, spray-painted graffiti on local buildings, or if a fight broke out in front of their homes than did residents in Dearborn. This result is not surprising given the higher levels of neighborhood disorder reported in Wells; a greater prevalence of physical and social disorder would suggest that residents become accustomed to certain behaviors or neighborhood conditions and are therefore less likely to react to them. The large differences in responses between Wells and Dearborn in terms of responding to graffiti, fights, and children skipping school create a picture of different expectations of neighborhood informal social control.
efficacy than reporting high levels of collective efficacy. These percentages confirm that more residents in Wells than Dearborn report low levels of collective efficacy. But it is important to note that almost a quarter of residents in Wells and a little over a quarter of residents in Dearborn report high levels of collective efficacy. In later sections of this report we examine whether residents who perceive higher levels of collective efficacy have better mental health.

Despite the marked difference in perceptions of neighborhood crime and disorder levels between Wells and Dearborn, we find few differences in the levels of social cohesion and control.
Perceptions of Housing Quality

In addition to reports of high levels of disorder and crime, residents report that the physical quality of their housing is low (figure 10). The majority of individuals assessed their housing as “fair” (37 percent), or poor (23 percent). Only a small percentage rated their housing as very good (10 percent) or excellent (6 percent).  

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Residents were also asked whether they have experienced any problems with mold, rats/mice, cockroaches, exposed radiators, peeling paint/plaster, water leaks, malfunctioning toilets, and poor heating. At least 10 percent of respondents in both sites report problems in all these areas (figure 11). The most frequently reported problem was cockroaches, with the majority of residents in both sites (64 percent of residents in Dearborn; 63 percent in Wells) reporting cockroaches. Residents in Wells report a statistically significantly higher rate of water leaks than Dearborn (57 percent in Wells; 45 percent in Dearborn). Furthermore, 51 percent of residents in Dearborn reported problems with mold (42 percent in Wells). These indicators of housing problems, coupled with resident reports of poor housing quality highlight unpleasant and unhealthy conditions that, over time, can have an impact on quality of life.
Relationship between Resident Characteristics and Neighborhood & Housing Environment

Table 3 shows the mean scores for the environmental factors previously discussed in this report and whether the mean scores vary across resident demographic characteristics. We assess whether perceptions of cohesion, social control, fear, violence and disorder vary across age, gender, and other family characteristics. Generally, perceptions of effective social control decrease with age. Women perceive higher levels of social control but very similar levels of social cohesion compared with men. Interestingly, those respondents with large families (over six members) report higher levels of social control and social cohesion, although this is based on a small sample of 17 families. One finding of particular interest is that individuals who have lived in a development longer (>30 years) report less social control and less cohesion than individuals who have lived in the development for a shorter period of time. This result is based on a fairly large sample (106 individuals report living in a development longer than 30 years). One might expect the opposite: that a longer duration of residence in a development would allow for the creation of stronger social bonds. However, this result may suggest something about the residents who remain in a development for thirty-plus years. It could be that feelings of social cohesion and control decrease over time, perhaps due to high levels of neighborhood disorder and increasing levels of fear that are typically associated with increased age. It is likely that the residents who remain in a development for over thirty years are older individuals who are less likely to interact with neighbors, given their age. This finding may have implications for relocation outcomes, in that there are patterns of perceptions by age that might allow targeting of efforts to build cohesion and informal social control.
Our findings also show that fear does not generally increase with age. Interestingly, individuals who are 40 to 60 years old report higher levels of fear than older residents, which stands in contrast to the literature on fear. Women report higher levels of fear than men, and perceptions of fear vary with time spent in development, but not in any telling pattern. Generally, perceptions of violence and social and physical disorder have no strong correlation with age. While perceptions regarding problems with violence increases slightly, perceptions regarding problems physical disorder seem to decrease with age, while perceptions of social disorder vary. Men and women report only slight differences, with women generally reporting lower levels of social and physical disorder. Although table 5 provides some insight into patterns of perceptions by resident characteristics, these patterns are simply measures showing a possible relationship between two factors, without taking into consideration the multitude of other factors that may be contributing to beliefs and perceptions about neighborhood conditions. To obtain more rigorously derived insight into possible causal relationships of these factors on mental health, we examine how these characteristics are associated with poor mental health.
The Environmental Factors Contributing to Poor Mental Health

