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Gentrification Creates Social Class Disparities in Belonging

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Gentrification impacts nearly every major city in the United States, posing a potential threat to lower social class residents' sense of belonging in their neighborhoods. In one survey and three preregistered experiments, we investigated how gentrification affects the belonging of residents across the social class spectrum and how to invest in working-class neighborhoods without undermining lower social class residents' sense of belonging. Studies 1–3 (Ns = 141, 1,085, and 510, respectively) provided correlational and experimental evidence that lower social class residents feel less belonging than higher social class residents in gentrifying neighborhoods. Study 3 showed that this belonging disparity was mediated by lower social class individuals perceiving themselves to be less similar to and less trusting of other residents and higher social class individuals feeling the amenities would better suit them in the gentrifying neighborhood. Nevertheless, neighborhood investment does not always threaten lower social class individuals' sense of belonging. Study 4 ($N = 402$) showed that lower social class individuals anticipated greater belonging and were more supportive when neighborhood investment was community driven (i.e., prioritized the needs of existing residents) than capital driven (i.e., prioritized economic growth). We discuss implications for equitable urban policy and future directions for a social psychology of gentrification.

Keywords: gentrification, belonging, social class, indirect displacement

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Since 2000, gentrification has rapidly accelerated in the United States (Richardson et al., 2019), and it continues to be a hot button topic for public, political, and academic debate. While prior work has sought primarily to understand whether gentrification causes residential displacement, the social psychological consequences and mechanisms are less understood. One major concern is that gentrification threatens working-class residents' sense of belonging— that is, their sense of connection and attachment—to their neighborhood. Understanding whether and why gentrification harms belonging can inform more equitable strategies for neighborhood investment.

The present research examines three key questions regarding gentrification's psychological impact. First, we examine how people's sense of belonging to gentrifying versus stable neighborhoods varies across social class. We then test several potential mechanisms to explain why there may be social class disparities in belonging within gentrifying neighborhoods. Last, we consider how a community-driven approach to neighborhood investment can support lower social class individuals while avoiding psychological harm.

What Is Gentrification and Whom Does It Affect?

Scholars disagree on how to precisely define and measure gentrification (Finio, 2022; Preis et al., 2021). However, almost all approaches acknowledge that gentrification involves a working-class neighborhood (i.e., a neighborhood that is less financially resourced and/or has residents who are predominantly lower income or in manual professions) becoming more affluent via an influx of higher social class residents. For example, sociologists and economists have measured gentrification by the changes in median household income, property values, the proportion of college-educated residents, or similar characteristics of a geographic tract (Brummet & Reed, 2019; Freeman, 2005; Landis, 2016; Richardson et al., 2019). Race is also an increasingly common component in the theorizing and measurement of gentrification (Rucks-Ahidiana, 2022). For example, scholars have also included changes in the proportions of White residents as an indicator of gentrification along with socioeconomic metrics (e.g., Loukaitou-Sideris et al., 2019) or focused their qualitative work on racial minority neighborhoods (García & Rúa, 2018; Hyra, 2015; Versey, 2018; Wong, 2019).

From a social psychology perspective, it is equally meaningful to consider the subjective perception that gentrification is taking place. In doing so, we join scholars who advocate for research on gentrification to go beyond strictly objective measurements of

neighborhood change to capture its nuanced impacts on residents (Brown-Saracino, 2017; DeVylder et al., 2019). Thus, in the present research, we define gentrification as the transformation of urban, working-class neighborhoods into more affluent, more White neighborhoods that is recognized by the residents of those neighborhoods.

Gentrification impacts people differently as a function of their identity and tenure in the neighborhood. Here we investigate how its psychological effects differ based on individuals' social class, which consists of the material and social resources they have that confer relative status and power in society (Kraus & Stephens, 2012; Stephens et al., in press).[1]

Gentrification's Threat to Belonging

Central to the debate around gentrification is whether it causes displacement. Most of the prior literature has focused on residential displacement, which does not always result from gentrification (Ding et al., 2016; Ellen & O'Regan, 2011; Freeman, 2005; Freeman et al., 2024; Martin & Beck, 2018). However, less work has addressed how gentrification erodes residents' sense of *belonging*, which gentrification scholars have also referred to as indirect displacement or sociocultural displacement (Davidson & Lees, 2010; Elliott-Cooper et al., 2020). Given that residents can feel a loss of belonging regardless of whether they stay in the neighborhood, it is worth studying in its own right.

A sense of belonging refers to the fundamental need to feel socially connected (Antonsich, 2010; Baumeister & Leary, 1995; Covarrubias, 2024). In the context of schools, workplaces, or neighborhoods, belonging can be thought of as a sense that one fits, is included, and feels at home in the context (Antonsich, 2010; Buckner, 1988; Ostrove & Long, 2007; Stephens et al., 2012). Belonging is both identity- and context-dependent. Those with minoritized identities are often mistreated and alienated in mainstream settings, whereas those with more privilege can dictate the right way to think, feel, and act and, ultimately, what kinds of people are welcome (Stephens et al., 2012, 2014; G. M. Walton & Brady, 2017; G. M. Walton & Cohen, 2007). Belonging is constantly being negotiated because contexts themselves are rarely neutral. Rather, most contexts have power structures that actively include some and exclude others (Covarrubias, 2024). What does it mean to feel belonging in a neighborhood and to claim a space as your home? For lower social class residents in gentrifying neighborhoods, feeling a greater sense of belonging might mean feeling a sense of long-term housing security and feeling a sense of fit with the culture and identity of the neighborhood. In contrast, lower belonging might mean continually worrying that one could be ostracized, mistreated, or pushed out, even if one has lived in the neighborhood for many years (Davidson & Lees, 2010; Elliott-Cooper et al., 2020). Empirical investigations of these experiences are critical, as lower belonging is associated with numerous downstream outcomes including decreased civic engagement (Daryanto & Song, 2021; Hyra, 2015; Stefaniak et al., 2017), poor psychological and physical health (Gonyea et al., 2018; Moyano-Díaz & Mendoza-Llanos, 2021), and even desire to leave the neighborhood (Clark & Coulter, 2015).

Social psychologists have long studied the circumstances that foster or hinder belonging across social class (Carey et al., 2022; Jury et al., 2017; Ostrove & Long, 2007; Stephens et al., 2012, 2014; Trawalter et al., 2021; G. M. Walton et al., 2023). As people navigate their daily lives, they regularly encounter both physical and sociocultural cues that signal which identities are appropriate and welcome. When working-class individuals navigate spaces that are designed by and for middle-class constituents, they face barriers. Much of this empirical work has been conducted in school and work settings. Research shows that students from lower social class backgrounds may feel a mismatch between their values and the values of elite universities (Oyserman & Destin, 2010; Stephens et al., 2012; see also Fryberg & Markus, 2007) and may feel a lower sense of belonging due to using public space on campus less frequently (Trawalter et al., 2021). Studying gentrification extends research on social class and culture beyond strictly organizational contexts to the neighborhood context. Whereas schools and workplaces have clear membership delineations with more static cultures, neighborhoods are more dynamic. In the context of gentrification, where a working-class neighborhood *becomes* more affluent, this threat to belonging could be even more pronounced. Gentrifiers may initially feel at odds with the working-class character of a neighborhood. However, by virtue of their socioeconomic status, gentrifiers carry disproportionate economic and political power to shape the neighborhood. In time, the neighborhood shifts to serve residents with more influence, to the detriment of lower social class residents. Gentrification can also be understood as the process of a neighborhood becoming more economically stratified. Greater economic inequality is linked to lower well-being, more distrust, and other harmful outcomes, especially for disadvantaged individuals (Buttrick & Oishi, 2017; Cheung & Lucas, 2016; Goya-Tocchetto & Payne, 2022; Oishi et al., 2011; Payne et al., 2017; K. E. Pickett & Wilkinson, 2015). Gentrification may prove to be yet another form of inequality with harmful psychological consequences at a more hyperlocal scale.

Previous studies examining gentrification's impact on belonging have typically relied on correlational evidence and case studies. One study of Philadelphia neighborhoods found that community connection was overall lower in neighborhoods that gentrified compared to those that did not gentrify, though it did not examine how this varied with individual residents' social class (Gibbons et al., 2020). Qualitative studies have also detailed longtime residents' experiences of alienation as they witness their neighborhood being transformed (Hyra, 2015; Shaw & Hagemans, 2015; Valli, 2015; Versey, 2018). In a case study of gentrifying Central Harlem, one resident shared that, "When I step outside this building here, you understand, people pass me and look at me like I'm in the wrong place" (Versey, 2018, p. 5). Valli's (2015, p. 1202) interviews with residents in gentrifying Bushwick echo this, "When you see these new people around, you feel different from how you felt before. You become more aware of yourself, you watch how you behave and how you speak." Such stories highlight the heightened vigilance and out-of-place feeling that existing residents experience when seeing wealthier newcomers move into their neighborhood.

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[1] Although we focus on social class, we would also predict that race affects residents' responses to gentrification. We report analyses by race in the Supplemental Material and further discuss the influence of race in the General Discussion section.

Why Would Gentrification Create Social Class Disparities in Belonging?

We theorize that gentrification creates social class disparities in belonging primarily through three psychological mechanisms—one's perceived fit with the amenities or institutions of the neighborhood, perceived similarity with other residents, and perceived social cohesion of the neighborhood. First, with respect to perceived fit with the amenities or institutions, people's social class circumstances determines not only the goods and services they can afford but also the goods and services that they prefer. As Bourdieu (1984) suggested in his concept of habitus, people enact their social position through their lifestyle preferences and consumer tastes. The shops people frequent, the restaurants where they eat, and their places of leisure all reflect and reinforce social class distinctions (McDonald et al., 2017; Wagner & McLaughlin, 2015). As neighborhoods gentrify, lower social class individuals may feel less belonging because they believe that the local amenities will no longer suit their needs or be meant for people like them. In other words, their psychological sense of fit with neighborhood institutions is compromised. Numerous qualitative studies provide evidence consistent with this theorizing. Existing residents of gentrifying neighborhoods often cannot afford nor do they want the new shopping and dining options that cater to the incoming wealthier clientele (Shaw & Hagemans, 2015; Sullivan & Shaw, 2011). Meanwhile, essential public amenities and accessible social spaces are scaled back. In Hyra's (2015) ethnography of U Street in Washington DC, one resident shared that newer residents wanted more "sit down restaurants" and "local nightlife," which longtime residents opposed. Similarly, in Shaw and Hagemans's (2015) study of Central St Kilda in Melbourne, longtime low-income residents reflected on the casual social venues that were being replaced by higher end cafes and bars. As they anticipate their frequented institutions becoming more exclusive or disappearing altogether, lower social class residents may feel increasingly alienated in gentrifying neighborhoods.

Lower social class individuals may also perceive themselves to be less like residents in gentrifying neighborhoods, whereas higher social class individuals might feel the opposite way. A core component of one's identification with a social group is whether they perceive themselves as prototypical members of the group (Leach et al., 2008; Tajfel & Turner, 1986; Turner et al., 1987). Residents who perceive themselves to resemble an average resident in the neighborhood may feel more identified with the neighborhood. Prior work shows that perceived intragroup similarity generally predicts greater group belonging (Easterbrook & Vignoles, 2013; C. L. Pickett et al., 2002). This may explain why more dissimilar (i.e., heterogenous) neighborhoods tend to have lower neighborhood belonging overall (Chaskin & Joseph, 2010; Newman et al., 2016; Van der Meer & Tolsma, 2014; Versey, 2018). Thus, to the extent that lower social class individuals associate gentrifying neighborhoods with an increasingly upper social class group identity, they may feel less similar and, hence, less belonging to the neighborhood.

Last, lower social class residents may feel less belonging in gentrifying neighborhoods due to lower levels of neighborhood social cohesion. People identify more with groups when they perceive that the entire group shares commonalities and exists as a cohesive unit (Leach et al., 2008; Lickel et al., 2000). In a neighborhood context, social cohesion is characterized by trust and a mutual willingness to help (Kawachi & Berkman, 2000)—both of which require time and stability to develop. Unsurprisingly, social cohesion suffers when there are high rates of turnover and mobility (McPherson & Smith-Lovin, 2002; Sampson, 1991). Ethnographies of gentrifying neighborhoods have documented how long-standing residents feel more withdrawn from their neighbors and how their formerly tight-knit social networks become more fragmented (Colic-Peisker & Robertson, 2015; Thurber, 2021). While gentrifying neighborhoods may appear less socially cohesive to everyone, we speculate that lower social class individuals may find gentrifying neighborhoods to be even less cohesive than higher social class individuals do as they anticipate the possibility of their own or their community's displacement. We examine all these potential mechanisms in the present research.

