Neighborhoods and Violence in the Housing Crisis

America is in the midst of a housing crisis. Rents continue to rise while income stagnates, creating record levels of rent burden (Joint Center for Housing Studies 2018). Eviction has become commonplace, with as many as one in eight poor renters evicted every two years (Desmond 2015). Even homeowners face high costs, and many people are still recovering from the foreclosure crisis (Joint Center for Housing Studies 2018). Despite the severity of the situation, there has been no systematic analysis of the effect of eviction, or forced moves more generally, on neighborhood crime.

One of urban sociology's most consistent findings is that unstable neighborhoods have high rates of crime (Shaw and McKay 1969; Jacobs 1961; Sampson 2012). Constant turnover breaks apart social networks and removes a sense of familiarity between neighbors. Institutions like churches and schools lose members and no longer have power within the neighborhood. As a result, the social fabric breaks down and crime proliferates. But not all moves are the same. People choose to move during important life events like starting a family or when they can afford a better home (Speare 1970; Desmond et al. 2015). In contrast, forced moves, due to eviction, foreclosure, or building condemnation, have a slew of negative outcomes. People forced out of their homes end up in poorer, more violent neighborhoods; they show less attachment to these areas and subsequently move more often; and they are at increased risk of depression, job loss, and material hardship (Bolan 1997; Desmond 2015a; Desmond 2015b). There are thus many reasons to believe that evictions and foreclosures have a particularly pernicious effect on neighborhood social health.

Black Americans move as or less often than whites (South and Deane 1993), but they are forced out of their homes at much higher rates. Black homeowners faced disproportionate rates of foreclosure during the Great Recession (Massey et al. 2016), but even in the decades before, they were more likely to transition back to renting (Sharp and Hall 2014). Black renters, particularly Black women renters, face extremely high rates of eviction (Desmond 2012). If it is true that forced moves are especially harmful to communities, then we may be missing a key dimension of Black neighborhood disadvantage.

Data and Methods

We will answer the question of how forced moves relate to neighborhood crime using quantitative data from Chicago and Boston. We chose Chicago because it has been the site of countless studies of urban structure, and so our results will speak directly to past work. Furthermore, it is a large and highly segregated city, which allows us to examine the relationship between forced mobility and violence in a variety of contexts. We chose Boston because it is relatively similar to Chicago - it is a highly-segregated, post-industrial city - but has a fairly different housing market. First, Boston is almost entirely rented, with very few predominantly owner-occupied tracts. Second, its rental market is extremely tight, with very low vacancy rates and a large range of rent prices. Finally, Boston's Black and Hispanic populations are far more residentially integrated than are those of Chicago.

We used data on eviction, foreclosure, crime incidents, and social organization in each city. We have records of every eviction since 2008 in Boston and since 2000 in Chicago, obtained from

LexisNexis and Massachusetts court websites. We have estimates of the number of foreclosures from January 2007 to July 2008 for both cities from HUD and exact foreclosure rates from 2008 to 2015 from Woodstock Institute. We operationalized forced mobility as the number of evictions and foreclosures, per household, in a certain area and time period. We have records of every crime incident since 2012 in Boston and since 2001 in Chicago, obtained from public data portals for each city. We used these to create per capita violent crime rates. We have measures of social organization in 1995 and 2002 in Chicago and 2006-2010 in Boston, obtained from the Project on Human Development in Chicago Neighborhoods and the Boston Neighborhood Survey. Census and ACS demographic data are also used throughout.

First we modeled the level of eviction and foreclosure at the tract level in each city, to get a sense of where and why it is happening. Next, we used forced mobility to predict the number of violent crime incidents and the level of social organization in each tract, controlling for population, race, concentrated disadvantage and overall mobility. These models allowed us to see whether tracts with a high rate of eviction and foreclosure have more crime and lower social organization. We then added social organization variables as predictors to our models estimating violent crime, to see whether collective efficacy or social networks mediates the association between forced mobility and violence. Finally, we replicated these models at the street segment level, where data allowed, to see at what geographic level the relationship exists. We estimated all of these models in both Boston and Chicago, for the entire city as well as for racially-homogenous subsections of each city. For parsimony in the preliminary findings we focus on the results from Chicago.

Preliminary Findings

Forced mobility is dramatically higher in Black communities. In Chicago, 80% of non-Black tracts have forced mobility rates between 1.5% and 6.2%, while 80% of Black tracts are between 5.4% and 13.4%. Not only are rates much higher in Black tracts, but there is almost no overlap. This racial disparity cannot be explained by demographic differences. Figure 1 shows the poverty rate and rate of forced mobility, by tract, in Chicago. Although poverty is associated with forced mobility and Black neighborhoods have higher rates of poverty, in those areas where poverty rate is the same, forced mobility is much higher in Black neighborhoods. Plots with family structure and forced mobility show the same relationships. When we predict forced mobility using multivariate models, proportion Black is the strongest predictor by far. All of these analyses were replicated and showed similar results in Boston.

