

CHALLENGES AND SUPPORTS TO AGING IN PLACE IN A GENTRIFYING CONTEXT

by

Manish Kumar

A thesis submitted for Graduation with Distinction in Program II

COMMITTEE:

Laura Richman, PhD (Program II Advisor and Faculty Research Mentor)

Nrupen Bhavsar, PhD

Jehanne Gheith, PhD

## Challenges and Supports to Aging in Place in a Gentrifying Context

### Abstract

**Background and Objectives:** Neighborhoods play a critical role in healthy aging, with changes to neighborhoods having a profound impact on individuals' ability to age in place. Using gentrification as an indicator of neighborhood change and applying the theoretical framework of the Environmental Press model, this study examines the relationship between changing environments, affordable housing, and environmental attributes that support and hinder the health and well-being of older adults.

**Research Design and Methods:** This study used a qualitative, case-study approach to interview low-income, majority Black older adults in a gentrifying ward of Washington D.C. Thirty-two adults (16 in non-profit and 16 in for-profit affordable housing) aged 55 and older participated in semi-structured interviews. Transcripts were analyzed using the framework method of analysis.

**Results:** Despite perceiving gentrification, most participants desired to age in place. Many appreciated gentrification-related improvements to the built environment but lamented its negative impact on social capital. By providing both proximity to physical amenities and a sense of stability, affordable housing promoted participants' ability to age in place, though many expressed uncertainties over their long-term ability to do so.

**Discussion and Implications:** This study suggests that while gentrification may improve physical amenities for older adults, its detrimental impact on social capital exacerbates their risk of social isolation. To better support older adults, this study calls for gentrifying areas to invest in affordable housing and promote interventions to preserve older adults' social capital.

*Keywords:* affordable housing, determinants of health, urban health

## **Challenges and Supports to Aging in Place in a Gentrifying Context**

### **Background and Objectives**

Neighborhoods play a critical role in the healthy aging of older adults. Not only do they provide physical amenities to help these individuals age (Barnett et al., 2017; Berke et al., 2007), they also provide social capital, serving as an important source of community and social support (Chaix et al., 2007; Wen & Christakis, 2005). As such, changes to neighborhoods can affect the physical and social interactions that older adults have with them. One such change can occur through gentrification.

Although gentrification can promote the economic well-being of a neighborhood, literature also suggests that it poses a risk to marginalized communities, who may face displacement (Lees, 2008; Newman & Wyly, 2006). This creates particular challenges for older adults, many of whom desire to age in place. For this population, affordable housing programs can be critical, providing opportunities for individuals to continue living independently within their neighborhoods.

However, despite a breadth of research examining the relationship between aging and the environment, research examining the impact of environmental changes (such as those catalyzed by gentrification) on aging in place has received limited attention. This study aims to fill that gap, examining these topics within a rapidly gentrifying area of Washington D.C. Using qualitative methods and a sample of low-income, majority Black older adults, this study examines the relationship between changing environments, affordable housing, and environmental attributes that support and hinder the health and well-being of older adults.

### **Aging and the Environment**

A growing number of older adults desire to “age in place,” a term used to describe the ability of an individual to age in a community of their choice with a relative degree of independence (Wiles et al., 2012). However, one’s ability to successfully age in place is dependent on a variety of factors, among which, one factor is the environment.

The Environmental Press (EP) model (Greenfield, 2012; Lawton & Nahemow, 1973; Wahl et al., 2012) provides a framework for understanding the relationship between the environment and aging. According to this model, successful aging is the product of a balance between an individual’s own competencies and the demands of their environment (“environmental press”). Although this model provides a strong foundation for environmental gerontology, it has been criticized for failing to outline potential mechanisms by which the environment may affect successful aging (Glass & Balfour, 2003). In addition, just as individuals change as they age, neighborhoods do as well, sometimes at a rapid pace. As such, there remains a need to conceptualize the environment in a way that considers the impact of *changing* environmental contexts on the healthy aging of older adults (Wiles, 2005).

### **Gentrification**

The term “gentrification” has traditionally been used to describe the transformation of low-income neighborhoods into those designed for the upper/middle class (Glass, 1964). In literature, gentrification has been associated with changes to a neighborhood’s racial and socioeconomic composition, housing stock, shops and businesses, and cost of living (Bhavsar et al., 2020; Schnake-Mahl et al., 2020). The net impact of gentrification is not well understood: several studies argue that it promotes economic development and decreases crime, while others find that it can lead to the displacement of original residents, particularly those belonging to marginalized groups (Atkinson & Wulff, 2009; Lees, 2008).

### **Affordable Housing**

Housing has been well documented as an important determinant of health and well-being (Brown et al., 2015). However, access to housing can be challenging, particularly among older adults, nearly a third of whom report experiencing rent burden (*Housing America's Older Adults: 2019*, 2019). In addition, many older adults receive a fixed income, making it difficult to adapt to changes in property taxes and/or the price of housing.

As such, affordable housing initiatives can provide opportunities for individuals to maintain their quality of life and well-being. Several government initiatives, such as Section 8, Section 202, and Low-Income Housing Tax Credits (LIHTC), provide economic incentives for developers to maintain affordable housing units (Olsen, 2003), but many cities are still unable to meet demand. For example, Washington D.C., the site of this study, is estimated to have a between 22,100 and 33,100 affordable housing unit shortage for extremely low-income households (Tatian et al., 2015).