Neighborhood Investment Without Displacement

Gentrification's potential harms have led some to fear that any form of investment or change will inevitably disenfranchise lower social class residents (Checker, 2011; Dale & Newman, 2009). Indeed, some may conclude that, to avoid psychological harm, working-class neighborhoods should not receive investment. We argue that this is not necessarily the case. Gentrification is often driven by economic priorities as both public and private actors seek the greatest returns on their investments (Cocola-Gant, 2019; Rucks-Ahidiana, 2022; Smith, 1979). This specific kind of capital-driven investment may raise skepticism among lower social class residents for good reason and undermine their belonging. In contrast, models of investment that involve citizen participation can help promote socioeconomic equity and empower marginalized residents (Danley & Weaver, 2018; Krings & Schusler, 2020; Wolf-Jacobs et al., 2023). Inherent in community-driven investment is the goal of preserving the neighborhood as a place that reflects the needs and identities of working-class residents—the psychological experiences that we propose explain social class disparities in belonging in gentrifying neighborhoods when threatened. Therefore, we theorize that when investment prioritizes this aim, rather than the economic goals that drive gentrification, it brings improvements to the neighborhood without compromising belonging.

Several case studies exemplify these contrasting approaches to neighborhood investment. In Danley and Weaver's (2018) case study of Camden, New Jersey, residents expressed distrust of future investment, seeing the legacy of a waterfront development as symbolic of outside developers' attempts to create a white, middle-class enclave in exchange for tax subsidies. These concerns are typical of community backlash against gentrification. In another case study, McKendry and Janos (2015) compared the priorities of a public–private partnership versus a grassroots coalition of residents and small business owners involved in sustainable development in South Seattle. Both groups supported cleaning up persistent pollution in the area. However, the public–private group saw the investment primarily in service of economic growth, whereas the grassroots coalition saw the economic growth as "only one spoke in an ecological and socially vibrant" investment plan (McKendry & Janos, 2015, p. 54). Fearing that the public–private partnership was more concerned with attracting tourists and new employers, the grassroots coalition articulated an alternative vision focused on maximizing community participation, connecting underemployed residents to jobs, and helping residents achieve basic needs. Their demands demonstrate that investment is wanted and needed but that the investment should be led by and meant for fellow working-class residents.

Drawing from this work, we hypothesize that investment alone is not what threatens lower social class residents' sense of belonging. Rather, it is the motives and intended beneficiaries of the said investment that impact belonging. In the present work, we experimentally compare the impact of conventional forms of neighborhood investment (i.e., capital-driven investment) and community-driven investment on lower social class individuals' sense of belonging to the neighborhood.

Present Research

Across four studies, we examine how gentrifying versus stable, working-class neighborhoods impact belonging and how to invest in working-class neighborhoods without undermining belonging. The first two studies test whether gentrification leads to social class disparities in belonging in a community sample of Seattle residents (Study 1) and in a controlled online experiment with fictitious neighborhoods (Study 2). Study 3 extends this by examining multiple psychological mechanisms for the link between gentrification and belonging. Last, Study 4 investigates whether alternative approaches to neighborhood investment (i.e., community-driven investment rather than capital-driven investment that is more typical of gentrification) can avoid compromising lower social class individuals' sense of belonging, while still investing in and changing the neighborhood.

In these studies, we take multiple approaches to measuring social class. Social class is determined by a range of status-conferring material and financial resources and can be measured with a variety of indices, including finances, education, and subjective social status (SSS; Kraus & Stephens, 2012; Krieger et al., 1997; Stephens et al., in press). Because financial resources are so central to whether someone can afford housing and other goods and services in a gentrifying neighborhood, income is frequently examined in studies of gentrification. As such, we focus on income as our primary measure of social class and use it in all four studies. Still, other measures of social class may also be relevant to gentrification. Savings, another indicator of financial resources, may operate in a similar way to income, although the effects of savings are more likely to be evident among older adults who have had more time to accrue wealth than among younger adults (Federal Reserve Board, 2023). When it comes to understanding gentrification's psychological consequences, education attainment could be especially important. Those with less formal education may find that the values and norms that guide their behaviors are at odds with their newer middle-class neighbors (Stephens et al., 2012, 2014). Finally, SSS, one's perceived relative status in society, may also be critical because it captures a more complex set of factors than any single objective measure can (Galvan et al., 2023). SSS is also a product of social comparison (Hoebel & Lampert, 2020; McLeod, 2013). As gentrification creates a more economically stratified neighborhood, it invites more "us" versus "them" comparisons. Therefore, in addition to our primary measure of income, we assess social class via measures of savings, education, and SSS in several studies (Studies 2–4).

Transparency and Openness

For all studies, we report how we determined our sample size, all data exclusions, all manipulations, and all measures pertaining to the hypotheses, and we follow Journal Article Reporting Standards (Kazak, 2018). Data were analyzed using R Version 4.1.1 and SPSS Version 27. Studies 2–4 were preregistered. Study materials, data, and analysis code are available at the Open Science Framework (OSF) and are accessible at https://osf.io/hfp3g/.

Study 1

In Study 1, we recruited a community sample of Seattle residents and investigated whether the relationship between social class and neighborhood belonging depends on the extent to which the neighborhood is gentrifying. Like many other major cities in the United States, Seattle has experienced high levels of gentrification (Richardson et al., 2019). Seattle's history of segregation and redlining (i.e., discrimination in loans/mortgages) has concentrated most of its low-income, Black, Indigenous, and people of color households in its southern neighborhoods (Gregory, n.d.; Hwang, 2020). Many of these neighborhoods now acutely face displacement pressures due to the omnipresent growth of the tech industry and construction of transit infrastructure in recent decades. Given the economic context, these neighborhoods are a natural location for a real-world test of our research questions.

Method

Participants

Data were taken from a larger study on Seattle area residents' neighborhood opinions conducted between January and May of 2023. Participants were recruited at public events and public transit stations and via Facebook Ads targeted at zip codes within Seattle. Participants completed surveys in exchange for a raffle entry for a $50 gift card.

To test our research question, we focused on participants living in neighborhoods with stops along the Link Light Rail southern corridor because these neighborhoods are known to be at high risk for gentrification (Seattle Office of Planning and Community Development, 2016). First opened in 2009, the Link Light Rail is much newer than most other train and subway systems in the United States. It brought a major update to the area's transit infrastructure, which previously relied solely on a network of shorter distance buses and streetcars. Public transit investment is sometimes associated with gentrification (Zuk et al., 2017). In Seattle specifically, there is evidence of demographic changes consistent with gentrification in neighborhoods adjacent to the Link Light Rail (Hess, 2020). With more expansion planned in the coming decades, the Link Light Rail will continue to shape Seattle's neighborhoods.

Sample size was determined by the number of participants who completed the survey by a predetermined stopping date, May 8, 2023. Of the 624 participants in the larger survey of residents' opinions of their neighborhoods, 141 participants lived in neighborhoods that qualified for our study. Ten participants were excluded from analysis for failing to respond to our measures of interest. The final sample consisted of 131 participants who were 51.9% women, 42.8% men, 5.3% nonbinary or gender queer; 51.2% White, 18.3% Asian, 14.5% Black, 9.2% multiracial, 5.3% Hispanic and/or Latine; and mostly (37.4%) between 25 and 34 years old. Post hoc effect size sensitivity analyses showed that our sample had 80% power to detect a medium effect size ($d = 0.48$).

Measures

Perceived Neighborhood Gentrification. We define gentrifying neighborhoods as those with objective markers of change, such as rising housing prices and demographic shifts, that are perceived by the residents. All participants in our analytic sample lived in neighborhoods that had been identified as at risk for gentrification by the City of Seattle and prior research (Hess, 2020; Seattle Office of Planning and Community Development, 2016). In addition, because these neighborhoods may have different markers of gentrification that vary in how noticeable and meaningful they are to residents, we measured participants' perceptions of neighborhood gentrification. Participants were asked,

> Would you say that your neighborhood is currently gentrifying? By 'gentrifying' we mean that there has been an increase in the price of rent/housing, new development and construction, and an increase in the number of White and/or wealthy residents moving in.

Participants responded on a 5-point scale (0 = *not at all*, 1 = *a little*, 2 = *somewhat*, 3 = *very much* so, 4 = *definitely*; $M = 2.73$, $SD = 1.08$; skew: −0.51, kurtosis: −0.48).

Belonging. We measured belonging using seven items adapted from the Belonging subscale of the Neighborhood Cohesion Scale (Buckner, 1988; Fone et al., 2007) and from the Sense of Social Fit Scale (G. M. Walton & Cohen, 2007). Participants indicated their agreement on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Example items include, "Living in my current neighborhood gives me a sense of community," "I feel like I belong in my neighborhood," and "I plan to remain a resident of my current neighborhood for a number of years." The seven items were averaged together (α = .87). Higher scores indicate greater belonging ($M = 3.80$, $SD = 0.72$).

Income. Participants were asked, "What is your annual household income, before taxes?" and selected their income bracket. We split participants into lower ($N = 61$) and higher income ($N = 70$) based on the Seattle median income of $100,000 (U.S. Census Bureau, 2022).[2] Responses were dummy coded (0 = lower, 1 = higher). Descriptive statistics for social class measures across all studies are presented in Table 1.

Besides the measures listed above, the full survey also included questions about local ballot measures, neighborhood change, and civic engagement, which are not included in the present analyses.[3]

Results

We aimed to investigate whether lower income participants experience lower belonging in neighborhoods that they perceived as gentrifying. We therefore tested whether income moderated the relationship between perceived gentrification and belonging and found that this was the case, $b = 0.30$, $SE = 0.12$, $t(127) = 2.56$, $p = .012$, 95% confidence interval (CI) [0.07, 0.53], $d = 0.45$. The interaction remained significant after controlling for age, gender, race, and duration of residence in the neighborhood, $b = 0.33$, $SE = 0.13$, $t(113) = 2.58$, $p = .011$, 95% CI [0.08, 0.58], $d = 0.49$.

To understand the nature of the interaction, we assessed model estimated means of belonging at higher (+1 SD) and lower (−1 SD) levels of perceived gentrification. Consistent with our theory, among those who reported higher levels of perceived gentrification, lower income residents felt significantly less belonging

Table 1
Means and Standard Deviations for Participant Social Class in Studies 1–4

Study	Income		Education		Savings		SSS	
	M	SD	M	SD	M	SD	M	SD
Study 1	0.53	0.50	4.99	1.01				
Study 2	4.23	2.10	4.29	1.34	3.81	2.52	5.14	1.75
Study 3	4.15	1.98	4.21	1.33	3.30	2.18	4.98	1.71
Study 4	3.67	1.75	3.93	1.35	2.64	1.87	4.28	1.44

Note. In Study 1, income was dummy coded (0 = less than $100,000, 1 = $100,000 or more). In Studies 2–4, income was measured on a scale from 1 (*less than $5,000*) to 9 (*$200,000 or higher*). Education was measured on a scale from 1 (*less than high school*) to 6 (*graduate degree*). Savings was measured on a scale from 1 (*less than $500*) to 9 (*$500,000 or more*). Subjective social status (SSS) was measured on a scale from 1 (*lowest*) to 10 (*highest*). Study 1 did not include measures of savings or SSS. Study 4 sampled only lower social class participants. Specific scale points can be found in the Supplemental Material.

($M = 3.62$, $SE = 0.12$) than higher income residents ($M = 4.09$, $SE = 0.13$), $t(127) = 2.65$, $p = .009$. Among those who reported lower levels of perceived gentrification, lower income residents reported similar levels of belonging ($M = 3.87$, $SE = 0.14$) as higher income residents ($M = 3.70$, $SE = 0.12$), $t(127) = 0.98$, $p = .33$.[4]

In addition, simple slope analyses showed that perceived gentrification predicted greater belonging for higher income residents, $b = 0.18$, $SE = 0.08$, $t(127) = 2.20$, $p = .03$, 95% CI [0.02, 0.34], but not for lower income residents, $b = -0.12$, $SE = 0.08$, $t(127) = 1.43$, $p = .15$, 95% CI [−0.28, 0.05]. Figure 1 depicts these results.

Discussion

Study 1 provides real-world evidence that income moderates the association between perceived gentrification and sense of belonging to one's neighborhood in a sample of neighborhoods that were objectively at risk for gentrification. Among those who perceived high levels of gentrification in their neighborhood, higher income residents felt a greater sense of belonging than lower income residents. This was not the case for those who perceived low levels of gentrification in their neighborhood. In addition, higher income residents felt greater belonging to their neighborhood the more they felt that it was gentrifying. There was also a pattern of lower income residents feeling less belonging the more they perceived their neighborhood to be gentrifying. However, this relationship was not significant potentially because all participants lived in neighborhoods that were objectively at risk for continued gentrification.

