



Race, mental health, and evictions filings in Memphis, TN, USA

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ABSTRACT

Although evictions are a major disruptor of residential stability, their contribution to health disparities is understudied. Both experiencing eviction and the threat of being evicted are associated with adverse physical and mental health outcomes. Communities with higher proportions of Black people have higher rates of eviction filings. Market characteristics alone are insufficient for explaining the clustering of eviction in neighborhoods of color. Memphis is the fastest-growing rental market in the United States, facing an eviction crisis and is rife with persistent racial health disparities. This study explored the relationship between eviction filings, mental health, and neighborhood racial composition in Memphis to inform local policy approaches. We combined health from the City Health Dashboard, 2019 American Community Survey 5-year estimates, and eviction filings from the Shelby County, TN General Sessions Civil Court. Multivariate regression models were used to examine the relationship between health outcomes and eviction filing rates while controlling other relevant neighborhood characteristics. Separate models were run based on neighborhood racial composition. Poor mental health was significantly associated with higher eviction filing rates in majority Black neighborhoods but not in majority white and racially mixed neighborhoods. These findings point to evictions as an important contributor to racial health inequities in Memphis and the importance of race-conscious policy interventions that address the dual crisis of evictions and racial health disparities.

1. Introduction

Stable and affordable housing is important for the health of individuals and communities (Moran-McCabe et al., 2018). While there is a robust and growing literature on the importance of housing for health, the role of evictions in the context of health is still relatively understudied. Evictions were at one point seen as the “hidden housing problem,” but in recent years, empirical evidence positions evictions as a significant disruptor of residential stability that contributes to health and economic disparities (Desmond and Kimbro, 2015). Memphis is a majority Black city that has been deemed the eviction capital of the United States. Additionally, Memphis experiences persistent and large racial health inequities. This study seeks to use Memphis as a case study by applying a neighborhood-level lens to the relationship between eviction filings and health outcomes.

1.1. Eviction and its downstream effects

Eviction is more than a legal process and carries collateral

consequences (Desmond, 2016). Following an eviction or an eviction filing, finding housing is more challenging since many landlords who check credit reports or court records will refuse to rent to tenants who have had eviction cases filed against them or judgments entered (Desmond and Kimbro, 2015; Polk, 2019). Relatedly, eviction can result in long-term consequences for a tenant’s credit history. Landlords often report eviction judgments, to credit bureaus, and those reports can stay on tenants’ credit histories for years (Greiner et al., 2012).

Additionally, experiencing eviction and the threat of being evicted are associated with adverse physical and mental health outcomes (Gold, 2016; Vásquez-Vera et al., 2017). Leifheit et al. (2020) found that children were more likely to experience food insecurity than children who did not experience a removal following an eviction. The adverse health effects of displacement are not limited to individuals. Counties with higher eviction rates had more chlamydia and gonorrhea cases per 100,000 population than counties with lower eviction rates (Leifheit and Jennings, 2019). Chicago researchers also found eviction rates and eviction filing rates as significant predictors of very low birth weight and infant mortality (Hazekamp et al., 2020). In California, counties that

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expanded Medicaid early had 25 fewer evictions per month than other counties (Allen et al., 2019).

The adverse effects of eviction are long-lasting. Hatch and Yun (2021) found that individuals who experienced eviction were more likely to have poor self-rated health and mental health outcomes one year and seven to eight years after an eviction. Mothers who experienced displacement were more likely to report poor health for themselves and their children two years after being evicted (Desmond and Kimbro, 2015).

The risk of and adverse effects of eviction are not equal throughout society. Households with children face a higher risk of eviction (Desmond et al., 2013), particularly among Black and Latinx mothers (Lundberg and Donnelly, 2019). Communities with higher proportions of African Americans had higher rates of eviction filings even after controlling for poverty rates and rent burdens (Zewde et al., 2019). Additionally, the threat of eviction has more substantial negative effects on women, older adults, and Black people (Vásquez-Vera et al., 2017).