Given the perceptions of poor quality of housing, high levels of fear, perceived disorder and crime among residents across the two developments, as well as high levels of depression it is important to examine the relationships among these unhealthy conditions. Although it is widely recognized that perceptions of violence and disorder influence fear, research on the relationship between these factors and depression is in its infancy. Similarly, studies have only recently suggested that housing quality may be related to mental health (Evans et al. 2000; Wells and Harris 2007). We examine the environmental pathways to depression taking into consideration a resident’s age, gender, income and years lived in the development. We also seek to determine whether positive features of neighborhoods, such as collective efficacy, can buffer the effects of disorder and violence. Below, we examine whether fear, signs of neighborhood disorder and poor housing quality lead to depression among residents surveyed in the two developments. Although the survey data have only been obtained for one snapshot in time (i.e., data are “cross-sectional” rather than longitudinal), we can attempt to assess the strength and significance of proposed relationships through path analysis. Path analysis is an analytic technique used to assess the strength of a set of hypothesized causal relationships. Our hypotheses are based in the research literature indicating that environmental factors, such as disorder, violence, and poor housing quality described in this report, can influence depression.

Figure 12: Hypothesized Path model of Environmental Influences on Depression

Figure 12 displays the conceptual path model examined in the current analysis; for a complete description of the statistical methods used in the path analysis, the tabular results, and a detailed description of the factors used in the analysis, see appendix A. The arrows in figures 12 and 13 indicate the direction of influence for all the factors. Regarding our hypothesized path model (figure 12), two factors—
fear and collective efficacy—are shown in the middle of the diagram to indicate that we believe (or hypothesize) that these factors act as mediators in the path model. A mediating factor is one that acts between two other variables. More specifically, the paths tested in this model are the following:

1. Family support, economic stressors, substandard housing, and income will have a direct relationship with depression. Residents reporting low levels of family support (compared to those reporting higher levels of family support) will be more likely to have been depressed in the last year. Similarly, residents reporting more economic stressors, and those reporting substandard housing, will be more likely to have been depressed in the last year than residents who report fewer stressors and/or substandard housing.

2. A high level of fear will be associated with depression, and low levels of collective efficacy will also be associated with depression.

3. Perceptions of social disorder, physical disorder and violence will be indirectly associated with depression through fear and low levels of collective efficacy. Perceptions of high levels of disorder and violence will be associated with higher levels of fear, and lower levels of collective efficacy, which in turn, will increase the likelihood of depression.

4. We also hypothesize that perceptions of social disorder, physical disorder and violence will directly and positively influence depression. More specifically, residents perceiving high levels of disorder and violence will also have a higher likelihood of depression.

We include age, gender and years living in the development as control variables as these variables have been found in prior research to be related to fear.

Figure 13 depicts a simplified version of the results of the statistical analyses showing only the paths that were confirmed as statistically significant. In other words, the variables that are shown in figure 12, but dropped from figure 13 are those that were not confirmed to have a statistically significant direct or indirect effect on depression.

As shown in figure 13, a number of direct pathways were confirmed. Two variables had significant direct associations with depression: higher levels of economic stressors are associated with a lower likelihood of depression, and resident perceptions of high collective efficacy decrease the likelihood of depression. The other statistically significant direct relationships involved the factors related to perceptions disorder and violence with the mediator variables: perceptions of social and physical disorder are directly and negatively associated with collective efficacy, meaning as perceptions of disorder go up, perceptions of collective efficacy go down. Although perceptions of disorder did not influence fear as hypothesized, perceptions of violence directly and positively influenced fear. It is also important to point out the hypothesized relationships that were not confirmed through statistical analysis. Looking at the factors in the first set of brackets in figure 12, income, substandard housing and family support did not have a significant direct relationship with depression.