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[2] The 2017–2021 American Community Survey estimated the median income in Seattle was $105,391. We were unable to analyze income as a continuous measure in Study 1 because we mistakenly had two versions of the household income question with different income bracket choices. The city median was a shared cutoff point across the two versions and allowed us to combine responses from both surveys and maximize sample size. This measure did not adjust for household size.

[3] Study 1 did not include measures of savings or SSS. We did measure education; however, due to the large proportion of college-educated individuals (81%), we did not conduct analyses by education.

[4] Due to the small number of participants who indicated low levels of perceived gentrifying ($n = 17$ who selected "not at all" or "slightly"), these estimated mean comparisons should be interpreted with caution.

Figure 1
Simple Slopes Depicting Belonging by Perceived Neighborhood Gentrification and Income (Study 1)
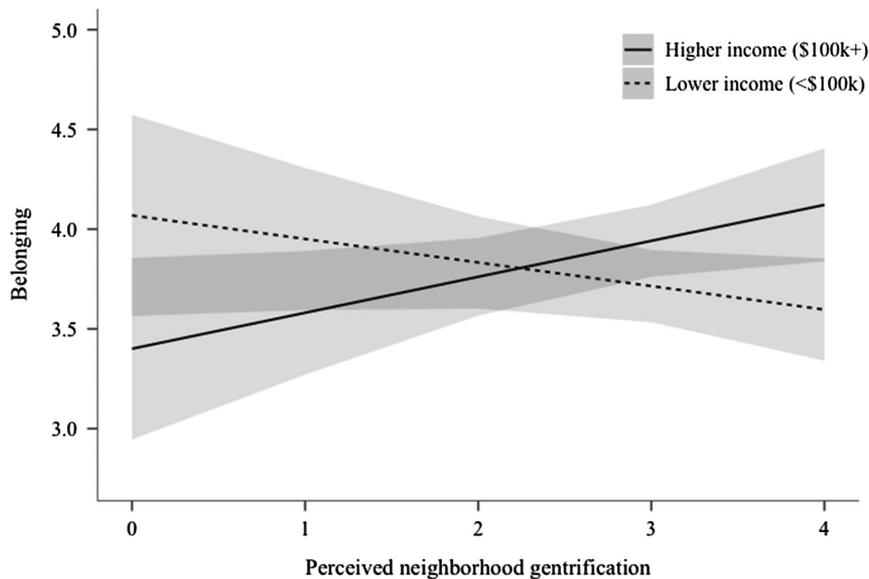
Note. Error bands represent 95% confidence intervals. Belonging was measured on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

In Study 2, we sought to follow up on this correlational evidence by experimentally testing whether gentrification causes social class disparities in belonging. We also addressed three methodological limitations of Study 1. First, we aimed to more clearly differentiate between neighborhoods that were gentrifying versus those that were clearly not currently experiencing gentrification nor at risk for future gentrification. Second, we measured income as a continuous variable rather than a dichotomous variable and included a wider range of measures of social class. Third, because some of the items that we had used to measure belonging in Study 1 captured factors that might be unrelated to belonging (e.g., "I plan to remain a resident of my current neighborhood for a number of years."), we assessed belonging with items that isolated a psychological sense of fit within the neighborhood.

Study 2

In Study 2 (preregistered at the OSF at https://osf.io/x9wy5/?view_only=e93c2961a6dd4bbfabd9938c547891d5), participants evaluated two fictitious neighborhood profiles, one depicting a gentrifying neighborhood and another depicting a stable, working-class neighborhood. We hypothesized that higher social class would predict greater belonging in the gentrifying neighborhood but not in the stable neighborhood.

Method

Participants

Based on a bootstrapped power analysis of a pilot study ($N = 773$), we aimed to recruit at least 1,000 participants to detect a small interaction ($d = 0.20$) with 90% power. We requested 1,200

participants from Prolific; however, 1,210 U.S. adults completed the study. As preregistered, we excluded eight for failing an attention check, six for not providing any socioeconomic status information, 99 for failing the manipulation check, and 12 for providing low-quality open-ended responses.[5] Our final sample was 1,085 participants (55.8% women, 41.2% men, 2.9% nonbinary or other gender; $M_{age} = 39$, $SD_{age} = 14.08$; 75.1% White, 6.8% Asian, 6.2% Black, 4.1% Hispanic and/or Latine, 7.8% multiracial or other racial group).

Procedure

Participants saw profiles of two neighborhoods, one gentrifying and one stable, in random counterbalanced order (a within-subjects design). After viewing the first neighborhood, participants described their general impression of the neighborhood and what a typical day in this neighborhood would be like to help them imagine living there. Participants then reported their sense of belonging to the neighborhood (our primary dependent variable). Then, they repeated the process for the second neighborhood. Finally, they provided demographic information about themselves.

Materials and Measures

Neighborhood Profiles. We designed two fictitious neighborhood profiles that were modeled after popular real estate websites (see Figure 2). One represented a gentrifying neighborhood, and another represented a stable, working-class neighborhood. Both neighborhoods had similar housing prices (i.e., "Prices are below the

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[5] Including participants who failed the manipulation check or attention checks or provided low-quality open-ended responses did not change the pattern or significance of our results.

Figure 2

Gentrifying and Stable Neighborhood Profiles in Study 2
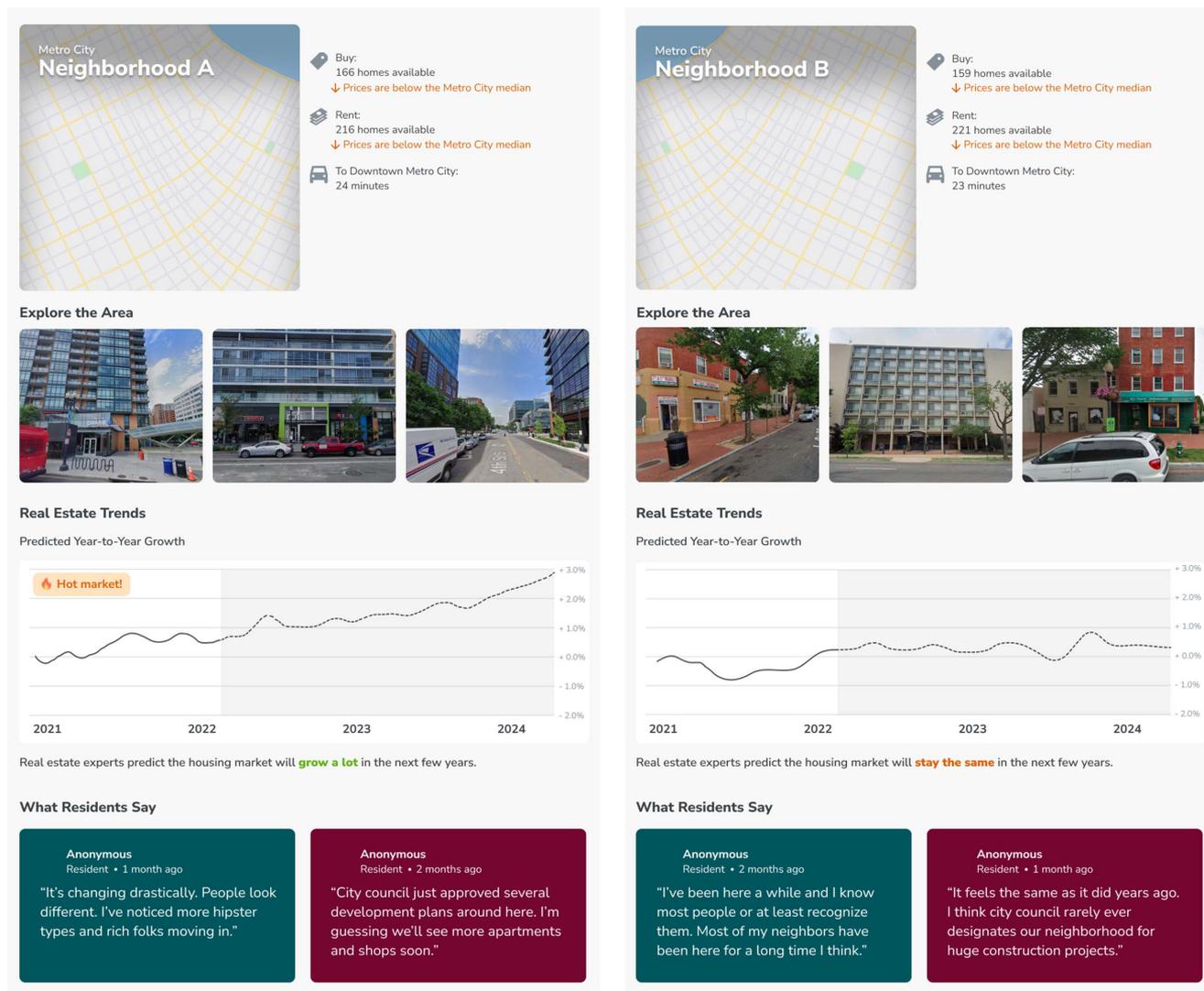
Note. See the online article for the color version of this figure.

Metro City median"), had similar levels of housing availability, and were a similar distance from downtown.

Whether the neighborhood was gentrifying versus stable, low income was conveyed via the *projected housing market, photos, and resident quotes*. To convey the projected housing market, a "real-estate trends" section of the profile indicated that the neighborhood was projected to "grow a lot in the next few years" (gentrifying) or to "stay the same" (stable). The photos we selected came from the Washington DC Navy Yard area, a neighborhood previously studied by gentrification researchers who have systematically labeled each neighborhood block for visible signs of investment (Golash-Boza, 2021). Photos for the gentrifying neighborhood were chosen from blocks that this previous research had identified as having visible signs of investment (e.g., trendy restaurants or bars, large-scale residential developments), whereas photos that represented the stable neighborhood lacked these visible changes. We ensured that

there were no people visible in each photo. Last, resident quotes from the gentrifying neighborhood emphasized the higher social class of newcomers and increasing development (e.g., "I've noticed more hipster types and rich folks moving in," "City council just approved several development plans around here"). Resident quotes in the stable neighborhood emphasized the lack of change (e.g., "I've been here a while and I know most people or at least recognize them," "I think city council rarely ever designates our neighborhood for huge construction projects").

We pretested the profiles to ensure that they differed in perceived neighborhood demographics in accordance with common definitions of gentrification. Specifically, we sought to ensure that the gentrifying neighborhood was perceived as having an increasing proportion of upper class and White residents and the stable neighborhood was perceived as demographically unchanging, with a smaller proportion of upper class and White residents overall than the gentrifying

neighborhood. One hundred participants recruited from Prolific saw both neighborhood profiles and estimated what percentage of the *current* and *future* residents were upper class (vs. middle or lower class) and White (vs. Asian, Black, Latine, or other racial group). We found significant 2 (Neighborhood: Stable vs. Gentrifying; within) × 2 (Time: Current vs. Future; within) interactions on the perceived proportion of upper class residents, $F(1, 99) = 29.35$, $p < .001$, and White residents, $F(1, 99) = 19.27$, $p < .001$. Participants expected the stable neighborhood to have the same proportion of upper class residents in the future, $F(1, 99) = 0.09$, $p = .77$. In contrast, they expected the gentrifying neighborhood to have a greater proportion of upper class residents in the future than in the present, $F(1, 99) = 31.26$, $p < .001$. Participants showed the same pattern for estimated proportions of White residents. Participants expected the stable neighborhood to have the same proportion of White residents in the future as in the present, $F(1, 99) = 0.47$, $p = .49$. However, they expected the gentrifying neighborhood to have a greater proportion of White residents in the future than in the present, $F(1, 99) = 25.19$, $p < .001$.

Manipulation Check. Participants were asked to think back to each neighborhood and indicate whether the housing market was projected to "grow," "stay the same," or "shrink." Only participants who correctly selected "grow" for the gentrifying neighborhood and "stay the same" for the stable neighborhood were included.

Belonging. We used four items adapted from the Sense of Social Fit scale (G. M. Walton & Cohen, 2007) to measure sense of belonging in a neighborhood context. Participants indicated their agreement on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) to the following: "I would want to live in this neighborhood," "I feel like I would belong in this neighborhood," "I would fit in well in this neighborhood," and "I would feel comfortable in this neighborhood." The four items were averaged separately for the stable condition (α = .95) and gentrifying condition (α = .95). Higher scores indicate greater belonging (M = 4.39, SD = 1.53).

Social Class. Our primary measure of social class was income, which participants reported from 1 (*less than $5,000*) to 9 (*$200,000 or higher*). Unlike in Study 1 where we divided participants into higher and lower income groups based on the Seattle city median income, we compared participants who are 1 *SD* above and below the sample mean income. Income was approximately normally distributed (skew: 0.22, kurtosis: −0.72).