1.2. Evictions and place

Single city studies often provide the scale necessary to analyze evictions at the neighborhood level meaningfully. For example, Teresa (Teresa, 2018) found in Richmond, Virginia, that market characteristics could not help describe why evictions were concentrating in certain neighborhoods. Teresa puts forth racial and ethnic neighborhood composition as a stronger predictor of eviction's spatial distribution (Teresa, 2018). This finding is supported by many other single city studies, where the proportion of Black residents is related to the geography of evictions (Finger, 2018; Thomas, 2017).

Evictions have steadily been increasing in Memphis, Tennessee. Between 2016 and 2019, an average of 31,633 evictions were filed annually. Roughly 20% of renters in Memphis faced eviction. Black and Latinx communities in the city had higher eviction rates than white communities (Harrison, 2019). In addition to racial disparities in eviction, Memphis is rife with racial disparities across multiple health outcomes. Black Memphians have comparatively higher rates of breast cancer care and outcomes, infant mortality, pediatric asthma outcomes, and chronic diseases (Cutts, 2010; Jia et al., 2014; Vuthipadadon et al., 2013; White-Means et al., 2020).

Social conditions, like housing, are a fundamental cause of health inequities, and deliberate public policy choices created these conditions (Swope and Hernández, 2019). Therefore, public policy interventions are needed to address both the housing and health inequities in Memphis. This study examined two major questions about the relationship between eviction filings and health outcomes in Memphis, Tennessee.

1. What is the spatial distribution of evictions in Memphis, TN?
2. Is there a relationship between eviction filings and mental distress?

2. Methods

We combined data from the City Health Dashboard, American Community Survey (ACS), and Shelby County, TN General Sessions Court. Health data was from the City Health Dashboard. This database includes 35 city- and census tract-level measures across five domains: clinical care, health behaviors, health outcomes, the physical environment, and social and economic factors. Details about the Dashboard have been previously published (Gourevitch et al., 2019).

We obtained contextual data about census tracts in Memphis from the 2019 ACS 5-year estimates. The ACS is a monthly survey conducted by the United States Census Bureau. The survey provides information about many different social and economic needs such as education, housing, and employment.

Case level information on eviction filings, also known as Forcible Entry and Detainer actions (FEDs), were obtained from the Shelby County General Sessions Court from January 2016 to December 2019.

This study was based on publicly available database and was deemed exempt by the University of Memphis Institutional Review Board.

2.1. Variables

Our health outcome of interest, frequent mental distress, was obtained from version 10.2 of the City Health Dashboard. The Dashboard defined frequent mental distress as the percentage of adults reporting that their mental health was not good for 14 or more days during the past 30 days. Frequent mental distress estimates are from 2018 and were developed using small area estimation approach that uses multilevel regression and poststratification (Zhang et al., 2015).

The predictor variable of interest was the census tract level eviction filing rate. We first geocoded each eviction case using the primary defendant address to manually calculate this using case-level eviction filing data. We were able to successfully geocode 95% of all filings in the study period. Then, we spatially joined the defendant's address to the correct census tract using the 2010 census tract boundaries. To determine the total number of renters at the tract level, we use the 2019 ACS 5-year estimates as our denominator and the total number of eviction filings as the numerator in calculating the rate.

Control variables, obtained from the 2019 ACS 5-year estimates, included: uninsured rates, percent of renter-occupied homes, percent of rent-burdened households (i.e., spending 30% or more of household income on rent), median household income, percent of single-parent families, percent of the population with a bachelor's degree or more, percent of the population with a disability, unemployment rate, and race and ethnicity. These covariates were chosen based on previous literature in this area and theoretical relevance to health outcomes and evictions. Higher uninsured rates, lower levels of educational attainment, unemployment, and lower household income are associated with poorer health outcomes (Braveman and Gottlieb, 2014; Levy and Meltzer, 2008). Cost-burdened renters, renters with disabilities, and single-parents face higher risk of evictions (Brennan et al., 2020; Kuechle, 2021). Additionally, gaining access to health insurance is associated with reductions in eviction filing rates (Allen et al., 2019).