### **Current Study**

Existing literature on gentrification and aging suggests that gentrification leads to feelings of indirect displacement – a form of displacement characterized by cultural and social exclusion (Versey et al., 2019). However, limited research has examined the intersection of gentrification, aging in place, and affordable housing. This study aims to fill that gap by asking the following question: in what ways does affordable housing impact the ability of older adults to age in place within a gentrifying context? Using the framework of the Environmental Press model, we hypothesize that affordable housing acts as a buffer against additional demands that gentrification imposes on older adults, instilling a sense of place and permanence as a neighborhood becomes more and more unfamiliar.

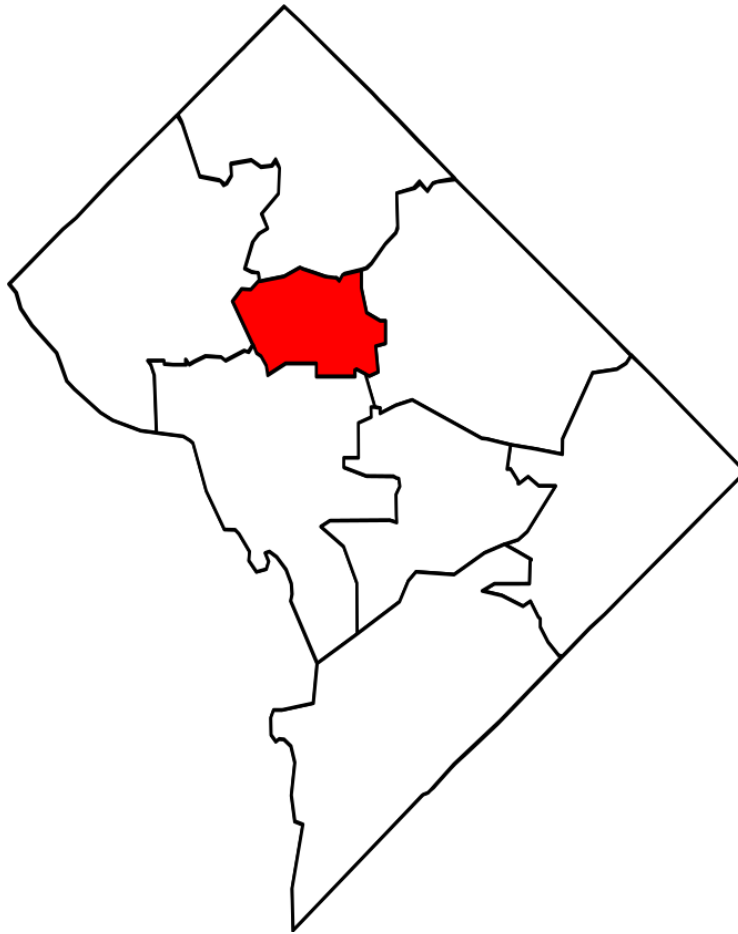
In addition to this goal, this study seeks to advance the applicability of the Environmental Press model, examining potential mechanisms by which gentrification-related environmental changes can both support and/or hinder successful aging.

### **Research Design and Methods**

#### **Study Site Selection**

Washington D.C. has experienced the greatest intensity of gentrification of any city in the United States (Richardson et al., 2019). However, changes in D.C. have not been homogenous; each of the city's 8 Wards has experienced varying levels of change. For example, Wards 2 and 3, which include the neighborhoods of Georgetown and Kalorama, have historically housed individuals with high socioeconomic status. As such, changes in these areas have not been as poignant as other parts of D.C. In contrast, Wards 7 and 8, located east of the Anacostia river, have historically been the most resource deprived areas of the city. Even today, these two Wards face the highest rates of poverty and lowest socioeconomic levels of any Ward in the city (DC State Data Center: 2013-2017 ACS Key Demographic Indicators, 2019). However different, these two regions are similar in that they have remained relatively stable, both in demographic and socioeconomic composition.

This study focuses on Ward 1 (Figure 1), an area of the city that has, over the past two decades, experienced rapid socioeconomic and demographic shifts. Located in the center of Washington D.C., Ward 1 contains several neighborhoods that have historically held significance for the city's Black and Latinx communities (Kasongo). However, rapid redevelopment and in-migration have altered the composition and character of the Ward, transforming it into a wealthier, majority White area.



**Figure 1.** *Location of Ward 1 (in Red) within Washington, D.C.*

As indicated by the 2000 Census and 2010-2014 American Community Survey data (Table 1) (DC State Data Center: 2013-2017 ACS Key Demographic Indicators, 2019), many of the Ward's upward socioeconomic changes have outpaced and exceeded those of the city, despite starting at a lower level than the city itself. Given these changes, Ward 1 meets several classification criteria for areas considered to be "gentrifying," often characterized as areas where upward socioeconomic shifts have outpaced those of the city they are located in (Bhavsar et al., 2020).