In addition, we assessed three other measures of social class: savings, education, and SSS. Participants reported their total savings from 1 (*less than $500*) to 9 (*$500,000 or more*). Participants reported their highest level of education attainment from 1 (*less than a high school degree*) to 6 (*graduate degree*). SSS was measured using the MacArthur Subjective Social Status ladder (Adler et al., 2000). Participants chose from one of 10 rungs on a ladder, where higher rungs represented higher status, defined as having "the most money, most education, and most respected jobs."[6]

Covariates. Participants also reported their age, gender, race, and urbanity of their current neighborhood (e.g., urban, suburban, or rural) as covariates.

Analysis Plan

Given the study's within-subject design, we treated the data as a two-level nested structure with participants as the clustering variable. We computed linear mixed-effect regression models with random intercepts for participants. The interaction between income and neighborhood condition was our primary fixed effect of interest. We report approximate *d* statistics as effect sizes for the interaction effects (Nakagawa & Cuthill, 2007).

Each measure of social class was standardized. Dichotomous predictors were effect coded as follows: neighborhood condition (−1 = stable, 1 = gentrifying), gender (−1 = not cisgender man, 1 = cisgender man), race (−1 = not White, 1 = White), and urbanity (−1 = suburban or rural, 1 = urban). As preregistered, analyses were conducted with and without covariates, and we conducted simple slope comparisons to examine the effect of income for each neighborhood condition. We also conducted mean comparisons to examine the simple effect of neighborhood for higher (+1 *SD*) and lower (−1 *SD*) income, although this was not preregistered.

Results

Income Moderates the Effect of Neighborhood on Belonging

There was a significant interaction between income and neighborhood on belonging, $b = 0.18$, $SE = 0.03$, $t(1,083) = 5.69$, $p < .001$, 95% CI [0.12, 0.24], $d = 0.24$ (see Figure 3).[7] Simple slope tests revealed that in the gentrifying neighborhood, income predicted greater belonging, $b = 0.16$, $SE = 0.15$, $t(1,083) = 3.43$, $p < .001$, 95% CI [0.05, 0.26], whereas in the stable neighborhood, income predicted lower belonging, $b = −0.20$, $SE = 0.05$, $t(1,083) = 4.26$, $p < .001$, 95% CI [−0.30, −0.09]. Lower income individuals (−1 *SD*) felt less belonging to the gentrifying neighborhood (M = 4.16, SE = 0.07) than the stable neighborhood (M = 4.66, SE = 0.07), $t(1,083) = 5.71$, $p < .001$. Higher income individuals (+1 *SD*) felt the opposite. They felt more belonging to the gentrifying neighborhood (M = 4.47, SE = 0.07) than the stable neighborhood (M = 4.27, SE = 0.07), $t(1,083) = 2.34$, $p = .039$. The predicted interaction remained significant even after controlling for participant race, gender, age, and urbanity, $b = 0.18$, $SE = 0.03$, $t(1,083) = 5.69$, $p < .001$, 95% CI [0.12, 0.24], $d = 0.24$.

Additional Measures of Social Class

We conducted the same analyses with the additional measures of social class and found consistent support for our hypotheses. Neighborhood condition interacted significantly with savings, $b = 0.17$, $SE = 0.03$, $t(1,083) = 5.55$, $p < .001$, 95% CI [0.11, 0.23], $d = 0.24$; education, $b = 0.19$, $SE = 0.03$, $t(1,083) = 6.17$, $p < .001$, 95% CI [0.13, 0.25], $d = 0.24$; and SSS, $b = 0.27$, $SE = 0.03$, $t(1,083) = 8.90$, $p < .001$, 95% CI [0.21, 0.33], $d = 0.38$. We report these results in more detail in the Supplemental Material.

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[6] In our preregistration, we planned to combine the income, savings, and education measures into a composite of objective markers of social class. However, we revised our plan and analyzed each measure separately in response to helpful recommendations from reviewers who cautioned that composite measures are less informative and difficult to interpret (Stephens et al., in press; American Psychological Association, Task Force on Socioeconomic Status, 2007). The analyses with the composite measure supported our hypotheses and are reported in the Supplemental Material.

[7] We did not find significant two-way or three-way interactions with race.

Figure 3

Simple Slopes Depicting Belonging to Gentrifying Versus Stable Neighborhoods by Income (Study 2)
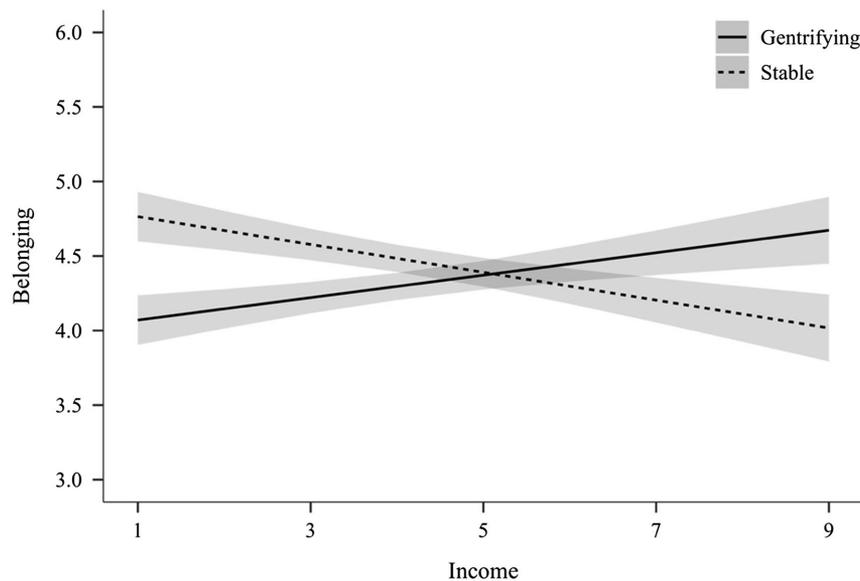
Note. Error bands represent 95% confidence intervals. Belonging was measured on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

Discussion

Study 2 provided evidence that gentrifying and stable neighborhoods produce social class differences in belonging. Compared to the stable neighborhood, the gentrifying neighborhood reduced belonging for lower social class individuals but increased belonging for higher social class individuals. In Study 3, we sought to test several psychological mechanisms for this social class disparity in belonging.

Study 3

Study 3 (preregistered at the OSF at https://osf.io/2849w/?view_only=661307a649c8475eb762b65f39726722) aimed to replicate Study 2 as well as investigate several psychological mechanisms for the social class disparity in belonging between gentrifying and stable neighborhoods. We hypothesized that the perceived social cohesion of a neighborhood, fit with neighborhood amenities, and perceived similarity with other residents would mediate the relationship between social class and belonging to each neighborhood.[8]

Method

Participants

Based on the effect size of the observed interaction in Study 2, we aimed to recruit at least 500 participants to detect a small interaction ($d = 0.28$), as well as a bootstrapped mediated effect with small path sizes at 80% power (Fritz & Mackinnon, 2007). Six hundred three U.S. adults completed the study on Prolific. As preregistered, 18 were excluded for failing an attention check, 54 were excluded for

failing the manipulation check, and 21 were excluded for providing low-quality open-ended responses.[9] Our final sample was 510 participants (48.2% women, 49.6% men, 2.2% nonbinary; $M_{age} = 38$, $SD_{age} = 13.12$; 73.7% White, 8.6% Black, 5.1% Hispanic and/or Latine, 4.9% Asian, 7.6% multiracial or other racial group).

Procedure

Study 3 followed a similar procedure to Study 2 but used a between-subjects design to reduce survey fatigue given that the additional measures (six additional scales to measure three mediators described in the Methods section of this study and three exploratory alternative mediators described in Footnote 9) increased the study length. This between-subjects design, like Study 2's within-subjects design, was preregistered. Participants saw both neighborhood profiles (the stable, working-class neighborhood followed by the gentrifying neighborhood) and then were randomly assigned to answer the mediator measures and dependent measures for just one of the two neighborhoods.

Materials and Measures

Neighborhood Profiles. Participants saw the same profiles that were used in Study 2.

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[8] We also tested three alternative mediators that were preregistered as exploratory: concerns about affordability, anxious expectations of discrimination, and perceived voice opportunity. These results are reported in the Supplemental Material.

[9] Including participants who failed the manipulation check or attention checks or provided low-quality open-ended responses did not change the pattern or significance of our results.

Manipulation Check.   Participants completed the same manipulation check as in Study 2, but this time they were only asked about the one neighborhood they were randomly assigned to evaluate.

Belonging.   Belonging was measured using the same four items in Study 2 (α = .95).

Institutional Fit.   Institutional fit with the neighborhood was measured by the mean score of four items (α = .92). Participants first read, "Think about the various institutions that would be in this neighborhood. By 'institutions' we mean the shops, restaurants, schools, parks, places of worship, facilities, and so forth." Then they were asked, "To what extent do you think that the institutions in this neighborhood … would have everything you want," "would be meant for people like you," "would cater to people like you" and "would seem appealing to you." Participants responded on a 5-point scale from 1 = *not at all* to 5 = *definitely*. Higher scores indicate greater fit.

Similarity With Other Residents.   Perceived similarity to residents in the neighborhood was measured by two adapted items (α = .96) from Craig and Richeson (2012; Study 5). Participants indicated their agreement on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) to the following: "I think I'm very similar to most people living in this neighborhood," and "I would have a lot in common with the average person living in this neighborhood." Higher scores indicate greater perceived similarity.

Social Cohesion.   Perceived social cohesion of the neighborhood was measured by the mean score of four items (α = .83) from Sampson et al. (1997). Participants indicated their agreement on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) to the following: "People around here would be willing to help their neighbors," "I think this would be a close-knit neighborhood," "I would trust people in this neighborhood," and "I would not get along with people in this neighborhood" (reverse coded). Higher scores indicate more cohesion. See Table 2 for descriptives and correlations among measures.

Social Class.   Social class was measured the same way as Study 2, with self-reported annual income as the primary measure and savings, education, and SSS as additional measures. Income was approximately normally distributed (skewness: 0.26, kurtosis: −0.66).

Covariates.   As in Study 2, we also asked for participant age, gender, race, and urbanity of their current neighborhood to be used as covariates in our analyses.

Results

Income and Neighborhood Interact to Predict Belonging

As in Study 2, there was a significant interaction between income and neighborhood on belonging, $b = 0.22$, $SE = 0.06$, $t(506) = 3.33$, $p < .001$, 95% CI [0.09, 0.35], $d = 0.30$ (see Figure 4).[10] Simple slope analyses showed that in the gentrifying neighborhood social class predicted greater belonging, $b = 0.44$, $SE = 0.09$, $t(506) = 4.82$, $p < .001$, 95% CI [0.23, 0.64]. However, contrary to the results from Study 2, social class did not significantly predict belonging to the stable neighborhood, $b = 0.00$, $SE = 0.09$, $t(506) = 0.04$, $p = 1.00$, 95% CI [−0.21, 0.21].[11] Lower income individuals (−1 *SD*) felt significantly less belonging to the gentrifying neighborhood ($M = 3.77$, $SE = 0.12$) than the stable neighborhood ($M = 4.43$, $SE = 0.14$), $t(506) = 3.57$, $p = .001$, 95% CI [−1.07, −0.24], whereas higher income individuals (+1 *SD*) felt similar levels of belonging to

both the gentrifying neighborhood ($M = 4.65$, $SE = 0.13$) and stable neighborhood ($M = 4.44$, $SE = 0.13$), $t(506) = 1.14$, $p = .51$, 95% CI [−0.20, 0.62]. The predicted interaction remained significant even after controlling for participant race, gender, age, and urbanity, $b = 0.21$, $SE = 0.07$, $t(502) = 3.19$, $p = .002$, 95% CI [0.08, 0.34], $d = 0.28$.

Additional Measures of Social Class

The interaction patterns between neighborhood and other measures of social class were also consistent with our hypotheses. The interaction was significant for savings, $b = 0.14$, $SE = 0.07$, $t(506) = 2.20$, $p = .029$, 95% CI [0.02, 0.27], $d = 0.20$; significant for SSS, $b = 0.34$, $SE = 0.06$, $t(506) = 5.19$, $p < .001$, 95% CI [0.21, 0.46], $d = 0.46$; and marginally significant for education, $b = 0.12$, $SE = 0.07$, $t(506) = 1.73$, $p = .084$, 95% CI [−0.02, 0.25], $d = 0.15$. We report these results in more detail in the Supplemental Material.