2.2. Statistical analyses

Based on the demographic makeup of Memphis and the strong relationship between evictions and the proportion of Black residents, we categorized neighborhoods based on the proportion of Black residents. We used three categories: 1) low Black population (i.e. < 25% Black); 2) racially mixed neighborhood (i.e. 25–50% Black); and 3) majority Black neighborhood (>51% Black). We view residential segregation, via racial composition of neighborhoods, as central to our research approach. Given the persistent residential segregation in Memphis and the disproportionate burden of evictions and eviction filings in Black communities, our modeling approach was focused in the relationship between mental health and eviction filing rates across different types of neighborhoods. We did not aim to explore general relationships between eviction filings and mental health.

Our analysis uses descriptive statistics to describe the study population and Pearson correlation to examine relationships between eviction filing rates and neighborhood socioeconomic characteristics and mental health. To explore the relationship between neighborhood-level eviction filing rate and mental health while adjusting for relevant neighborhood characteristics, we used pooled multivariate OLS regression models. We controlled for neighborhood socioeconomic characteristics and health behaviors. Our dependent variable was based on estimation techniques which may bias our standard errors. To address this, we conducted White's test of for heteroskedasticity to determine if we needed to adjust our regression models (Kong and Zhang, 2020; Lewis and Linzer, 2005). White's test was not significant ($p = 0.19$), so we did not correct the OLS standard errors. Variance inflation factors (VIF) were used to determine collinearity between variables, and VIF

values < 10 were used as the threshold to determine collinearity. Separate models were run for each type of neighborhood. These methods constitute an exploratory approach that seeks to begin distilling the relationship between neighborhood eviction filing rate and mental health. It is not a causative analysis but an important first step in the research, with so little previously known about this topic.

3. Results and discussion

We found that the relationship between neighborhood-level eviction filings and poorer mental health was only significant in majority Black neighborhoods. These findings point to structural racism as a fundamental cause of poor health, the importance of neighborhood dynamics, and the need for thoughtful policy interventions that are sensitive to state and local contexts.

3.1. Overview of results

Between 2016 and 2019, an average of 27,666 evictions were filed each year. During that same period, the average neighborhood eviction filing rate was 16.9%. The number of eviction filings and the eviction filing rate was higher in majority Black neighborhoods (Table 1). The distribution of eviction filing rates also varied by the neighborhood racial composition (Fig. 1). This specific finding is one of the most important in the study. It necessitates an even closer look at residential segregation and its impact on eviction filings, given the racialized nature of evictions evident in previous research (Desmond, 2016).

Eviction filing rates were significantly correlated with many socio-economic characteristics and health outcomes (Table 2). The strongest correlations were observed between the percent of the population with at least a bachelor's degree (-0.39), poor self-rated mental health (0.33), percent of single-parent households (0.37), and percent of the population that is white (-0.48). The single-parent household is not surprising. Neither is the negative relationship between white communities and college education since housing instability in our commodified housing

Table 1
Summary statistics for study variables by neighborhood racial composition.

	Total	Low Black (N = 53)	Racially mixed (N = 35)	Majority Black (N = 128)
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Eviction filing rate	16.9% (11.34)	9.0% (1.26)	12.9% (1.30)	21.2% (0.96)
Number of evictions	501(39)	153 (19.94)	397 (66.76)	692 (57.66)
Health outcomes and behaviors				
Poor mental health	17.8% (4.37)	13.7% (0.47)	15.6% (0.58)	20.0% (0.28)
Smoking	23.7% (7.34)	17.4% (0.96)	20.0% (0.96)	27.4% (0.46)
Social and economic characteristics				
Unemployment	9.3% (7.95)	4.6% (1.03)	5.2% (0.57)	12.4% (0.67)
Uninsured	12.8% (8.22)	7.2% (0.97)	10.9% (1.15)	15.5% (0.54)
Single parent households	47.2% (26.44)	16.9% (1.23)	34.7% (3.19)	63.4% (1.69)
Cost burdened renters	54.2% (15.65)	44.6% (2.23)	47.9% (2.38)	59.9% (1.15)
Median household income	\$51,213 (30,485)	\$82,907 (4,282)	\$61,862 (4,209)	\$34,612 (1,390)
Bachelor's degree or more	27% (20.47)	48.0% (2.93)	38.2% (2.67)	15.6% (0.87)
Percent white	32.5% (31.38)	76.2% (2.14)	49.4% (2.14)	9.5% (0.92)
Percent Latinx	5.9% (8.85)	7.7% (1.69)	8.3% (1.84)	4.6% (0.53)