With regard to indirect relationships, we hypothesized that three of the left-hand factors (in the bottom bracket)—perceptions of social disorder, physical disorder and violence—would have an indirect relationship with depression through fear and low levels of collective efficacy. Two of the hypothesized indirect relationships were confirmed as
statistically significant. Both social and physical
disorder have a significant positive association with
depression, operating through low levels of collective
efficacy. This means that, although collective efficacy
by itself suppresses depression, when residents
perceive physical and social disorder to be high,
perceptions of collective efficacy are low, which in
turn, is associated with depression. Moving to the last
factor in bottom bracket—violence, although we
found that perceptions of violence are directly
associated with fear, there is support for our
hypotheses that violence has an indirect relationship
with depression through fear.

With regard to violent and disorderly environments,
it is theoretically sensible that acts of violence would
directly result in fear, as opposed to less fear-
provoking signs of physical and social disorder. What
is informative, is that, it is not fear or violence itself
that is associated with depression, but signs of
physical and social disorder that operate through fear
and low levels of collective efficacy. One possible
interpretation is that residents of the developments
in this study do not become inured to decaying and
disorderly conditions, but instead, take these clues as
signs of serious problems in their daily environment,
that, overtime take a toll on personal health. The
pathway is through their observations about trash,
graffiti, vacant houses, gangs, loitering, drugs that
create negative feelings or distressing views of human
nature and the potential of neighbors to act when needed for the good of the community.

Summary

Toward Innovative Solutions for Hard to House Residents of Public Housing

This report was designed to shine a spotlight on the immediate physical and social environment of residents who were living in two distressed public housing developments in 2007. While past research has similarly described the high incidence of depression and the high levels of disorder and violence within older, urban public housing developments, this report was intended to bring those factors together to uncover the pathways that influence mental health. We find evidence that suggests that physical and social disorder create cues that take a toll on residents through negative feelings about neighborhood cohesion and the neighborhood’s ability to come together in a time of need. In addition, we find that economic stressors, which include threats of eviction, not being able to pay bills, or buy food for oneself, is associated with depression.

The report also highlighted the notable differences between perceptions of problems and social capital between the two developments. In Wells, which was toward the end of the almost decade-long process of closing down, a significantly larger percentage of residents perceived high levels of disorder than residents of along almost all factors except graffiti; in addition, residents in Wells were more fearful than residents in Dearborn, and residents in Wells were significantly more likely to report big problems with violence. But it is also important to note, regardless of these differences, the picture that emerges across both developments is one of disorderly neighborhoods, rife with crime and drugs.

With regard to housing quality and housing problems, the majority of residents in both developments felt the quality on their housing was fair or low, with at least 40 percent of residents in both developments reporting problems or big problems with mold, cockroaches, peeling paint and plaster, and water leaks.

The magnitude of housing quality issues, fear, and crime and disorder in these developments calls to our attention the need for innovation and experimentation to help improve the quality of life for public housing residents. The concentration of residents in a centralized physical location, such as public housing, provides a unique opportunity for policymakers and practitioners to experiment with options that change physical features and/or buoy the social aspects of these communities in hope of ultimately, improving mental health. In many jurisdictions, public housing program dollars for comprehensive resident services do exist, but priorities often dictate that case management and supportive services focus on employability, as well as education or tenancy issues. Our analyses demonstrate that efforts directly spent on building income and assets—a focus on short-term goals in addition to the longer-term goals of employability or job training could help reduce the financial strain that may lead to depression. The Chicago Case Management Demonstration incorporates a financial literacy program that offers training in budgeting and financial management, and provides a matched savings program—but only for those residents who are employed. Continuing to explore programs or services that assist with short-terms needs, and are expressly focused on building assets and resources, as well as paying bills, could offer immediate reductions in financial stressors for residents.
In addition, community-based efforts focused on maintaining order in the neighborhood, as well as increasing collective efficacy, might be a worthy investment in the health of residents and communities. Partnerships between local police agencies and residents that bring residents together and also built trust in the police, could simultaneously build neighborhood cohesion and assist in creating stronger informal social controls. Furthermore, given that the findings indicate that physical conditions appear to be decidedly worse in Wells, than Dearborn, if we can make the assumption that these conditions relate to the lengthy process of building demolition and resident relocation in Wells (roughly seven years), future efforts to replace large multi-building developments should consider having fewer phases of relocation and/or ensuring a safe and orderly environment for residents who remain among vacant and distressed units for any period of time.