Moderated Mediation Analysis

To investigate why belonging to either neighborhood depends on social class, we conducted a series of moderated mediation analyses using PROCESS Model 8 (Hayes, 2018) with 10,000 bootstrap resamples (see Figure 5 for a diagram of the conceptual model). We used bootstrapping estimation to probe conditional indirect effects of each mediator on belonging. Our key parameter of interest is the index of moderated mediation, which tests whether the conditional indirect effects for higher income (+1 *SD*) and lower income (−1 *SD*) individuals are significantly different from each other. Table 3 presents the regression results for the a-path of each model and the results of the moderated mediation analysis for each mediator.

Institutional Fit.   The interaction between income and neighborhood on institutional fit was significant and the indirect effect of neighborhood on belonging through institutional fit was moderated by income (see Table 3). Specifically, higher income individuals felt greater institutional fit with the gentrifying neighborhood relative to the stable neighborhood, which in turn was associated with more belonging. Institutional fit was not a significant mediator for lower income individuals.

Similarity With Other Residents.   The interaction between income and neighborhood on perceived similarity with other residents was also significant and the indirect effect of neighborhood on belonging through similarity with other residents was moderated by income (see Table 3). Specifically, lower income individuals felt less like residents in the gentrifying neighborhood than the stable neighborhood, which in turn was associated with less belonging. Similarity with other residents was not a significant mediator for higher income individuals.

Social Cohesion.   Last, the interaction between income and neighborhood on social cohesion was also significant and the indirect effect of neighborhood on belonging through social cohesion was moderated by income (see Table 3). Social cohesion predicted greater belonging for both lower and higher income

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[10] We did not find significant two-way or three-way interactions with race.

[11] We preregistered this prediction based on the results from Study 2 showing that social class negatively predicted belonging in the stable neighborhood. However, we did not have this prediction before running Study 2.

Figure 4

Simple Slopes Depicting Belonging to Gentrifying Versus Stable Neighborhoods by Income (Study 3)
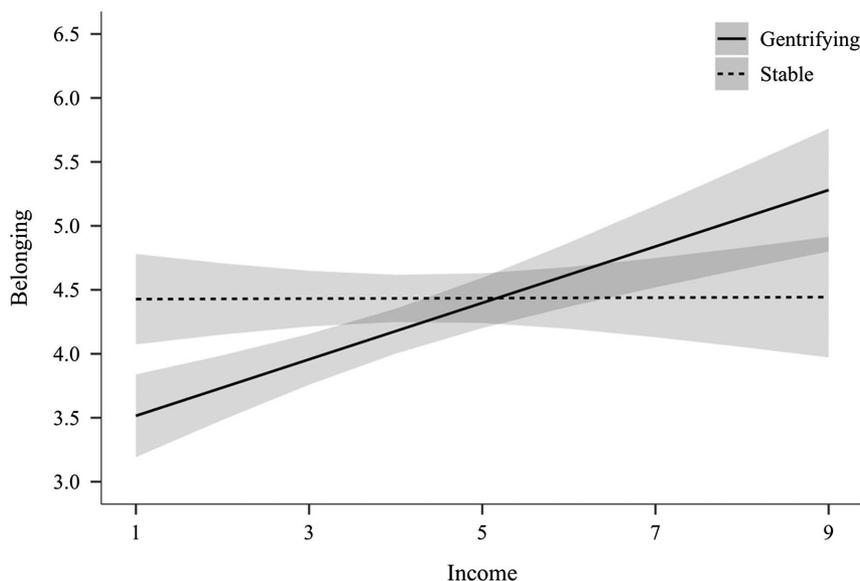
Note. Error bands represent 95% confidence intervals. Belonging was measured on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

individuals, but the indirect effect was stronger for lower than higher income individuals.

Additional Measures of Social Class

We conducted the same moderated mediation analyses for each of the three mediators with the other measures of social class. The indirect effect of neighborhood through institutional fit was significantly moderated by SSS ($b = 0.23$, Boot $SE = 0.06$, Boot 95% CI [0.11, 0.36]) but not by education ($b = 0.12$, Boot $SE = 0.08$, Boot 95% CI [−0.03, 0.28]) or savings ($b = 0.08$, Boot 95% CI [−0.01, 0.18]). The indirect effect of neighborhood through perceived similarity with others was significantly moderated by savings ($b = 0.10$, Boot $SE = 0.05$, Boot 95% CI [0.01, 0.20]), education ($b = 0.20$, Boot $SE = 0.08$, Boot 95% CI [0.05, 0.36]), and SSS ($b = 0.29$, Boot $SE = 0.06$, Boot 95% CI [0.17, 0.41]). Last, the indirect effect of neighborhood through social cohesion was significantly moderated by savings ($b = 0.09$, Boot $SE = 0.04$, Boot

Figure 5

Conceptual Moderated Mediation Model Showing the Interaction Between Income and Neighborhood Predicting Belonging

95% CI [0.00, 0.18]) and SSS ($b = 0.17$, Boot $SE = 0.06$, Boot 95% CI [0.07, 0.29]) but not by education ($b = 0.00$, Boot $SE = 0.07$, Boot 95% CI [−0.14, 0.15]). We report these results in more detail in the Supplemental Material.

Discussion

Study 3 replicated findings from Studies 1 and 2, where higher income participants felt greater belonging to a gentrifying neighborhood than did lower income participants. Unlike in Study 2, we found that income was unrelated to belonging in the stable neighborhood, suggesting that this relationship may be less robust. We speculate about reasons why in the General Discussion.

We also find that the social class gap in belonging to gentrifying neighborhoods is mediated by multiple psychological mechanisms. Higher income individuals expected the amenities of the gentrifying neighborhood to be especially well-catered to them in comparison to the amenities of the stable neighborhood, which in turn was associated with a greater sense of belonging to the gentrifying neighborhood. Lower income individuals expected to be less like residents of the gentrifying neighborhood than the stable neighborhood, which was associated with a reduced sense of belonging to the gentrifying neighborhood. Last, social cohesion was a stronger mediator for lower income than higher income individuals. When conducting analyses with other measures of social class, we also found that perceived institutional fit, similarity to other residents, and social cohesion mediated the social class gap in belonging to gentrifying neighborhoods, although the specific mediators that explained the effects differed by measure of social class.

Upon first glance, these findings, along with those from Studies 1 and 2, might suggest that financial investment or any type of change
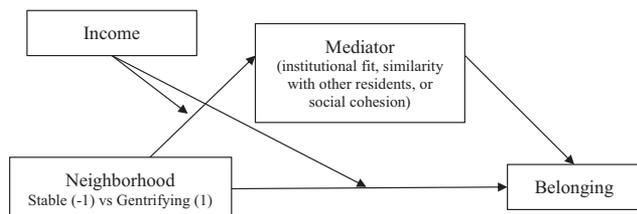
Table 2
Means, Standard Deviations, and Correlations Among Variables in Study 3 (N = 510)

Variable	M	SD	1	2	3	4
1. Belonging	4.30	1.49	—			
2. Institutional fit	3.01	1.01	.75***	—		
3. Similarity w/other residents	4.04	1.52	.77***	.69***	—	
4. Social cohesion	4.44	1.17	.65***	.38***	.59***	—

*** $p < .001$.

in working-class neighborhoods is threatening and thus should be avoided. However, building on real-world examples of successful investment without displacement (Krings & Schusler, 2020; McKendry & Janos, 2015; Thurber & Christiano, 2019) and mechanisms uncovered in Study 3, we propose that this is not the case. Instead, we suggest that it is gentrification (i.e., capital-driven investment) specifically that undermines belonging and that lower social class individuals will feel a greater sense of belonging in neighborhoods where the investment is designed to maintain the neighborhood as a place for people like them. We test this in Study 4 by presenting lower social class individuals with hypothetical neighborhoods experiencing one of two kinds of investment—capital driven (i.e., driven by maximizing profit, as is typical in many gentrifying neighborhoods) or community driven (i.e., driven by the priorities of existing residents).

Study 4

Study 4 (preregistered at the OSF at https://osf.io/swym2/?view_only=8f839a0c31904a9eb55be4fd9f374ad3) examined whether lower social class individuals' belonging to a neighborhood that is receiving investment depends on the nature of that investment. Specifically, we designed a manipulation to reflect models of capital-driven versus community-driven investment that were externally valid (e.g., McKendry & Janos, 2015) and theoretically consistent with a key mediator identified in Study 3. We focused on lower social class participants only in this study, given that they were the participants whose belonging was threatened by gentrification in previous studies. We hypothesized that lower social class individuals would prefer community-driven investment over capital-driven investment.

Method

Participants

We aimed to recruit at least 346 participants to detect a small-to-medium effect ($d = 0.35$) at 90% power. As preregistered, we recruited 500 lower social class U.S. adults on Prolific, anticipating that some would fail the manipulation check. Participants were considered lower social class if they ranked themselves on the lower half of Prolific's 10-rung socioeconomic ladder screening question (i.e., they chose between 1 and 5).[12] Ninety-eight were excluded for failing the manipulation check,[13] leaving a final sample size of 402 participants (43.0% women, 53.7% men, 3.2% nonbinary or other gender; $M_{age} = 36$, $SD_{age} = 11.86$; 63.9% White, 11.7% Asian, 8.2%

Black, 6.7% Hispanic and/or Latine, 9.5% multiracial, native, or other racial group).

We also report analyses for subsets of participants who are lower income, lower savings, and less educated. Based on distributions in Studies 2 and 3, we considered lower income participants to be those who reported their income as 2 or lower (less than $20,000), lower savings participants were those who reported a 1 (less than $500), and less-educated participants were those who reported a 3 or lower (no college degree). These correspond to approximately -1 SD or lower based on distributions from Studies 2 and 3.

Procedure

Participants were randomly assigned to read about a working-class neighborhood experiencing either capital-driven or community-driven investment. Participants first saw a profile of the neighborhood with basic population statistics, photos of the neighborhood, and resident quotes. Then, participants read an ostensible local news article describing investment and development that was occurring in the neighborhood. Participants then reported on their sense of belonging to the neighborhood and degree of support for the investment. Finally, they provided demographic information about themselves.

Materials and Measures

Neighborhood Stimuli. In the capital condition, participants read about a new mixed-use development, Lynmoore Village, that was led by a national investment firm. The article included quotes such as, "The recent changes are exactly what investors and developers have been pushing for," "At the center of it all is the tremendous growth in Metro City," and "A group of investors got together, and they were saying how south Metro City is going to be the up-and-coming neighborhood."

In the community condition, participants read about a new mixed-use development, also named Lynmoore Village, that was led by a tenants advocacy group. The article included quotes such as, "The recent changes are exactly what the community has been pushing for," "At the center of it all is the working-class community living in and around Metro City," and "A group of tenants got together, and they were saying how we need to advocate for our own needs."

We pretested the stimuli on multiple dimensions. First, to ensure that our manipulation was not only externally valid (i.e., reflected an approach to investment found in the real world) but also theoretically relevant (i.e., was conceptually related to one of the mediators identified in Study 3), we examined whether lower social class participants perceived themselves to be more similar to residents in the community condition than the capital condition. We confirmed that this was the case, $t(401.48) = 3.62$, $p < .001$. We also pretested to ensure that the neighborhoods were similar in their

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[12] Prolific also includes prescreeners for income and education. However fewer participants complete these measures compared to the status ladder measure. Of Prolific's active U.S.-based participants in February 2024, 94% completed the status ladder screener, 72% completed the education prescreener, and 62% completed the income prescreener. Therefore, because our hypothesized patterns had emerged for SSS (i.e., the ladder) in earlier studies and we wanted to ensure that we drew from a large a sample as possible, we used the ladder measure to screen for participants.

[13] Including participants who failed the manipulation check did not change the pattern or significance of our results.