**Table 1.** *Demographic and Socioeconomic Change in Ward 1 vs. D.C.*

	Ward 1			District of Columbia		
	2000	2010-2014	Change (%)	2000	2010-2014	Change (%)
Median Household Income	\$36,902	\$80,794	118.9	\$40,127	\$69,234	72.5
Median Gross Rent	\$610	\$1,442	136.4	\$618	\$1,302	110.7
Median Home Value	\$171,295	\$511,500	198.6	\$157,200	\$454,500	189.1
% w/ Bachelor's Degrees	38.5	63.7	25.2	39.1	53.4	14.3
% Black	45.7	31.4	-14.3	60	49.6	-10.4
% White	31.7	54.7	23	30.8	40.2	9.4
% Hispanic/Latino	24.7	20.8	-3.9	7.9	9.9	2
% Age 55+	14.4	15.1	0.7	20.9	22	1.1

### Participants and Interview Collection

Participants were recruited across a variety of non-profit and for-profit affordable housing sites in Ward 1. In order to participate in the study, individuals had to be at least 55 years old, be eligible for affordable housing, and live within Ward 1 of Washington D.C. Participants were recruited using word of mouth, flyers, and referrals from community organizations. Thirty-eight individuals expressed verbal interest in participating in the survey. However, 6 individuals, 2 women and 4 men, later declined participation. A total of 32 individuals participated in the study, 16 from for profit affordable housing units and 16 from non-profit affordable housing units.

All participants completed semi-structured interviews in English, lasting an average of 40 minutes. Interviews took place in residents' homes or in community spaces within their affordable housing building. With informed, written consent, interviews were recorded on audio,

de-identified, and transcribed verbatim. One individual declined an audio recording, and thus, detailed notes were taken instead. All participants were compensated \$15 in cash for their participation following completion of the interview. The study, protocol, and all materials were approved by the Duke University Institutional Review Board (2019-0548 names blinded for review).

During the interview, participants answered several demographic questions, followed by questions relating to neighborhood change, gentrification, aging in place, and challenges and supports to aging in place. These questions were developed to understand participants' own perceptions of neighborhood change, its meaning as they aged in their housing, and the impact of any neighborhood changes on determinants of their health and well-being (see Supplementary Appendix 1 for the entire questionnaire).

### **Data Analysis**

Descriptive statistics of participants were collected and compared across those living in two different types of affordable housing: those developed by non-profits and those developed by for-profit organizations. Categorical variables (gender, race, living situation, income range, mobility) were compared using a chi-squared test for independence. Quantitative variables (age and years in the neighborhood) were compared using 2-sample t tests.

Following interview transcription, transcripts were uploaded onto the NVivo 12 qualitative data analysis software. The framework method for qualitative data analysis was then used to identify and characterize themes from the interviews (Gale et al., 2013). First, both researchers familiarized themselves with the data. Then, transcripts were carefully read to inductively identify recurring themes. Using these themes, the research team (blinded for review) developed an initial codebook, which was further consolidated into more well-defined themes

surrounding (1) the conceptualization of gentrification, (2) aging in place, and (3) challenges and supports to aging in place. This formed an analytical framework through which data was subsequently indexed into (see Supplementary Table 1). To avoid researcher bias, coding was completed initially by the first author and then subsequently reviewed by the second author. Discrepancies were resolved through discussion and negotiated agreement (Campbell et al., 2013).

Common themes related to the conceptualization of gentrification included: increased housing construction, higher cost of living, and racial changes. Themes related to aging in place included: personal, physical, and social reasons to age in place. In alignment with the Environmental Press model, themes related to challenges and supports to aging in place are framed as demands and supports. Supports included stability in housing and age-friendly built environments, while demands included a lack of social capital and uncertainty over continued neighborhood change.

### **Results**

Participants in the study lived across 11 different affordable housing sites in Ward 1 of the District of Columbia. The average age of participants was 67 years, while the average number of years they reported living in Ward 1 was 22 years. The majority of participants identified as Black (78.1%) and 68.8% identified as female. The vast majority of participants, 93.8%, reported living at or below 30% of the D.C. Area Median Income (\$23,150 for 1 person), a measure used to determine eligibility for affordable housing, while the remainder reported living between 31-50% of the Area Median Income (see Table 2 for complete demographic data).

**Table 2***Descriptive Statistics of Residents (n=32)*

	Non-Profit Housing	For-Profit Housing	Total
<b>Total Participants</b>	16	16	32
<b>Gender</b>			
<i>Male</i>	5	5	10
<i>Female</i>	11	11	22
<b>Race</b>			
<i>Black</i>	11	14	25
<i>Latinx</i>	1	0	1
<i>White</i>	2	2	4
<i>Mixed</i>	2	0	2
<b>Living Situation</b>			
<i>Single</i>	13	15	28
<i>Partner</i>	2	0	2
<i>Children</i>	1	1	2
<b>Income</b>			
<i>0-30% AMI</i>	14	16	30
<i>31-50% AMI</i>	2	0	2
<b>Mobility Challenges</b>			
<i>Yes</i>	5	7	12
<i>No</i>	11	9	20
<b>Age (Mean)</b>	65	70	
<b>Years in Neighborhood (Mean)*</b>	16	27	

*Note.* \*=significant at  $p < 0.05$

Key themes around the conceptualization of gentrification, aging in in place, and challenges and supports to aging in place are reported in the following section. Representative quotes from selected participants are used to better illustrate each theme, with breaks between quotes representing different participants.

### **Conceptualizing Gentrification**

Consistent with the objective measurement of gentrification in Ward 1, most residents reported experiencing gentrification related changes to their neighborhood, conceptualized primarily through housing construction, increases to the cost of living, and racial change.

Participants referred to increased housing construction in the context of newly built and/or recently renovated condominiums. New construction was often seen as luxurious and out of reach. In some cases, this housing was also associated with the reduction and demolition of affordable housing units. In addition, some individuals attributed new housing to an influx of new, wealthier, residents and/or the displacement of original, lower-income, residents.