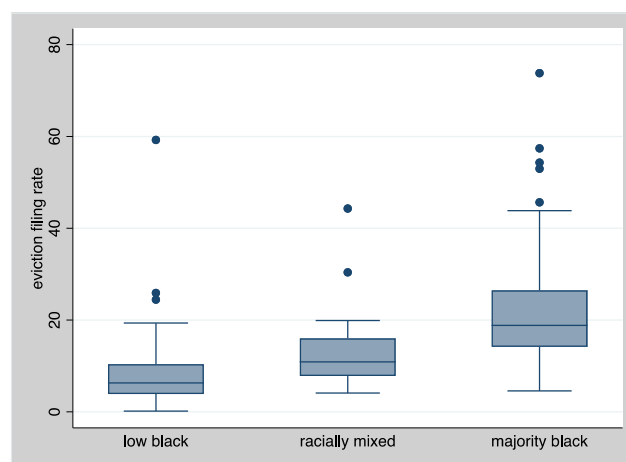


Fig. 1. Distribution of eviction filing rates by neighborhood racial composition.

Table 2
Correlation between eviction filing rate and health and socio-economic outcomes.

	R
Uninsured rate	0.27**
Unemployment	0.16*
Single parent households	0.37**
Cost-burdened renters	0.23**
Percent Latinx	0.03
Percent white	-0.48**
Percent Black	0.46**
Median household income	-0.29**
Percent with disability	-0.02
Bachelor's degree or more	-0.39**
Smoking	0.31**
Poor self-rated mental health	0.33**

* p < 0.05.

** p < 0.01.

system is a product of poverty and income disparities (Desmond, 2016).

Results from the multivariate regression analysis showed that eviction filing rates were significantly associated with worse mental health across all neighborhoods ($\beta = 0.015$, p-value = 0.002), but this association was not consistent across all types of neighborhoods. Higher eviction filing rates were associated with a higher prevalence of poor self-rated mental health ($\beta = 0.018$, p-value = 0.001) only in majority Black neighborhoods compared to other neighborhoods (Table 3). In other words, a one percent increase in neighborhood eviction filing rate increases the amount of people who self-report poor mental health by 1.8 percent. We discuss these results in more detail in the context of structural racism, neighborhood dynamics, and policy interventions below.

3.2. Structural racism as a fundamental cause of residential segregation and poor health

Structural racism is the fundamental cause of racial health inequities (Bailey et al., 2017; Yearby, 2020). In the case of our exploratory study, we can already see that racially segregated neighborhoods and a higher prevalence of eviction filings in Black neighborhoods are mechanisms through which structural racism is connected to health outcomes. Our findings are consistent with previous literature that understands segregation as a mediator of structural racism and health (Schulz et al., 2002; Williams and Collins, 2001). We build on this previous research by showing that evictions may have spillover effects. We measured neighborhood exposure to eviction filings on population health outcomes. Moreover, this study did not isolate households or individuals that

Table 3
Multivariate regression results modeling the association between eviction filing rate and poor self-rated mental health by neighborhood racial composition.

	Total Coefficient (SE)	Low Black neighborhood Coefficient (SE)	Racially mixed neighborhood Coefficient (SE)	Majority Black neighborhood Coefficient (SE)
Eviction filing rate	0.015 (0.005)*	-0.001 (0.009)	0.034 (0.020)	0.018 (0.005)**
Uninsured rate	-0.016 (0.010)	-0.014 (0.024)	-0.095 (0.044)*	-0.004 (0.010)
Smoking	0.589 (0.019)**	0.644 (0.049)**	0.606 (0.083)**	0.573 (0.021)**
Unemployment	-0.018 (0.089)*	0.080 (0.032)	0.091 (0.054)*	-0.037 (0.0009)**
Single parent households	-0.010 (0.003)*	-0.024 (0.010)	-0.026 (0.008)**	-0.003 (0.004)
Cost burdened renters	0.012 (0.004)*	0.006 (0.005)	0.003 (0.012)*	0.006 (0.005)
Median household income	-0.000 (0.000)**	0.000 (0.000)**	0.000 (0.000)**	0.000 (0.000)
Bachelor's degree or more	0.023 (0.006)**	0.041 (0.009)**	0.028 (0.023)	-0.009 (0.010)
Constant	4.417 (0.585)**	2.637 (1.168)*	5.814 (2.843)	4.904 (0.890)**
	N = 216	N = 53	N = 35	N = 128
	R ² = 0.9759	R ² = 0.9783	R ² = 0.9578	R ² = 0.9673