Forced mobility is highly associated with violent crime. Figure 2 shows that there is a strong bivariate relationship between the two variables. Although Black areas have higher rates of forced mobility, in areas where forced mobility is the same, Black and non-Black rates of violent crime are similar. There appears to be a single relationship between forced mobility and violence that applies to both Black and non-Black neighborhoods. When we estimate multivariate models, the relationship remains very strong. In models from Chicago, an increase of 9% in forced mobility rate (2.5 standard deviations) is associated with 2.2 times the rate of violent crime. The association was substantively the same when we modeled only Black, only white, and only Hispanic tracts. The coefficient did not change when we controlled for a large range of possible third variables. We replicated these models in Boston and found very similar results, despite much lower rates of crime and forced mobility.

Forced mobility mediates a large portion of racial differences in violent crime. Without any controls, Black tracts in Chicago have 211% and 125% higher rates of violent crime than white and Hispanic tracts, respectively. When we control for concentrated disadvantaged, residential stability, and median age, those disparities decrease to 140% and 100%. When we add forced mobility, these drop to 71% and 32%. While the conventional measures of structural disadvantage mediate a huge part of racial differences, the forced mobility rate mediates even more. These results were even more dramatic in Boston. In those models, adding forced mobility reduced the racial indicators to zero. This suggests that forced mobility may be a key reason for higher rates of violence in Black neighborhoods.

Forced mobility is moderately associated with social disorganization. In Chicago, neighborhoods with high levels of forced mobility have substantially lower levels of collective efficacy and reciprocal exchange and smaller social networks. A 9% change in forced mobility rate (2.5 standard deviations) is associated with a change in collective efficacy of .37 standard deviations. This relationship persists when we model Black and white tracts separately. However, forced mobility does not predict social organization in Boston nearly as well. Only collective efficacy has a substantial association, and it is not significant. Furthermore, even in Chicago, the relationship with social organization is not extremely large and social organization variables do not mediate the relationship between forced mobility and violent crime. Part of this may be due to measurement error in our social organization variables or issues with the timing of measurement.

Not satisfied with the mixed evidence from social organization variables, we wanted to know at what geographic level the association between forced mobility and violent crime exists. We geocoded evictions (foreclosure data is only at the tract level) and crime incidents to the street segment and estimated zero-inflated negative binomial models. We found that when we control for the level of forced mobility at the street segment, the tract-level measure is no longer predictive. This suggests that whatever is causing the association varies at the street segment level. We plan to continue these analyses in the future.

Implications and Next Steps

Our research thus far has shown that forced mobility is a racialized process that is highly associated with violent crime. This suggests that forced mobility is responsible for a large part of racial differences in violence, but we cannot yet prove that, because we do not know precisely why the association exists. Some evidence points to social organization as a mediating variable, but the data is not conclusive. We plan to continue analysis by testing for mediators at the street segment level. We are currently looking for indicators of socioeconomic status, physical infrastructure, and social organization for street segments. One possibility is using 311 reports from Boston, which have been shown to be decent proxies for social organization variables (O'Brien 2015).

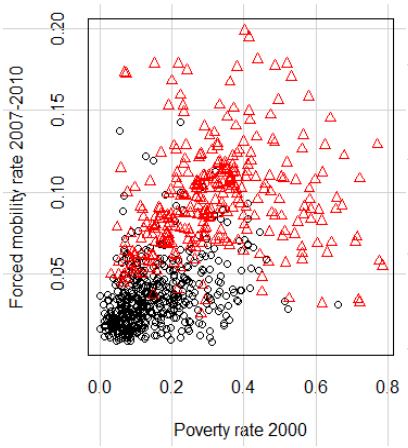

Fig. 1 Poverty rate and forced mobility rate, for majority Black (red) and not majority Black (black) tracts, in Chicago. Black tracts have anomalously high rates of forced mobility, given their poverty rates.

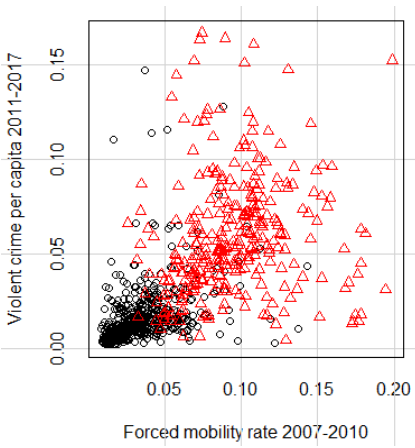

Fig. 2 Forced mobility rate and violent crime rate, for majority Black (red) and not majority Black (black) tracts, in Chicago. Given the relationship between forced mobility and violent crime, crime rates in Black tracts do not appear anomalous.

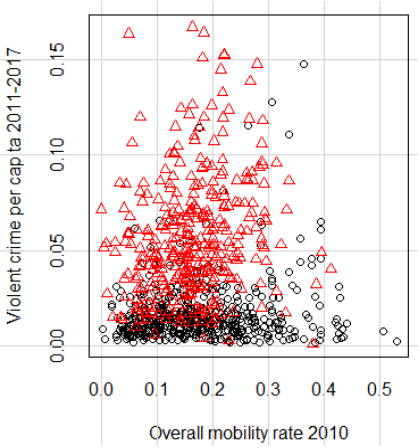

Fig. 3 Overall mobility rate and violent crime rate, for majority Black (red) and not majority Black (black) tracts, in Chicago. Overall mobility has little relationship with violent crime, much less than forced mobility does.

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