“There have been other buildings in the neighborhood that have been renovated, redone, totally knocked down, started from the ground up. Just about every street around here.”

“You look around, and buildings are everywhere. See a building go up and right after there are signs for the lease. It makes it harder to live here because the land development is kicking people out.”

“Like from 15<sup>th</sup> and U [St.] and all up and down 14<sup>th</sup> St. and 16<sup>th</sup> St, and right near Vermont Avenue they have a lot of new apartments and houses. And right around the corner, Columbia Road and 15<sup>th</sup>, they done remodeled a couple of apartment buildings.”

Respondents also described increases to the general cost of living. “Market rate” housing was considered too expensive for many residents, with some mentioning that they would not be

able to afford any other homes in the neighborhood. Residents also reported increases in the cost of groceries and dining.

“The rent went up enormously. When I moved in here, in this street 25 years ago, my rent was \$390 for an efficiency, nice efficiency. Now, I’m sure it’s over a \$1000.”

“Some same products, they’ve gone up a lot. I’ve seen different eateries. I went in just out of curiosity the price of food is ridiculous.”

“It is expensive here. I kid you not if I were not sick and receiving the benefits that I do I sincerely doubt that I would be able to afford to live in D.C.”

“The cost of living is going up. This area lacks affordable housing for your average family. The cost of living is extremely high.”

Another common theme used to conceptualize gentrification was changes to the racial composition of the neighborhood. Throughout their interviews, participants frequently referred to terms such as “newcomers,” “new residents,” and “yuppies.” Many of these new residents were described as White and middle class, often arriving at the expense of a historical Black majority. Although some expressed disdain at these changes, others expressed satisfaction that the community had still been able to retain some of its diversity.

“D.C. used to be 75% black, now it’s 50/50. Even the council is reflecting that. Here definitely because Columbia Road I kid you not, Hispanic people, Black people, and a

few White people used to live here. What I've seen is more predominantly White. D.C. is more separated than South Africa at its worst time of Apartheid.”

“I think this neighborhood and Columbia Heights used to be more Latino. So it's no longer that. So when it comes to gentrification, I can see there are more Whites than ever before. There are more Whites and less Latinos. It is not a considered a Latino community any longer.”

“In this neighborhood, I remember when it was all Black. Now, it's a mixed neighborhood. You know. So I think that's good. Different races, nationalities, since I've been here.”

“So the yuppies, the new White young people, the professionals are moving in, but so far, the poor have stayed.”

Participants' descriptions of both changes to housing stock and to the racial composition of their neighborhood add merit into including these measures when defining gentrification. Assessing these changes alongside existing variables used to define gentrification may provide a richer, community-based perspective on identifying which neighborhoods may actually be gentrifying.

### **Aging in Place**

A majority of respondents desired to age in place, citing attachment to the neighborhood for physical, social, and personal reasons. Physical reasons for aging in place related to the

convenience provided by the neighborhood, such as easy access to stores, social services, and transportation. Social reasons related to access to community. And personal reasons included intrinsic feelings of connection to their neighborhood.

Participants expressed these desires to age in place in spite of gentrification, suggesting their attachment to the neighborhood superseded the impact of neighborhood change. The relationship participants had cultivated with the neighborhood carried deep meaning that changes could not take away, at least for the time being. Furthermore, many residents felt integral to the culture of the community, feeling as though they brought a vibrancy to the neighborhood that newcomers could not.

“I would like to age in this community, yeah. I like this area. Everything I need I can get to. I go to GW hospital and that’s not far away. I can go up to 14th St and I got my stores. Grocery stores, pharmacy, everything that I need is in this area and I like that.”

“For the seniors here, in this community, you know, we are a diverse group, and neighbors look out for each other.”

“I think it’s important [to age in the neighborhood] because I bring a history the newcomers don’t have of the neighborhood let alone the city.”

“Absolutely, this is the best neighborhood in the city. I would not, if I had to live in D.C., I wouldn’t want to live anywhere else but Adams Morgan. I love the flavor; I love the diversity.”

Only two individuals did not wish to age in place. These residents expressed concerns that the neighborhood would not be able to support them as they aged and disappointment at the level of change that had occurred in the neighborhood.

“I don’t want to stay here. I just don’t like what’s around me, what’s been done.”

### **Challenges and Supports to Aging in Place**

Gentrification-related neighborhood change presented both demands and supports to older adults. Many participants reported that changes to the built environment were beneficial, such as increased access to transportation, healthcare, and support services. However, participants reported significant difficulty adjusting to the social changes accompanying gentrification, citing lack of friends/family, tensions with newcomers, and a disruption of the community fabric.

In relation to housing, respondents reported challenges and supports partially consistent with the hypothesis. Affordable housing provided a sense of place to many respondents, offering a foundation from which they could build off of. In addition, it provided participants convenient access to improved neighborhood amenities. However, affordable housing was not perceived to mitigate the consequences of neighborhood social change, and many participants felt uncertain about their long-term ability to age in place.

### ***Age-Friendly Built Environment***

The most frequently mentioned support by residents was the prevalence of an age-friendly built environment. D.C. was praised as a relatively “age-friendly” city, providing a variety of resources to enable older adults to age in place. Participants mentioned feeling that the city had been intentional in investing in improved amenities for older adults.