Table 3

Moderated Mediation Model: Indirect Effect of Neighborhood on Belonging Through Institutional Fit, Similarity With Other Residents, and Social Cohesion Moderated by Income

| | Mediator variable model (a-path) | | | | | | | | | | | | | | |
| | Institutional fit | | | | | Similarity w/other residents | | | | | Social cohesion | | | | |
Predictor	b	SE	t	p	95% CI	b	SE	t	p	95% CI	b	SE	t	p	95% CI
Intercept	0.00	0.04	0.01	.995	[−0.08, 0.08]	0.01	0.04	0.35	.728	[−0.07, 0.10]	0.02	0.04	0.65	.516	[−0.05, 0.10]
Income	0.09	0.04	2.02	.044	[0.00, 0.17]	0.15	0.04	3.53	<.001	[0.07, 0.24]	0.10	0.04	2.54	.011	[0.02, 0.17]
Neighborhood	0.21	0.04	4.93	<.001	[0.13, 0.30]	−0.14	0.04	3.33	.001	[−0.23, 0.06]	−0.48	0.04	12.57	<.001	[−0.56, −0.41]
Income × Neighborhood	0.13	0.04	3.00	.003	[0.04, 0.21]	0.14	0.04	3.26	.001	[0.06, 0.22]	0.09	0.04	2.37	.018	[0.02, 0.17]
−1 SD income	0.08	0.06	1.36	.176	[−0.03, 0.20]	−0.28	0.06	4.65	<.001	[−0.40, −0.16]	−0.57	0.05	10.54	<.001	[−0.68, −0.47]
+1 SD income	0.34	0.06	5.62	<.001	[0.22, 0.46]	0.00	0.06	0.05	.96	[−0.12, 0.12]	−0.39	0.05	7.22	<.001	[−0.50, −0.29]

| | Conditional indirect effects of neighborhood on belonging | | | | | | | | |
| | Institutional fit | | | Similarity w/other residents | | | Social cohesion | | |
Income level	Estimate	Boot SE	Boot 95% CI	Estimate	Boot SE	Boot 95% CI	Estimate	Boot SE	Boot 95% CI
−1 SD income	0.10	0.07	[−0.04, 0.24]	−0.33	0.07	[−0.47, −0.18]	−0.66	0.07	[−0.80, −0.53]
+1 SD income	0.40	0.07	[0.27, 0.53]	0.00	0.07	[−0.13, 0.13]	−0.45	0.07	[−0.59, −0.32]
Index of moderated mediation	0.15	0.05	[0.06, 0.25]	0.16	0.05	[0.07, 0.26]	0.11	0.05	[0.02, 0.20]

Note. Income is standardized. Neighborhood is effect coded (−1 = stable, 1 = gentrifying). All mediators (institutional fit, similarity with other residents, social cohesion) are standardized. *SE* = standard error; *CI* = confidence interval.

existing conditions and expected improvement. We confirmed that the two neighborhoods were similar in terms of how much investment was needed, $t(90) = 0.43$, $p = .67$, and how much improvement was expected, $t(90) = 0.78$, $p = .44$. The two neighborhoods were also seen as having a similar existing proportion of lower class, middle-class, and upper class residents (ps > .14).

Manipulation Check. Participants were asked, "Who is leading the Lynmoore Village development?" and were given three response options, "A national investment firm," "A tenants advocacy group," and "I don't remember." Only participants who correctly selected "A national investment firm" in the capital condition and "A tenants advocacy group" in the community condition were included.

Belonging. Belonging to each neighborhood was measured using the same four items in Studies 2 and 3 ($\alpha = .95$; $M = 4.95$, $SD = 1.27$).

Support for Development. Support for the development was measured with a single item, "How much would you oppose or support the changes being described in the news article?" Participants responded on a 7-point scale (1 = *strongly oppose*, 7 = *strongly support*; $M = 5.57$, $SD = 1.35$).

Results

Belonging

As predicted, participants reported significantly greater belonging in the community condition ($M = 5.12$, $SD = 1.20$) than in the capital condition on average ($M = 4.78$, $SD = 1.32$), $t(397) = 2.68$, $p = .008$, $d = 0.27$ (see Figure 6). The difference persisted when we restricted our sample to people whose reported income, savings, education, and subjective status put them on the lower end of the distribution on each of these variables. Lower income individuals, $t(113) = 2.08$, $p = .039$, $d = 0.38$ (marginally); lower saving individuals, $t(143) = 1.87$, $p = .064$, $d = 0.31$; and less-educated individuals, $t(196) = 3.01$, $p = .003$, $d = 0.43$, felt greater belonging in the community condition than the capital condition.

Support for Development

There was also significantly greater support for the development described in the community condition ($M = 6.16$, $SD = 0.88$) than in the capital condition on average ($M = 5.00$, $SD = 1.48$), $t(330.8) = 9.53$, $p < .001$, $d = 0.95$.[14] Again, the difference persisted even when we restricted our sample to people whose reported income, savings, education, or subjective status put them on the lower end of the distribution on each of these variables. Lower income individuals, $t(91) = 5.14$, $p < .001$, $d = 0.95$; lower savings individuals, $t(123) = 5.56$, $p < .001$, $d = 0.92$; and less-educated individuals, $t(160) = 7.15$, $p < .001$, $d = 1.01$, supported the development more in the community condition than the capital condition.

Discussion

Lower social class individuals responded more positively to investment that was driven by the local community rather than by

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[14] We did not preregister a prediction for condition differences in support for development, but this difference is consistent with our theory.

Figure 6
Mean Belonging and Support for Development by Condition in Study 4 (N = 402)
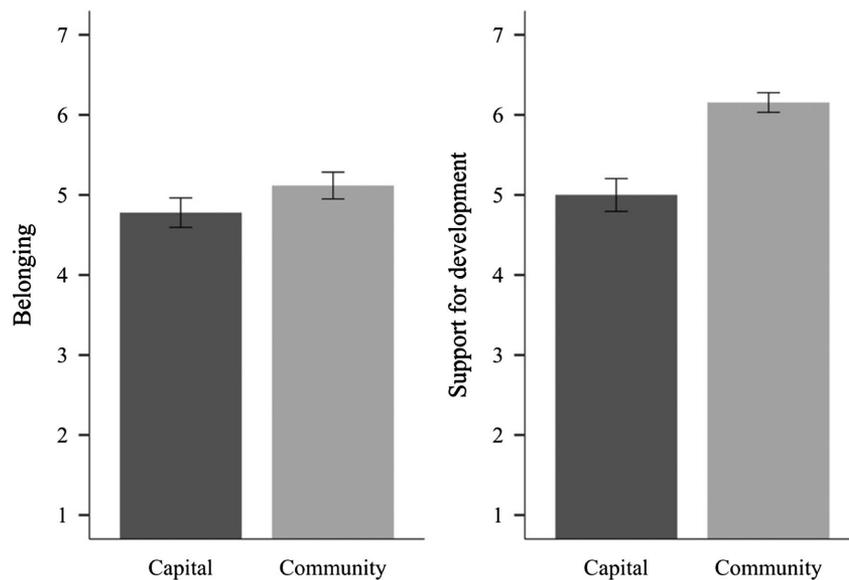
Note. Error bars represent 95% confidence intervals.

capital gains, reporting greater support for such changes and greater belonging to the neighborhood. One explanation is that community-driven investment also intervened on lower social class individuals' perceptions of similarity with other residents, a mediator identified in Study 3. Although we did not directly manipulate perceived similarity and therefore cannot determine if increasing similarity *caused* increased belonging, our results suggest that community-driven investment has a parallel effect on both outcomes. Future studies may consider explicitly changing perceptions of similarity, a suggestion we revisit in the General Discussion section.

Notably, mean belonging was high in both conditions and even surpassed that of higher income individuals in Studies 2 and 3 in the gentrifying conditions. It is possible that, because the current manipulation describes relatively early stages of investment, there is more optimism about how or whether the neighborhood will continue to change in the future. In Studies 2 and 3, however, the gentrifying condition includes forecasts of the housing market and clearly describes ongoing changes. Still, these results provide evidence that lower social class residents prefer more community-driven forms of investment over capitalistic, profit-motivated investment.

General Discussion

The present work shows that gentrifying neighborhoods versus stable neighborhoods create social class disparities in belonging, but community-driven investment brings resources into communities without undermining lower social class individuals' sense of belonging. In Study 1, we find correlational evidence for income disparities in belonging within a community sample of residents in gentrifying neighborhoods. Studies 2 and 3 replicate this real-world finding in online experiments with multiple indicators of social class, demonstrating that gentrification *causes* these social class

differences in belonging. Moreover, Study 3 shows that higher and lower income earners feel a sense of belonging—or lack of belonging—to gentrifying, as compared to stable, working-class neighborhoods, for different reasons. For higher income earners, their perception that the institutions in the gentrifying neighborhood (e.g., shops, restaurants, schools, parks, and places of worship) will better fit their needs explains their greater sense of belonging, relative to the stable, working-class neighborhood. In contrast, lower income earners feel that they would belong less in the gentrifying neighborhood than in the stable, working-class one, because they perceive gentrifying neighborhoods as having fewer people like them and as being less socially cohesive.

Although gentrification typically reduces lower social class individuals' sense of belonging, neighborhood investment does not automatically lead to the disenfranchisement of existing residents. Instead, Study 4 suggests that community-driven solutions may be a more favorable and equitable alternative to capital-driven investment that otherwise focuses on optimizing land for profit. Consistent with real-world examples (Krings & Schusler, 2020; McKendry & Janos, 2015; Thurber & Christiano, 2019), we show that when investment in a neighborhood is driven by and for existing tenants, rather than an outsider corporation, lower social class individuals feel a greater sense of belonging in the neighborhood.

To our knowledge, these studies are among the first quantitative studies to directly compare lower and higher social class individuals' sense of belonging in gentrifying neighborhoods and to demonstrate that when investment is community driven, rather than capital driven, lower social class individuals feel more neighborhood belonging. We show that people with higher and lower social class feel different levels of belonging in gentrifying versus stable neighborhoods. More importantly, we show experimentally that gentrification creates social class disparities in belonging. We speculate that disparities in belonging may even go on to exacerbate gentrification itself,

thereby creating a vicious cycle. Higher income residents who feel greater belonging may continue to advocate for amenities, services, and policies that cater to their lifestyle and attract other white-collar professionals. Lower income residents who feel out of place may continue to disengage socially and politically or move out altogether, leaving less resistance for gentrification to continue. Still, as Study 4 demonstrates, neighborhood investment that prioritizes the needs of existing residents leads lower class individuals to feel more belonging than neighborhood investment that is driven by economic priorities, as is typical of gentrification. To the extent that community-driven investment boosts belonging, it may also provide spillover benefits for residents' health, civic action, and other important life outcomes (Daryanto & Song, 2021; Gonyea et al., 2018; Stefaniak et al., 2017).

Importantly, we find that our results largely hold across different measures of social class, including our primary measure of income, as well as measures of savings, education, and SSS. This suggests that all these measures tap into aspects of social class that are relevant to gentrification and its psychological consequences. Measures of financial resources, such as income and savings, capture individuals' ability to pay for housing and goods and services within the neighborhood. This influences not only practical concerns, such as whether one can afford to stay in the neighborhood, but also social ones, such as whether they will be able to trust, relate to, and connect with potentially wealthier neighbors (Stancato et al., 2023). Level of education, which shapes the norms and values that guide people's thoughts, feelings, and actions, may also influence people's sense of cultural fit in neighborhoods with increasing proportions of highly educated residents (Stephens et al., 2012, 2019). Finally, SSS captures people's relative position in the social hierarchy (Adler et al., 2000; Galvan et al., 2023), a key component of social class (Stephens et al., in press). Moreover, because the measure asks participants to base their ratings on multiple status markers, including finances, education, and occupation, it captures status in a more holistic and nuanced way than other assessments of social class. This could be especially relevant in the context of gentrification, where neighborhoods undergo multifaceted changes that affect many aspects of residents' lives.

That said, some measures of social class drive our effects more strongly than others. Although measures and manipulations of gentrification interacted significantly with income, savings, and SSS across studies, the interaction with education was less consistent (i.e., was marginal in Study 3). These disaggregated results help disentangle the "black box" of social class by identifying which aspects are most sensitive to gentrification's psychological effects (American Psychological Association, Task Force on Socioeconomic Status, 2007; Chakraborty, 2002; Krieger et al., 1997). Given that rising living costs are often a central component of gentrification, it is reasonable for one's financial resources to more strongly inform individuals' reactions to gentrification than their education levels. This is also consistent with prior meta-analyses showing that income and subjective status are more strongly associated with general measures of psychological well-being than education is (Tan et al., 2020).

Patterns of Simple Effects Across Studies

The studies that examined income disparities in belonging (i.e., Studies 1–3) generally yielded consistent results. Across all these studies, the degree of gentrification consistently interacted with income to predict neighborhood belonging. The nature of this interaction can be broken down into four comparisons: (a) the difference between higher and lower income individuals in gentrifying neighborhoods, (b) the difference in how lower income individuals feel in one type of neighborhood compared to another, (c) the difference in how higher income individuals feel in one type of neighborhood compared to another, and (d) the difference between higher and lower income individuals in stable neighborhoods. This first comparison—the social class gap in gentrifying neighborhoods—is most central to our theory, and we found evidence for it in all three studies.

The other three comparisons are also meaningful and, along with the first, inherently dependent on each other. The evidence for each of these comparisons was less consistent across the studies. We speculate about why and discuss each of the comparisons in turn.