We also want to reiterate suggestions provided in a recent report on the demonstration that found that residents in these developments could be characterized along three clusters of types of residents—“aging and distressed,” “high risk,” and “striving,” and that services should be targeted to the different needs (see Theodos et al. 2010). It is notable that two of the clusters—“aging and distressed” and “high risk residents”—were characterized by residents with serious physical and mental health challenges, with high rates of poor health, depression, anxiety, and substance abuse. Many of the residents in these clusters cannot work due to health issues. The report suggested that residents represented in these clusters could benefit from intensive case management models and supplemental services such as literacy programs and programs that assist tenants in selecting and moving to new housing, with continued services provided in the new home. Moving residents out of public housing and into other types of housing could offer a range of needed services in a safe environment where overall quality of life is higher. Options include permanent family supportive housing and/or “integrated” supportive housing that provides services on-site such as health care, mental health services, and substance abuse counseling; educational and literacy services; transitional jobs and other employment and training services; financial literacy; parenting support; child care; after school services. Integrated supportive housing places small numbers of permanent family supportive housing units incorporated into mixed-income developments, with case management and services provided on site. Residents that don’t need the more intensive service offerings in permanent supportive housing could be assisted to move out of public housing with vouchers that include “wrap-around services”—where case managers go into the community to provide the same package of services delivered in permanent family supportive housing to voucher holders.

In conclusion, the analytical findings described in this report are only one small part of a complex portrait of resident health (or poor health) and quality of life for residents living in urban public housing developments. But complacency shouldn’t follow complexity. Research that provides a better understanding of the mechanisms through which neighborhood conditions, perceptions of neighborhood conditions, and individual characteristics affect mental health can better inform policy. The complexity of the issue demands attention across disciplines and from all fronts—national, state and local government and community-based agencies intent on creating safer and supportive environments. The policy discussion about hard to house families must occur in the larger collaborative and cross-disciplinary framework of action toward effective housing solutions that incorporate viable solutions for all families currently living within distressed and
Examining the Physical and Social Environment of Public Housing Residents

segregated public housing. With regard to the Chicago Family Case Management Demonstration, we hope that by showing the depth of problems related to safety and housing quality across residents in the two public housing developments, we will spur continued progress in developing and sustaining innovative programs that target the individualized needs of the residents.
References


Examining the Physical and Social Environment of Public Housing Residents


Appendix A. Path Analysis: Description and Tabular Results

We removed from our original sample of 344 individuals any respondent who was missing data for any of the variables specified in our model. Our final sample was 296. Path analysis was conducted using version 8.54 of Lisrel. Hypothesized models are developed from theory and then subsequently tested against the data to see if they do an adequate job of predicting outcomes for the dataset. One of the benefits of path analysis is it allows variables to both directly and indirectly outcomes. This information provides insight with regard to the pathways of influence for multiple factors in one’s life. Path analysis allows for an assessment of the “goodness of fit” of a hypothesized model. The Satorra Bentler Scaled chi-square test statistic was 11.11 (p=0.602) with a RMSEA of < 0.01 and a CFI = 0.89. These statistics indicate a good fitting model.

Table A1 presents the direct effects of individual and perceived environmental characteristics on depression. Statistically significant effects are denoted in bold and asterisks are used to identify significance level. As described in the narrative of this report, perceptions of violence increased fear, but fear did not have a statistically significant relationship with depression. Perceptions of both physical and social disorder decreased perceived levels of collective efficacy, which in turn, was related to depression. Residents that reported more economic stressors (p<0.05) had a greater likelihood of being depressed in the past year.