“I think that D.C. is an age friendly city. And I’ve been to a lot of cities. And I would say we get more services, and affordable or free services in D.C., that’s a personal opinion, than a lot of other urban cities throughout the country.”

“Well I’m on disability so the services are good. If something don’t go right for me, I will go to the Department of Aging. And I know if I go to the Department of Aging, I can get all this different information I need.”

In addition, participants cited a reliance on non-profits, churches, and the local farmers market. By providing reliable support, particularly with food assistance, these organizations were perceived as a buffer to gentrification-related increases in the cost of living.

“We are Family, they are really making an impact. Because food distress is a big problem for people in this city, particularly as you get older, your ability to feed yourself becomes a big challenge. And if you don’t have an income stream, even if you get food stamps, it’s still difficult.”

“And the food, I look wherever. The Martha’s Table, I go there. This week we went to the church on 16th Street, wherever it is given. I have food stamps too, not much \$80 but I can make it.”

“No, no, it’s [access to food] not difficult for me, because we have the Grocery Plus program and I’m able to go to church and Bread for the City, and I’m able to get the things that I need.”

Participants particularly praised the age-friendly transportation services offered by their neighborhood, with the majority reporting easy and convenient access to public transportation. Improved transportation access appeared to carry a close relationship with gentrification, with several participants describing the creation of a metro station as a catalyst for rapid neighborhood change. Participants also described the development of special transportation services for older adults, such as “Metro Access” and “Transport D.C.,” a \$5 cab service. Such options provided participants with the opportunity to make medical appointments and conduct errands, thereby promoting their ability to age in place.

“The options are great especially in this area. I mean it’s great all over the city but because its busy in this area, the busses are continuously coming.”

“The transportation quality is really good because I have access to any point in city that I need to get to within minutes because I catch a bus to the city. Transportation wise, getting access to the city is very excellent.”

Because of their age and/or income, participants were generally eligible for both Medicare, Medicaid, or both. They reported easy access to most healthcare services, citing the proximity of local clinics, hospitals, and pharmacies to their housing. However, several residents reported issues with in-home healthcare, particularly in obtaining reliable caregiving services.

“GW [George Washington University] is not far away; Georgetown is not far away. We are kind of centralized really. So healthcare is not hard to get from this neighborhood.”

“My personal hope is better personal care. The situation with home health aides and stuff like that I see a lot of my neighbors struggling with getting their aides and getting good services from their aides.”

In general, participants reported a built environment with amenities that supported their ability to age in place, either unaffected or improved by gentrification. The proximity of their affordable housing to these amenities further promoted access, though the support of government initiatives and non-profits were often critical.

### *Lack of Social Capital*

Although respondents frequently reported age-friendly built environments, many reported poor social environments. When asked about their social networks, nearly 40% of participants responded that they either did not have any friends or that they only had “associates.” For those with friends, social networks did not generally extend beyond their residential building. In addition, over 80% of respondents reported that their family did not live nearby, with many family members living in states outside of D.C.

“Friends in this neighborhood? All my friends are gone or dead.”

“I would say [I have] associates. There’s a difference between a friend and an associate. Cause you know you don’t know who your friends is [unless] when you in need. So I would say associates.”

“No, none of my family is in D.C. I got family in Ohio and family in Boston and that’s it.”

Although most participants reported friendly relationships with others in their building, they described strained relationships with the outside community, particularly with newer neighborhood residents and those living in market rate housing. Many stated that these individuals refused to engage with the original residents of the community, at times viewing them with disdain or disgust. Newer residents were also seen as disruptive to the community fabric, causing participants to feel left out of the community, despite having lived there longer. Several also lamented the decline of the neighborhood’s Black community.

“Some of them [newer residents] say hello, some of them look down and don’t want to look at you period. We in this position because of what y’all people did to us, and you created this, and you make me feel like I’m nothing.”

“But to me other than the senior centers you go out of this community to, I don’t have any knowledge of that [services for seniors]. You just have to go into everybody else’s ball game and hope that you are accepted.”

“Because I think a big problem with growing older in this society is that we become irrelevant. We’re not looked at as someone who is employable or someone who is of interest or in need or...what’s the word, in need of services and assistance and of relevancy.”

When asked if changes to the neighborhood had impacted the way they were treated, respondents reported increased feelings of bias and prejudice, particularly on the basis of their age and race. Such feelings were tied to demographic changes accompanying gentrification and further increased tension between original residents and newcomers. Many participants also reported that changes to the neighborhood had decreased their feelings of safety. Neighborhood changes were blamed for increased crowding, drug and bar activity, and violence, making it difficult for older adults to navigate the neighborhood, particularly in the evening and nighttime.

“I’ll tell you one of the reasons I probably don’t have friends. It’s probably the gentrification. A lot of them...I’ve met people. ‘Hi I’m a lawyer, what do you do?’ And I’m not that, I’m parking attendant. If I try to be friendly with people, you get people who are, you know. They’re living in the condos and they drive BMWs and you know? I feel like crap around people.”

“Or your age, cause being older you’d be surprised how people treat you sometimes, with the disrespect that they have for seniors. It don’t make sense.”

“It’s a lot of prejudice [here]. It is. It’s the people that has moved up and around the neighborhood. They don’t really know me or they come with the attitudes from where they came.”

“And then on the weekends we have the 18th St. corridor which is a party scene. There’s a lot of late nigh hoopin’ and hollerin’. All kind of activities going on. So it’s a little bit challenging, especially for old folks. I guess young people can get away with it.”