In terms of how lower social class individuals felt in different types of neighborhoods, in Studies 2 and 3, they felt a higher sense of belonging in the stable neighborhood than the gentrifying neighborhood. However, in Study 1, although there was a pattern of lower income participants feeling more belonging the less they perceived their neighborhood to be gentrifying, this pattern was not significant. We speculate that these differences may have been driven by differences in study design. In Study 1, Seattle residents reflected on gentrification in their current neighborhood, whereas in Studies 2 and 3, we experimentally manipulated gentrification with fictitious profiles and clearly distinguished between gentrifying and stable neighborhoods. All participants in Study 1 lived in neighborhoods that were objectively gentrifying to some degree, and we investigated how lower and higher income participants' perceptions of gentrification moderated their sense of belonging to the neighborhood. Therefore, this study—and likely most studies conducted in Seattle and other major cities where gentrification is acute (Richardson et al., 2019)—was better suited to documenting an income gap in belonging in gentrifying neighborhoods than comparing sense of belonging across different neighborhoods.

As for the higher social class participants, even though Studies 2 and 3 had relatively similar procedures, the difference between their belonging in the gentrifying and stable neighborhoods was significant in Study 2 but not in Study 3. One explanation is that those with more independent cultural orientations, such as higher social class individuals, may be less sensitive to their environments or feel more entitled to change the environment to suit their needs (Markus & Kitayama, 2003; Stephens et al., 2014; Talhelm et al., 2018). Thus, they may feel more belonging overall regardless of the neighborhood. If this is the case, the gap in higher social class participants' belonging in stable versus gentrifying neighborhoods might be a weaker effect and, thus, harder to detect consistently across studies.

Finally, we note that in Study 2, but not Study 3, income was correlated with belonging in the stable neighborhood condition. This was not entirely unexpected. In fact, because we did not have a strong theory about how income would be related to belonging in the stable neighborhood condition, we did not preregister a hypothesis for this effect in Study 2. However, this relationship did emerge in Study 2, and it did make sense that higher social class participants would feel less belonging than lower social class participants in a stable, working-class neighborhood. Therefore, in Study 3, we preregistered a hypothesis that social class would be negatively correlated with belonging in the stable neighborhood. There are

some plausible explanations for why the results differed between the two studies. First, as we note above, the belonging of individuals with higher social class might be less affected by differences in the neighborhood if they are less sensitive to context or feel they can change the neighborhood. In addition, it is possible that participants were mentally comparing the stable neighborhood to different alternatives in the two studies. In Study 2, which had a within-subjects design, comparisons to the gentrifying neighborhood would have been salient and potentially increased lower social class participants' belonging and decreased higher social class participants' belonging in the stable neighborhood. In contrast, in Study 3, which had a between-subjects design, participants might have made comparisons to a range of alternative neighborhoods. For instance, lower social class individuals likely have more experience living in working-class neighborhoods themselves. Thus, when evaluating the stable neighborhood condition, they could have made comparisons to not only gentrifying neighborhoods but also to other more desirable neighborhoods for working-class communities.

Contributions to the Social Psychology of Social Class and Inequality

Although this is, to our knowledge, one of the first social psychological investigations of gentrification, there is extensive social psychological research on social class and inequality. Our work extends the research on both topics. First, the present work broadens the scope of prior research on social class and belonging to the neighborhood context. While the impacts of social class on sense of fit and performance are well-studied in school and workplace settings (e.g., Destin & Oyserman, 2009; Hernandez et al., 2021; Jury et al., 2017; Stephens et al., 2019; Townsend et al., 2019), how this plays out in neighborhoods is less understood. Unlike schools and workplaces, neighborhoods are not formally structured organizations. The boundaries of neighborhoods are both geographically and socially porous. Neighborhoods lack clear in- and outgroup members and leadership structures. Thus, the dominant culture of a neighborhood, and what being a proper or ideal member of the neighborhood entails, is also less clear. Yet, we find that social class inequalities in belonging persist outside of strictly organizational contexts (see also Galster & Sharkey, 2017). Moreover, the work on social class and fit in schools and workplaces has largely focused on lower social class individuals in higher social class institutions (e.g., colleges/universities, white-collar workplaces, Stephens et al., 2019; G. M. Walton & Brady, 2017). Here, we show how belonging changes in a dynamic context that started as a place for lower social class individuals and is becoming more affluent.

Our research is also consistent with other work showing that more income inequality in a geographic region (e.g., country, state, or neighborhood) predicts negative outcomes such as social mistrust, social competition, risky behaviors, and poor health and well-being, especially among those with fewer resources (Buttrick & Oishi, 2017; Cheung & Lucas, 2016; Goya-Tocchetto & Payne, 2022; Oishi et al., 2011; Payne et al., 2017; K. E. Pickett & Wilkinson, 2015). Gentrification is just one social process that brings about inequality within a neighborhood. We show that, at least in contexts where inequality between neighbors is created because gentrification brings an influx of wealthier residents, these disparities in

material resources may also facilitate disparities in psychological well-being.

Last, the present work also contributes to research on how social identities are reproduced in physical space. Previous work, mostly focused on race, has shown that stereotypes about racial groups bleed over into stereotypes about spaces that those racial groups occupy (Bonam et al., 2016, 2017; Zou & Cheryan, 2022). Other recent work has linked characteristics of physical space to class-based identity processes as well. For example, lower social class students feel less belonging in elite public colleges in part because they use public space on campus less (Trawalter et al., 2021), and neighborhood characteristics (e.g., neighborhood "walkability") affect individuals' socioeconomic mobility throughout their lifetime (Oishi et al., 2019). We build on this research by showing that neighborhood change and neighborhood stability also impact individuals' belonging. Moreover, how neighborhood change affects belonging depends on one's social class and the type of change that is occurring.

Implications for Gentrification Research and Housing Policy

Some proponents of gentrification assume that working-class neighborhoods are blank slates that are prime for redevelopment (e.g., Gregor, 2014). This echoes the rhetoric used decades earlier by advocates of "urban renewal" who believed the only way to help inner city neighborhoods was by demolishing them and starting anew (Dickerson, 2015). Such arguments pathologize working-class livelihoods while overlooking the structural conditions of segregation, economic disinvestment, and political disregard that produce stark differences between neighborhoods (Day et al., 2014). Moreover, this belief ignores the assets and needs of existing residents who can and do cultivate strong, long-standing connections to their neighborhoods (E. Walton, 2016). Although prior research has shown that working-class residents of gentrifying neighborhoods feel a weaker sense of community (e.g., Hyra, 2015; Shaw & Hagemans, 2015), this work has been mostly descriptive or correlational and thus unable to demonstrate that these low levels of neighborhood belonging are caused by gentrification. This previous work has left open the possibility that gentrification occurs in neighborhoods whose residents already feel unattached to their communities. Our experimental methods help to dispel this myth. In Studies 2 and 3, lower socioeconomic status individuals actually feel *greater* belonging to the stable, low-income neighborhood than the gentrifying neighborhood.

While some qualitative studies have created typologies of sociocultural displacement resulting from gentrification (e.g., Davis et al., 2023; Twigge-Molecey, 2014), our work is among the first to do so quantitatively. We examined several distinct psychological effects of gentrification, identifying the specific mechanisms driving the gap in belonging between higher and lower social class residents. We found that high social class individuals' sense of fit with the amenities of the neighborhood explained their greater sense of belonging in a gentrifying neighborhood. In contrast, low social class individuals' sense of similarity and cohesion with other residents of the neighborhood explained why they anticipated greater belonging in the stable neighborhood. These distinct mechanisms might be explained by how higher versus lower social class contexts tend to cultivate more independent versus

interdependent models of self, respectively (Carey & Markus, 2017; Stephens et al., 2007, 2014). Higher social class cultures are characterized by choice and options. Therefore, higher social class individuals' sense of belonging is tied to having adequate amenities that cater to their wants and needs. On the other hand, working-class cultures are characterized by fitting in and adjusting to others. As a result, for lower social class individuals, it makes sense that their sense of belonging would be more associated with the nature of their social relationships.

Our research also points to ways of investing in working-class neighborhoods without compromising residents' belonging. Our finding that lower social class residents feel a greater sense of belonging in neighborhoods receiving community-driven, rather than capital-driven, investment suggests that neighborhood investment may not automatically disenfranchise existing residents. Indeed, as urban geographer Tom Slater has argued, gentrification proponents have set up a "false choice" (Slater, 2014) between conventional forms of investment that seek to revitalize the neighborhood by attracting new residents versus the continued neglect of working-class residents' needs. Instead, community-driven solutions may prove to be an equitable alternative to capital-driven investment that otherwise focuses on maximizing profits. We acknowledge that implementing this is no easy feat. The present research speaks to lower social class individuals' receptivity toward community-driven investment but has minimal bearing on the uphill political battle to achieve such funding (Earley, 2023). When housing remains a market commodity, community-driven investment is often at odds with economic incentives.

While the present research considers different strategies for investment, it is also worth contending with the upstream ideological and structural forces that lead to the uneven distribution of resources between neighborhoods in the first place. Gentrification is just one of many extractive processes that characterize capitalism. As such, gentrification is bound up with the concentration of wealth in select, predominantly White neighborhoods and the growing concentration of poverty in suburban and rural areas (Hochstenbach & Musterd, 2018; Rucks-Ahidiana, 2022; Smith, 1982). The relative affluence of one area does not exist without the relative disinvestment of another. Still, policymakers can pursue multiple solutions, some that address urgent crises of affordability and others that boldly shift agency and power to the most vulnerable residents. Expanding rent control, mandating inclusionary zoning, encouraging community ownership of land, and giving preferential tenancy to community members are all policy interventions that have been pursued (Bellisario et al., 2016; Chapple et al., 2023; Ghaffari et al., 2018). More investment and resources are very much needed in low-income neighborhoods. The challenge, rather, is what that investment looks like and who holds the power and agency to determine it.

Limitations and Future Directions

One limitation of the present work is its sole focus on social class. Gentrification disproportionately harms lower income, often older, people of color (Buffel & Phillipson, 2019; Crewe, 2017; Hwang & Ding, 2020; Torres, 2020; Versey, 2022). While our studies were well-powered to detect social class differences, they were likely underpowered to detect further crossed interactions. Although we did not set out primarily to test interactions of social class and race, we would have expected White people, and especially high social

class White people, to prefer the gentrifying neighborhood over the stable neighborhood. We would have expected Black, Indigenous, people of color individuals to feel the opposite. However, when we conducted exploratory analyses to test how participants' racial identities impacted their responses to our manipulations, we did not find significant two-way or three-way interactions with race (see Supplemental Material for analyses). This may have occurred because heterogeneity within our sample of racial minority participants diluted any interactions. The Asian American participants in our sample were higher socioeconomic status compared to the Latine and Black American participants. Our Asian participants were more attracted to the gentrifying neighborhood, whereas Latine and Black Americans showed inconsistent patterns, thus attenuating any differences between White and racial minority participants. Yet, Asian Americans are the most economically divided racial group in the United States (Kochnar & Cilluffo, 2018). Asian Americans thus represent a nebulous demographic as both potential beneficiaries and victims of gentrification. Many historical Chinatowns and other urban Asian enclaves across the United States are some of the most heated battlegrounds facing gentrification (Hom, 2022; Pottie-Sherman, 2013; Wong, 2019). Unlike the suburban communities of higher social class Asian Americans, these neighborhoods are often home to elderly lower income Asian immigrants. These nuanced within-group differences once again highlight the importance for future work to take an intersectional approach.

In addition, in the current work, we defined and operationalized gentrification as a multifaceted phenomenon that includes increases in housing values, changes to the neighborhood's racial and social class demographics, physical changes (i.e., residential and retail development), and the arrival of new residents with different lifestyles (e.g., residents with familiar faces vs. "rich folks" and "hipster types"). Moreover, we framed gentrification as a phenomenon with both objective components (e.g., changes in housing prices, presence of new public transit) and subjective components (e.g., study participants' or pretest participants' perceptions that more wealthy White residents would move in). This approach to gentrification as a complex set of changes is consistent with existing definitions in the literature (Brown-Saracino, 2017; Hwang, 2016) and with the way that gentrification plays out in the real world. However, we acknowledge that definitions of gentrification continue to evolve, and our research does not allow us to test which specific components of gentrification have the strongest impact on neighborhood belonging. Future research that isolates each component or asks participants to qualitatively describe what gentrification-related changes are most salient to them could address this question.