Table A1. Direct Effects of Individual and Perceived Environmental Factors on Depression

<table>
<thead>
<tr>
<th></th>
<th>Fear b (SE)</th>
<th>Collective Efficacy b (SE)</th>
<th>Depression b (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.137 (0.247)</td>
<td>0.001 (0.600)</td>
<td>0.204 (0.295)</td>
</tr>
<tr>
<td>Gender (1 if female, 0 if male)</td>
<td>0.111 (0.115)</td>
<td>-0.049 (0.149)</td>
<td>0.124 (0.182)</td>
</tr>
<tr>
<td>Years in development</td>
<td>-0.013 (0.148)</td>
<td>0.099 (0.145)</td>
<td>-0.002 (0.203)</td>
</tr>
<tr>
<td>Physical disorder</td>
<td>0.048 (0.120)</td>
<td>-0.278 (0.118)*</td>
<td>0.148 (0.168)</td>
</tr>
<tr>
<td>Social disorder</td>
<td>0.154 (0.146)</td>
<td>-0.137 (0.083)*</td>
<td>-0.72 (0.143)</td>
</tr>
<tr>
<td>Violence</td>
<td>0.339 (0.134)*</td>
<td>-0.132 (0.109)</td>
<td>-0.112 (0.161)</td>
</tr>
<tr>
<td>Collective efficacy</td>
<td></td>
<td>-0.292 (0.141)*</td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td></td>
<td></td>
<td>0.151 (0.132)</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td>-0.170 (0.111)</td>
</tr>
<tr>
<td>Economic stressors</td>
<td></td>
<td></td>
<td>0.269 (0.129)*</td>
</tr>
<tr>
<td>Substandard housing</td>
<td></td>
<td></td>
<td>0.021 (0.103)</td>
</tr>
<tr>
<td>Family support</td>
<td></td>
<td></td>
<td>-0.091 (0.101)</td>
</tr>
</tbody>
</table>

Significance testing:†p < 0.10, *p < 0.05, **, p < 0.01
b= unstandardized regression coefficient; SE = standard error
Table A2 reports the indirect effects (i.e., how one variable affects another through a mediating variable) on depression.

<table>
<thead>
<tr>
<th>Depression</th>
<th>b (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.021 (0.182)</td>
</tr>
<tr>
<td>Gender (1 if female, 0 if male)</td>
<td>0.044 (0.172)</td>
</tr>
<tr>
<td>Years in development</td>
<td>-0.031 (0.040)</td>
</tr>
<tr>
<td>Physical disorder</td>
<td>0.088** (0.029)</td>
</tr>
<tr>
<td>Social disorder</td>
<td>0.063* (0.032)</td>
</tr>
<tr>
<td>Violence</td>
<td>0.090 (0.063)</td>
</tr>
</tbody>
</table>

Significance testing: †p < 0.10, *p < 0.05, **, p < 0.01

b = unstandardized regression coefficient; SE = standard error

Measurement of Factors in Path Model

**Depression.** Our outcome variable is a dummy variable derived from the CIDI-12, or Composite International Diagnostic Interview Instrument. The series includes two types of screener questions that assess the degree of depression and the length of time it has lasted. The index is then created by summing how many of the six items respondents reported feeling for a large share of the past two weeks. A respondent score of three or higher on the index indicates a major depressive episode and was coded as a “1” versus “0” for a score of less than 3.

**Fear** is measured as an additive scale of two items: how often does fear of crime keep you from walking outdoors (never, rarely, sometimes, or always) and how safe do you feel or would you feel being out alone in the parking lots, the lawns, the street, or sidewalks right outside your building at night (very safe, somewhat safe, somewhat unsafe, very unsafe).

**Collective Efficacy** is a 10-item construct representing individual-level perceptions of community cohesion and informal social control. Respondents were asked to indicate the extent of their agreement on a four-point scale ranging from strongly disagree to strongly agree or very likely to very unlikely. The items included: This is a close-knit neighborhood; people around here willing to help neighbors; people don’t get along with each other; people do not share same values; people in this neighborhood can be trusted; likelihood neighbors would do something about kids hanging out; likelihood neighbors would do something about kids painting graffiti; likelihood neighbors would scold child showing disrespect; likelihood neighbors would break up fight in front of house; and likelihood neighbors would do something if local fire station closed. The ten items were
combined to form a single scale. Internal reliability was high (\( \alpha = 0.88 \)).