Overall, participants reported a lack of social capital, exacerbated by gentrification related changes. Older adults also reported increased discomfort accessing community spaces, particularly as these spaces began to cater to newer and younger residents.

### *Stability in Housing*

Throughout their interviews, participants frequently highlighted the important role of affordable housing in both enabling them to age in place and supporting their overall health and well-being. Housing coordinators and other building staff were perceived as useful resources in connecting participants to a variety of health promoting services, such as financial assistance, food assistance, and in-home healthcare. Several buildings also provided gym facilities for residents. Housing was often associated with feelings of independence, as it provided residents an opportunity to focus on their well-being instead of stress over rent payments.

“I’m living in a place that truly accommodates my situation and more importantly I feel appreciated. If Jubilee [Housing] doesn’t do anything else, one thing Jubilee does is allow people to keep their dignity.”

“Well number one is getting this affordable housing. This has really been a foundation from which I can build upon and I’m hoping to become more engaged in the community.”

“We have a resident service here. When you have those and they make this information known to the residents, that helps. We have meetings and they talk with us to let us know the various services we have access to; that helps.”

Although participants generally spoke positively of their housing accommodations, some expressed conflict and challenges with management and staff. For these individuals, management was seen as disconnected from residents and unreceptive to residents' concerns.

“The challenge is knowing that we have a management that cares about how we feel and listen to what we say instead of just closing their ears to everything.”

“So in the office, C., who was the manager, she was once the secretary. She said, ‘S. in this building we take care of the building, not the people.’ It made me so mad.”

### *Feelings of Uncertainty*

In spite of the security provided by their housing, respondents felt uncertain about the future. Feelings of uncertainty mostly surrounded accessing neighborhood amenities and continued gentrification. Several also voiced concerns about the growing bureaucracy of accessing the city's services, suggesting that navigating such complexity would become difficult as they grew older. Others called for additional support for older adults, including the construction of additional wellness centers and more housing.

“One important thing I'd like to see if they could put something like a wellness center here that seniors could go to because so far we only have one that's up on Georgia Ave. I'd like to see this area here have a wellness center for seniors to go to.”

“Yes, it [access to healthcare] has changed a lot because it's so much paperwork. You don't want to read all that, sometimes as you get older, you don't have an understanding of all of it. And its taxing on people my age.”

Several participants mentioned feeling less safe as they navigated the neighborhood, largely due to perceived increases in crowding and criminal activity. In addition, participants also reported feeling uncertain about their future quality of life, particularly as the cost of goods and services in the neighborhood continues to increase.

“It’s been challenging to continue to maintain my previous standard of living with continuously rising prices of goods and services.”

“It’s gotten more expensive to eat here. I’ve been here 9 years and the Target and Giant are getting more expensive to eat.”

“The young men now, they carrying guns and stuff and they don’t care what they do. Just for one of these here [points to phone], they’ll attack you.”

### **Discussion and Implications**

This study yields several insights into the relationship between changing environments, affordable housing, and environmental attributes that support and/or hinder successful aging. Results are consistent with the conceptual framework outlined by the Environmental Press model, suggesting that gentrification impacts healthy aging both through the demands and supports it places on an older adult’s ability to age in place. Supports primarily related to an improved physical environment, particularly in transportation and age-friendly support services. Despite these improvements, however, participants reported a demanding social environment, characterized by increased neighborhood crowding, decreased perceptions of safety, and a deterioration of their social networks.

Various studies have found that an individual's physical and social environment both contribute to their overall health and well-being (Barnett et al., 2017; Berke et al., 2007; Chaix et al., 2007; Wen & Christakis, 2005). For example, the physical environment can impact health outcomes by promoting positive health behaviors and providing additional opportunities for individuals to improve and/or maintain their health. Social environments can impact health by affecting community cohesion, collective efficacy, and social fabric, all of which play a role in mediating stress and overall health. The findings of this study suggest that while gentrification may benefit older adults' physical environments, it carries a detrimental impact on their social environment, leading to a feeling of being "out of place."

Within this context, affordable housing was commonly cited as a vital support, both because of its low relative cost and its proximity to improved physical amenities. However, despite access to affordable housing, older adults still struggled to blend into the new social environment. Though affordable housing offered a literal ability to "age in place," neighborhood changes had begun to warp the "place" that residents had known for so long, leading to uncertainty over their long-term ability to age in their neighborhood. The in-migration of "new" residents created growing concerns over safety in a neighborhood that older residents had known for years, exacerbated by the absence of friends, family, and community. This increase in social isolation is consistent with the findings of studies in other cities, such as those conducted in New York, Chicago, and Montreal (Betancur, 2011; Burns et al., 2012; Versey, 2018; Versey et al., 2019).

Therefore, the findings of this research also suggest that strategies to improve social capital in gentrifying areas can support the healthy aging of older, longtime residents. For example, declaring social spaces with cultural significance "historic sites" may prevent their

demolition, preserving their meaning and value for those who have lived in the community longer. In addition, commitments to maintaining neighborhood traditions can help older and newer residents develop a sense of shared history.

Furthermore, though participants were not asked specifically about issues of race, many respondents also described the racialized nature of gentrification in their neighborhood and its personal toll. Such perceptions of anti-Blackness and classism can create added stress for minority and low-income older adults. To combat this, further investment in programs that enable community wealth building, such as Community Development Block Grants (CDGBs), can empower local governments to responsibly and inclusively drive neighborhood change (Galster et al., 2004). Additionally, initiatives like mixed-income housing can promote the creation of income diverse communities.