*p < 0.05.

** p < 0.01.

experienced an eviction filing since our unit of analysis was the neighborhood. This points to the importance of place-based interventions that address the mental health of both individuals that experience evictions and people living in communities with high rates of eviction filings

Similar to previous research, eviction filings were more prevalent in majority Black neighborhoods (Hazekamp et al., 2020; Immergluck et al., 2020; Lens et al., 2020; Medina et al., 2020; Raymond et al., 2018; Teresa, 2018). However, there was still considerable variation in eviction filing rates among majority Black neighborhoods. This suggests that there are other unobserved factors here that merit future investigation.

3.3. Neighborhood dynamics and evictions

Neighborhoods with corporate rental investors tend to target predominantly Black communities, further compounding the neighborhood racial aspects with the production of housing precarity (Raymond et al., 2018). As a result, predominantly Black neighborhoods, which make up most neighborhoods in Memphis and cities like it, first saw a wave of foreclosures and then years later saw sharp rises in single-family rentals. Institutional owners tend to file evictions at higher rates. Even the filing of an eviction has a profound effect that reaches beyond housing directly to impact job access and health outcomes (Raymond et al., 2018).

Our findings suggest that eviction filings alone pose a potential impact on mental health in Black neighborhoods especially, again even though our research is not causative these exploratory results are clear. This evidence should be discussed in the context of other housing-related health impacts also concentrated in communities of color, such as property conditions and housing instability. Shin and Shaban-Nejad (Shin and Shaban-Nejad, 2018) found that childhood asthma rates are closely associated with the prevalence of vacant and abandoned property. Moreover, the neighborhoods where eviction filings are expected tend to have spatial commonalities with property condition issues. The market depreciation discourages owner-occupants and creates an environment where investors are one of the few actors that can still profit from such property investment (Harrison et al., 2020). Also, past research has shown that following an eviction filing or an eviction judgment, individuals have trouble finding housing and often rent at worst condition properties that pose even higher threats to the tenant's health. For these reasons and many others, the neighborhood trends are among the most essential framings to apply to this research and should be further support for action in this space.

3.4. Policy interventions

Several policy interventions at the local and state levels could mitigate some of the adverse health effects associated with eviction.

3.4.1. Eviction prevention

Since most eviction cases are based on nonpayment of rent, cities and

states can provide or increase financial assistance available to tenants who are behind on their rent and encourage tenants and landlords to seek financial aid before filing an eviction case court (Desmond, 2012). Since the COVID-19 pandemic began in March 2020, the federal government has provided billions of dollars to states and municipalities to assist tenants who have fallen behind on rent due to the pandemic (Campisi and Tarver, 2021). This assistance is critical to helping tenants remain housed while also compensating landlords for their financial losses. Federal, state, and local governments should continue to fund similar programs even after the pandemic ends.

Second, legal assistance for tenants is critical to preventing eviction. An overwhelming majority of landlords are represented by attorneys in eviction proceedings, while attorneys do not represent an overwhelming majority of tenants in those same cases (Sabbeth, 2018). When tenants have attorneys in court, they are between three and nineteen times more likely to prevail in their cases than unrepresented tenants (Engler, 2010). "Represented tenants are far less likely to lose by default, they secure significantly more favorable settlements, and they are more likely to win at trial" (Sabbeth, 2018). Additionally, reducing evictions means preserving affordable housing (Sabbeth, 2018).