**Economic Stressors** is a five-point scale (0-4) that assesses financial hardship. Respondents were asked whether financial strain had caused them to do any of the following in the past 12 months: (1) cut down or skip meals, (2) miss phone payments, (3) miss rent payments, or (4) receive an eviction notice or threat of eviction. Positive responses were summed to form the scale.

**Substandard Housing** is a 0-8 index of poor housing conditions based on the number of affirmative responses to the following questions on housing conditions: has your apartment been too cold in the past winter?, do the toilets not work?, does water leak in the apartment?, is paint/plaster peeling off?, does the apartment have an exposed radiator?, does the apartment have cockroaches?, does the apartment have rats or mice?, and does the apartment have problems with mold? Like the economic stressors variable, the variable was coded as a summation of positive responses.

**Physical Disorder.** The physical disorder measure consists of three questions that asked respondents if they found the following to be a problem in their neighborhoods: vacant houses/apartments, graffiti and trash. Participants were asked to rate the degree of the problem on a three point scale from no problem (coded 1) to a large problem (coded 3). The disorder index was calculated by taking the average of the responses. Reliability was adequate (\( \alpha = 0.69 \)).

**Social Disorder** is a measure consisting of three items asking respondents if they found the following to be a problem in their neighborhoods: loitering, selling drugs, using drugs, and gang presence. Participants were asked to rate the degree of the problem on a three point scale from no problem (coded 1) to a large problem (coded 3). The disorder index was calculated by taking the average of the responses. Reliability was good (\( \alpha = 0.78 \)).

**Violence** is measured as an index of three questions which ask respondents to what degree they believe the following to be problems in their community: robberies/attacks, gangs, and shooting/general violence. Respondents indicated their responses on a three point scale (no problem to a big problem). The index was created by taking the mean of the three scores. Internal reliability was adequate (\( \alpha = 0.71 \)).

**Family Support** is a measure consisting of 13 items that were scaled by taking the mean: respondents were asked, on a four-point scale, how strongly they agreed or disagreed with the following statements with regard to the last 30 days: You have someone in family who would help you find a place to live; you have someone in family who would help you find a job; you have someone in family who would provide financial help; you felt close to family; you wanted family involved in life; you considered self a source of support for family; fought a lot with family members; often felt like you disappointed family; you were criticized a lot by family; you had family member to talk with about problems; you had family member to turn to for suggestions on how to deal with problems; you had family member who understood problems; and you had someone in family to love you and make you feel wanted. Reliability was very high (\( \alpha = 0.87 \)).

**Individual-level Socio-demographics.** Individual-level socio-demographic characteristics include self-reported age (in years), gender (male/female), number of years respondent has been living in the development and ratio of income to need, calculated a household income divided by the official poverty threshold for the household. An income-to-need ratio of 1 would indicate that a resident’s household income is equal to the poverty threshold. A score of greater than 1 would indicate less severe poverty.
Endnotes

1 For more detail on the Chicago Family Case Management Demonstration see the report titled, “The Chicago Family Case Management Demonstration: Developing a New Model for Serving “Hard to House” Public Housing Families (Popkin et al. 2008).” Note that some material from the 2008 report—for instance, the project, site and sample description, and general description of household characteristics—was also used in this report.


3 The measures of anxiety were derived from Berwick et al. (1991).

4 The PHDCN was a large-scale, interdisciplinary study of how families, schools, and neighborhoods affect child and adolescent development. Data on neighborhood problems come from a probability sample of adult household residents across 343 neighborhood clusters in 2000.

5 The Social Capital Community Benchmark Survey used a national sample of roughly 3,000 respondents.

6 Internal reliability was high (α =0.88).

7 Levels are based on the average score for collective efficacy within each development; low level signifies levels that are more than 1 standard deviation below the mean; high levels represent a score higher than 1 standard deviation above the mean.

8 Numbers may not sum to 100 due to rounding.