The generalizability of this study is limited due to its focus on residents living in affordable housing units in the Ward 1 of Washington D.C. Compared to other cities, D.C. has taken a proactive role in supporting the ability of older adults to age in place. In 2018, the D.C. Mayor's Office announced the "Age-Friendly D.C. 2023 Strategic Plan," based on three primary pillars: the built environment, changing attitudes about growing older, and lifelong health and security (The Office of the Deputy Mayor for Health and Human Services, 2018). However, several gentrifying cities such as Philadelphia (Gibbons & Barton, 2016), Baltimore (Narita et al., 2019), and New Orleans (Schnake-Mahl et al., 2019), neither prioritize these services nor have capacity to provide them. In such circumstances, older adults may not be able to access the improved physical amenities associated with gentrification, increasing their risk for displacement.

Nevertheless, this research provides a rich individual and community-based perspective on how gentrification and access to affordable housing affect the ability of older adults to age in place. Furthermore, it is the first qualitative study we are aware of which situates conversations on gentrification and aging in place within existing ecological models of aging, providing a framework for additional studies, namely empirical analyses that compare the experiences of older adults in gentrifying and non-gentrifying areas.

### **Conclusion**

To date, research in environmental gerontology has not significantly examined the impact of changing environments on the ability of older adults to age in place. Using a sample of low-income older adults, this study examines the impact of one such change: gentrification. Among older adults, gentrification was typically conceptualized through increased housing construction, increases in the cost of living, and racial changes.

Although certain physical changes associated with gentrification, such as improved access to transportation, were seen as supportive, older adults expressed significant difficulty adapting to gentrification-related social change. The in-migration of new residents not only eroded original residents' social capital, but also led to increased neighborhood tensions, increased prejudice against minorities, and concerns over safety. Access to affordable housing provided positive benefits, such as a place to stay and opportunities to access improved physical amenities. However, it did not protect against the consequences of neighborhood social change. Furthermore, many individuals felt uncertain of their future as the neighborhood continued to gentrify. In spite of these challenges, however, older adults expressed a strong desire to age in place if they are able to do so.

This research identifies a critical need for gentrifying cities to promote social interventions that can enable older adults to better age in place. Such interventions should not only provide a place to live, but also a physical and social environment that is conducive to growing older. As neighborhoods change, community members should recognize the meaningful role older adults play in their communities and remember that supporting their ability to age in place is important not only to older adults, but also to communities at large.

### **Acknowledgements**

We would like to thank both the organizations that permitted the recruitment of participants in their affordable housing complexes and the community organizations that provided participant referrals. We would also like to thank Courtney Van Houtven, PhD for her review and comments on the manuscript. And finally, thank you to all of the participants, without whom this work would not have been possible.

### References

- Atkinson, R., & Wulff, M. (2009). Gentrification and displacement: a review of approaches and findings in the literature. *Submarkets and public sector housing*, 115, 1-29.
- Barnett, D. W., Barnett, A., Nathan, A., Van Cauwenberg, J., Cerin, E., & group, C. o. E. a. P. A. C. O. A. w. (2017). Built environmental correlates of older adults' total physical activity and walking: a systematic review and meta-analysis. *Int J Behav Nutr Phys Act*, 14(1), 103. <https://doi.org/10.1186/s12966-017-0558-z>
- Berke, E. M., Koepsell, T. D., Moudon, A. V., Hoskins, R. E., & Larson, E. B. (2007). Association of the built environment with physical activity and obesity in older persons. *Am J Public Health*, 97(3), 486-492. <https://doi.org/10.2105/AJPH.2006.085837>
- Betancur, J. (2011). Gentrification and community fabric in Chicago. *Urban Stud*, 48(2), 383-406.
- Bhavsar, N. A., Kumar, M., & Richman, L. (2020). Defining gentrification for epidemiologic research: A systematic review. *PLOS ONE*, 15(5), e0233361. <https://doi.org/10.1371/journal.pone.0233361>
- Brown, R. T., Miao, Y., Mitchell, S. L., Bharel, M., Patel, M., Ard, K. L., Grande, L. J., Blazey-Martin, D., Floru, D., & Steinman, M. A. (2015). Health Outcomes of Obtaining Housing Among Older Homeless Adults. *Am J Public Health*, 105(7), 1482-1488. <https://doi.org/10.2105/AJPH.2014.302539>
- Burns, V. F., Lavoie, J. P., & Rose, D. (2012). Revisiting the role of neighbourhood change in social exclusion and inclusion of older people. *J Aging Res*, 2012, 148287. <https://doi.org/10.1155/2012/148287>

- Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding In-depth Semistructured Interviews: Problems of Unitization and Intercoder Reliability and Agreement. *Sociological Methods & Research*, 42(3), 294-320.  
<https://doi.org/10.1177/0049124113500475>
- Chaix, B., Isacson, S. O., Råstam, L., Lindström, M., & Merlo, J. (2007). Income change at retirement, neighbourhood-based social support, and ischaemic heart disease: results from the prospective cohort study "Men born in 1914". *Soc Sci Med*, 64(4), 818-829.  
<https://doi.org/10.1016/j.socscimed.2006.10.018>
- DC State Data Center: 2013-2017 ACS Key Demographic Indicators. (2019). In. DC Office of Planning State Data Center: District of Columbia Office of Planning.
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*, 13, 117. <https://doi.org/10.1186/1471-2288-13-117>
- Galster, G., Walker, C., Hayes, C., Boxall, P., & Johnson, J. (2004). Measuring the impact of community development block grant spending on urban neighborhoods. *Housing Policy Debate*, 15(4), 903-934. <https://doi.org/10.1080/10511482.2004.9521526>
- Gibbons, J., & Barton, M. S. (2016). The Association of Minority Self-Rated Health with Black versus White Gentrification. *J Urban Health*, 93(6), 909-922.  
<https://doi.org/10.1007/s11524-016-0087-0>
- Glass, R. (1964). Aspects of change. In J. Brown-Saracino (Ed.), *The Gentrification Debates: A Reader* (pp. 19-30). Routledge.
- Glass, T., & Balfour, J. (2003). Neighborhoods, Aging, and Functional Limitations. In (pp. 303-334). <https://doi.org/10.1093/acprof:oso/9780195138382.003.0014>

Greenfield, E. A. (2012). Using ecological frameworks to advance a field of research, practice, and policy on aging-in-place initiatives. *Gerontologist*, 52(1), 1-12.

<https://doi.org/10.1093/geront/gnr108>

*Housing America's Older Adults: 2019*. (2019).

Kasongo, E. About Ward 1. In. DC Office of Planning: DC Office of Planning.

Lawton, M. P., & Nahemow, L. (1973). Ecology and the aging process. In *The psychology of adult development and aging*. (pp. 619-674). American Psychological Association.

<https://doi.org/10.1037/10044-020>

Lees, L. (2008). Gentrification and Social Mixing: Towards an Inclusive Urban Renaissance?

*Urban Studies*, 45(12), 2449-2470. <https://doi.org/10.1177/0042098008097099>

Narita, Z., Knowles, K., Fedina, L., Oh, H., Stickley, A., Kelleher, I., & DeVylder, J. (2019).

Neighborhood change and psychotic experiences in a general population sample.

*Schizophr Res.* <https://doi.org/10.1016/j.schres.2019.11.036>

Newman, K., & Wyly, E. K. (2006). The Right to Stay Put, Revisited: Gentrification and Resistance to Displacement in New York City. *Urban Studies*, 43(1), 23-57.

<https://doi.org/10.1080/00420980500388710>

Olsen, E. O. (2003). Housing programs for low-income households. In *Means-tested transfer programs in the United States* (pp. 365-442). University of Chicago Press.

Richardson, J., Mitchell, B., & Franco, J. (2019). *Shifting neighborhoods: gentrification and cultural displacement in American cities*. NCRC. Retrieved July 9, 2019 from

<https://ncrc.org/gentrification/>

Schnake-Mahl, A., Sommers, B. D., Subramanian, S. V., Waters, M. C., & Arcaya, M. (2019).

Effects of gentrification on health status after Hurricane Katrina. *Health Place*, 102237.

<https://doi.org/10.1016/j.healthplace.2019.102237>

Schnake-Mahl, A. S., Jahn, J. L., Subramanian, S. V., Waters, M. C., & Arcaya, M. (2020).

Gentrification, Neighborhood Change, and Population Health: a Systematic Review. *J*

*Urban Health*, 97(1), 1-25. <https://doi.org/10.1007/s11524-019-00400-1>

Tatian, P., Leopold, J., Oo, E., Joseph, G., MacDonald, G., Nichols, A., Woluchem, M., Zhang,

S., & Abazajian, K. (2015). *Affordable Housing Needs Assessment for the District of*

*Columbia*. T. U. Institute.

The Office of the Deputy Mayor for Health and Human Services. (2018). *Age-Friendly DC 2023*

*Strategic Plan*.

Versey, H. S. (2018). A tale of two Harlems: Gentrification, social capital, and implications for

aging in place. *Soc Sci Med*, 214, 1-11. <https://doi.org/10.1016/j.socscimed.2018.07.024>

Versey, H. S., Murad, S., Willems, P., & Sanni, M. (2019). Beyond Housing: Perceptions of

Indirect Displacement, Displacement Risk, and Aging Precarity as Challenges to Aging

in Place in Gentrifying Cities. *Int J Environ Res Public Health*, 16(23).

<https://doi.org/10.3390/ijerph16234633>

Wahl, H. W., Iwarsson, S., & Oswald, F. (2012). Aging well and the environment: toward an

integrative model and research agenda for the future. *Gerontologist*, 52(3), 306-316.

<https://doi.org/10.1093/geront/gnr154>

Wen, M., & Christakis, N. A. (2005). Neighborhood effects on posthospitalization mortality: a

population-based cohort study of the elderly in Chicago. *Health Serv Res*, 40(4), 1108-

1127. <https://doi.org/10.1111/j.1475-6773.2005.00398.x>

Wiles, J. (2005). Conceptualizing place in the care of older people: the contributions of geographical gerontology. *J Clin Nurs*, 14(8B), 100-108. <https://doi.org/10.1111/j.1365-2702.2005.01281.x>

Wiles, J. L., Leibing, A., Guberman, N., Reeve, J., & Allen, R. E. (2012). The meaning of "aging in place" to older people. *Gerontologist*, 52(3), 357-366. <https://doi.org/10.1093/geront/gnr098>