3.4.2. Housing First/Rapid rehousing

For people who do become homeless through eviction, housing first and rapid rehousing policies are necessary to mitigate the health, social, and legal effects of housing displacement. Rapid rehousing approaches were successfully used during the Great Recession when many Americans lost their homes to foreclosure and eviction (Layser et al., 2020). Utilizing a safety-net approach to housing stability can have a positive effect on people who are displaced (Layser et al., 2020). Prioritizing housing first can enable people with low-incomes to effectively address their other areas of need, including employment, education, and child-care (Rosser, 2017).

3.4.3. Stronger enforcement of legal protections for tenants

In addition to eviction prevention and homelessness mitigation policies, it is necessary for state and local governments to implement more vigorous enforcement of legal protections for tenants, especially relating to repairs and conditions/habitability issues. This would serve to reduce eviction filing rates because tenants would have fewer reasons to withhold rent because of the landlord's failure to maintain the property. A study of 2016 housing court case filings in New York City found that more than half of tenants who were sued for nonpayment eviction had meritorious claims of poor conditions in their homes, yet <2% of them received financial compensation in the form of a rent abatement (Summers, 2020).

The health issues that accompany substandard housing are inextricably linked to eviction (Sabbeth, 2018). Housing conditions that can lead to or exacerbate poor health for tenants include "toxic mold, insect and vermin infestation, the absence of heat or running water, faulty

electrical wiring, and lead paint and dust,” among other issues (Sabbeth, 2018). While most states have existing legal protections that would require landlords to address these conditions, enforcement of those protections lacks in many places (Sabbeth, 2018). Black tenants with low-incomes are most likely to live in substandard housing, and governments should prioritize enforcement of housing conditions to improve housing stability and health equity.

3.4.4. Increase barriers to eviction filings

Due to the modest fees associated with starting the legal process of eviction, landlords and property managers use this process to coerce tenant behavior and enact consequences for non-payment (Garboden and Rosen, 2019). Increasing eviction filing fees for landlords or adding other requirements that may lengthen the eviction process may incentivize more collaboration and problem-solving between tenants and landlords (Garboden and Rosen, 2019; Leung et al., 2021).

3.5. Future research

Given the role of structural racism in shaping eviction practices, larger housing policy, and health outcomes, the research should be grounded in a critical public health race praxis that centers the context and experiences of the racialized groups who are experiencing inequities (Ford and Airhihenbuwa, 2010). In the case of our study, future research should be grounded in the context and experiences of Black communities. Given the spillover effects of eviction filings, research should also explore the impact of evictions and eviction filings at both the individual and neighborhood levels. In addition to the impact of evictions, a closer look at the relationship between rental housing conditions and health, especially in fast-growing rental markets like Memphis, is warranted.

More attention is getting paid to mental health, and events such as evictions align certainly exacerbate this relationship in the context of the ongoing global pandemic. This study looked at 2016–2019, but updated research using the COVID-era is likely needed, especially considering this preliminary evidence.

Although this study adds evidence about the adverse health effects of the geographic concentration of evictions in Black neighborhoods, there are some limitations. First, our study measured ecological associations not a causal relationship between eviction filings and mental health. The sample size for racially mixed neighborhoods is small and the null findings between eviction filings and mental health should be taken with caution. Memphis is highly segregated and racially mixed neighborhoods are rare.

4. Conclusion

This study adds more evidence for structural racism, residential segregation, and racialized housing market dynamics, leading to the disproportionate geographic concentration of evictions in Black neighborhoods. More research that needs to be done, but in many ways, the finding on mental health outcomes is chief among areas for future research, especially during the COVID-era and increased attention towards mental health and the impacts of structural racism on generational mental health. These findings point to the necessity of detailed, intentional policy discussion around the effects of disproportionate housing stability and health outcomes in Black communities.

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CRedit authorship contribution statement

Courtnee Melton-Fant: Conceptualization, Data curation, Formal analysis, Funding acquisition, Methodology, Writing – original draft, Writing – review & editing. **Austin Harrison:** Conceptualization, Data curation, Funding acquisition, Methodology, Writing – original draft, Writing – review & editing. **Katy Ramsey Mason:** Conceptualization, Funding acquisition, Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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