Future work on neighborhoods and social class might also further explore higher social class individuals' reactions to gentrification and neighborhood change. In some ways, gentrification challenges conventional knowledge of intergroup anxiety. Prior work has shown that people with high status identities (e.g., White Americans) feel threatened by the influx of members of minoritized groups into their neighborhoods (Craig & Richeson, 2018; Zou & Cheryan, 2022) and will configure their local environments to avoid contact with minoritized groups (Anicich et al., 2021). Yet, gentrification appears to be an example of the opposite pattern, wealthier White residents choosing to move to poorer Black, Indigenous, people of color neighborhoods. What explains these apparently contradictory phenomena? One possibility is that, in both cases, people with higher

status, who tend to see themselves as entitled to influence their social contexts (Markus & Kitayama, 2003; Stephens et al., 2014), are driven by a sense that they can and should be able to control their neighborhood, whether that means keeping residents with minoritized identities out or changing gentrifying neighborhoods so that they have services that suit their needs. It is also possible that gentrifiers view some degree of socioeconomic or racial diversity within a neighborhood positively, as long as it is not "too much." Consistent with this idea, White elites actually perceive moderate levels of people of color in a neighborhood to be "authentic," and, thus, desirable (Rucks-Ahidiana, 2022; Yoon, 2022).

Additional research could also explore ways to eliminate social class disparities in belonging when gentrification is already underway. While one method might be to focus on bridging divides between incoming higher social class residents and existing lower social class residents, another might be to strengthen ties among existing residents. Future research could more directly manipulate perceived similarity, for example, by explicitly highlighting a contingent of residents with shared interests and histories as long-standing neighbors. Additional research could target social cohesion, for example, by implementing programs designed to foster reciprocal relationships between neighbors. These direct manipulations of perceived similarity or social cohesion would also allow researchers to draw causal claims about the effect of these mechanisms of belonging. Additionally, further qualitative research could directly ask residents what would help preserve their sense of belonging in changing neighborhoods (see Thurber, 2021; Thurber & Christiano, 2019). When testing such interventions, researchers may consider using higher social class residents as a comparison group to see whether the gap in belonging is closed or even reversed.

Finally, although gentrification is inherently a longitudinal process, all our studies were cross-sectional. There are several ways that the effects we document here might unfold longitudinally. As neighborhoods gentrify, lower social class individuals may feel increasingly out of place. If higher social class residents move in and feel that they belong in these neighborhoods, they may feel more entitled to continue building new institutions that fit their needs, inviting more wealthy residents to move in, further undermining lower social class individuals' sense of belonging. In other words, we might expect that the social class disparity in belonging widens over time. Given the longitudinal nature of gentrification, scholars have called for more nuanced measures of the pace or stage of gentrification in a neighborhood (Hwang, 2016). The psychological consequences of gentrification may also very much depend on whether a neighborhood is in the early or late stages of gentrification. Social class itself is also dynamic. Although wealth mobility is relatively low in the United States (Shiro et al., 2022), individuals can still gain (or lose) social capital over time as they build social networks, change jobs, and gain education. Recent theorizing around social class as a dynamic process raises multiple possibilities for those residents that experience social class mobility as their neighborhood gentrifies (Day et al., 2014; Destin et al., 2017; Phillips et al., 2020). Some may adapt their perceptions of gentrification as if acculturating to their new social class identity, while others may resist changing.

Conclusion

There are few urban policy issues today that are as contentious as gentrification. Aside from the potential for physical displacement, gentrification also leads to harmful psychological consequences.

The present work provides causal evidence that gentrification reduces belonging for lower social class individuals while increasing belonging for higher social class individuals. We show that belonging is impacted via multiple psychological mechanisms including a reduced sense of similarity with other residents, perceived social cohesion, and sense of fit with neighborhood amenities. In doing so, we join calls for public planning experts to consider more than simply one's place of residence but also a holistic social infrastructure that attends to how residents interact with each other and the institutions of their neighborhood. More ambitiously, working-class neighborhoods deserve funding that prioritizes community needs rather than a return on investment. As cities continue to confront gentrification, it is critical that they attend to both the material and psychological security of their most vulnerable residents.

References

Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy white women. *Health Psychology*, 19(6), 586–592. https://doi.org/10.1037/0278-6133.19.6.586

American Psychological Association, Task Force on Socioeconomic Status. (2007). *Report of the APA task force on socioeconomic status.* https://www.apa.org/pi/ses/resources/publications/task-force-2006.pdf

Anicich, E. M., Jachimowicz, J. M., Osborne, M. R., & Phillips, L. T. (2021). Structuring local environments to avoid racial diversity: Anxiety drives Whites' geographical and institutional self-segregation preferences. *Journal of Experimental Social Psychology*, 95, Article 104117. https://doi.org/10.1016/j.jesp.2021.104117

Antonsich, M. (2010). Searching for belonging—An analytical framework. *Geography Compass*, 4(6), 644–659. https://doi.org/10.1111/j.1749-8198.2009.00317.x

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Bellisario, J., Weinberg, M., Meng, C., & Yang, L. (2016). *Solving the housing affordability crisis: How policies change the number of San Francisco households burdened by housing costs.* Bay Area Council Economic Institute. https://www.bayareaeconomy.org/files/pdf/BACEI_Housing_10_2016.pdf

Bonam, C. M., Bergsieker, H. B., & Eberhardt, J. L. (2016). Polluting Black space. *Journal of Experimental Psychology: General*, 145(11), 1561–1582. https://doi.org/10.1037/xge0000226

Bonam, C. M., Taylor, V. J., & Yantis, C. (2017). Racialized physical space as cultural product. *Social and Personality Psychology Compass*, 11(9), Article e12340. https://doi.org/10.1111/spc3.12340

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste* (R. Nice, Trans.). Harvard University Press.

Brown-Saracino, J. (2017). Explicating divided approaches to gentrification and growing income inequality. *Annual Review of Sociology*, 43(1), 515–539. https://doi.org/10.1146/annurev-soc-060116-053427

Brummet, Q., & Reed, D. (2019). *The effects of gentrification on the well-being and opportunity of original resident adults and children* [FRB of Philadelphia Working Paper No. 19-30]. https://doi.org/10.21799/frbp.wp.2019.30

Buckner, J. C. (1988). The development of an instrument to measure neighborhood cohesion. *American Journal of Community Psychology*, 16(6), 771–791. https://doi.org/10.1007/BF00930892

Buffel, T., & Phillipson, C. (2019). Ageing in a gentrifying neighbourhood: Experiences of community change in later life. *Sociology*, 53(6), 987–1004. https://doi.org/10.1177/0038038519836848

Buttrick, N. R., & Oishi, S. (2017). The psychological consequences of income inequality. *Social and Personality Psychology Compass*, *11*(3), Article e12304. https://doi.org/10.1111/spc3.12304

Carey, R. M., & Markus, H. R. (2017). Social class shapes the form and function of relationships and selves. *Current Opinion in Psychology*, *18*, 123–130. https://doi.org/10.1016/j.copsyc.2017.08.031

Carey, R. M., Stephens, N. M., Townsend, S. S. M., & Hamedani, M. G. (2022). Is diversity enough? Cross-race and cross-class interactions in college occur less often than expected, but benefit members of lower status groups when they occur. *Journal of Personality and Social Psychology*, *123*(5), 889–908. https://doi.org/10.1037/pspa0000302

Chakraborty, A. (2002). Issues in social indicators, composite indices and inequality. *Economic and Political Weekly*, *37*(13), 1199–1202. https://www.jstor.org/stable/i399779

Chapple, K., Loukaitou-Sideris, A., Miller, A., & Zeger, C. (2023). The role of local housing policies in preventing displacement: A literature review. *Journal of Planning Literature*, *38*(2), 200–214. https://doi.org/10.1177/08854122221137859

Chaskin, R. J., & Joseph, M. L. (2010). Building "community" in mixed-income developments: Assumptions, approaches, and early experiences. *Urban Affairs Review*, *45*(3), 299–335. https://doi.org/10.1177/1078087409341544

Checker, M. (2011). Wiped out by the "greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society*, *23*(2), 210–229. https://doi.org/10.1111/j.1548-744X.2011.01063.x

Cheung, F., & Lucas, R. E. (2016). Income inequality is associated with stronger social comparison effects: The effect of relative income on life satisfaction. *Journal of Personality and Social Psychology*, *110*(2), 332–341. https://doi.org/10.1037/pspp0000059

Clark, W. A., & Coulter, R. (2015). Who wants to move? The role of neighbourhood change. *Environment and Planning A: Economy and Space*, *47*(12), 2683–2709. https://doi.org/10.1177/0308518X15615367

Cocola-Gant, A. (2019). Gentrification and displacement: Urban inequality in cities of late capitalism. In T. Schwanen & R. Van Kempen (Eds.), *Handbook of urban geography* (pp. 297–310). Edward Elgar Publishing. https://doi.org/10.4337/9781785364600.00030

Colic-Peisker, V., & Robertson, S. (2015). Social change and community cohesion: An ethnographic study of two Melbourne suburbs. *Ethnic and Racial Studies*, *38*(1), 75–91. https://doi.org/10.1080/01419870.2014.939205

Covarrubias, R. (2024). What does it mean to belong? An interdisciplinary integration of theory and research on belonging. *Social and Personality Psychology Compass*, *18*(1), Article e12858. https://doi.org/10.1111/spc3.12858

Craig, M. A., & Richeson, J. A. (2012). Coalition or derogation? How perceived discrimination influences intraminority intergroup relations. *Journal of Personality and Social Psychology*, *102*(4), 759–777. https://doi.org/10.1037/a0026481

Craig, M. A., & Richeson, J. A. (2018). Majority no more? The influence of neighborhood racial diversity and salient national population changes on Whites' perceptions of racial discrimination. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, *4*(5), 141–157. https://doi.org/10.7758/rsf.2018.4.5.07

Crewe, S. E. (2017). Aging and gentrification: The urban experience. *Urban Social Work*, *1*(1), 53–64. https://doi.org/10.1891/2474-8684.1.1.53

Dale, A., & Newman, L. L. (2009). Sustainable development for some: Green urban development and affordability. *Local Environment*, *14*(7), 669–681. https://doi.org/10.1080/13549830903089283

Danley, S., & Weaver, R. (2018). "They're not building it for us": Displacement pressure, unwelcomeness, and protesting neighborhood investment. *Societies*, *8*(3), 74. https://doi.org/10.3390/soc8030074

Daryanto, A., & Song, Z. (2021). A meta-analysis of the relationship between place attachment and pro-environmental behaviour. *Journal of Business Research*, *123*, 208–219. https://doi.org/10.1016/j.jbusres.2020.09.045

Davidson, M., & Lees, L. (2010). New-build gentrification: Its histories, trajectories, and critical geographies. *Population Space and Place*, *16*(5), 395–411. https://doi.org/10.1002/psp.584

Davis, B., Foster, K. A., Pitner, R. O., Wooten, N. R., & Ohmer, M. L. (2023). Conceptualizing gentrification-induced social and cultural displacement and place identity among longstanding Black residents. *Journal of Black Studies*, *54*(4), 288–311. https://doi.org/10.1177/00219347231166097

Day, K., Rickett, B., & Woolhouse, M. (2014). Class dismissed: Putting social class on the critical psychological agenda. *Social and Personality Psychology Compass*, *8*(8), 397–407. https://doi.org/10.1111/spc3.12118

Destin, M., & Oyserman, D. (2009). From assets to school outcomes: How finances shape children's perceived possibilities and intentions. *Psychological Science*, *20*(4), 414–418. https://doi.org/10.1111/j.1467-9280.2009.02309.x

Destin, M., Rheinschmidt-Same, M., & Richeson, J. A. (2017). Status-based identity. *Perspectives on Psychological Science*, *12*(2), 270–289. https://doi.org/10.1177/1745691616664424

DeVylder, J., Fedina, L., & Jun, H. J. (2019). The neighborhood change and gentrification scale: Factor analysis of a novel self-report measure. *Social Work Research*, *43*(4), 279–284. https://doi.org/10.1093/swr/svz015

Dickerson, A. M. (2015). Revitalizing urban cities: Linking the past to the present. *The University of Memphis Law Review*, *46*, Article 973.

Ding, L., Hwang, J., & Divringi, E. (2016). Gentrification and residential mobility in Philadelphia. *Regional Science and Urban Economics*, *61*, 38–51. https://doi.org/10.1016/j.regsciurbeco.2016.09.004

Earley, A. (2023). Achieving urban regeneration without gentrification? Community enterprises and community assets in the UK. *Journal of Urban Affairs*, 1–24. https://doi.org/10.1080/07352166.2023.2229459

Easterbrook, M., & Vignoles, V. L. (2013). What does it mean to belong? Interpersonal bonds and intragroup similarities as predictors of felt belonging in different types of groups. *European Journal of Social Psychology*, *43*(6), 455–462. https://doi.org/10.1002/ejsp.1972

Ellen, I. G., & O'Regan, K. M. (2011). How low income neighborhoods change: Entry, exit, and enhancement. *Regional Science and Urban Economics*, *41*(2), 89–97. https://doi.org/10.1016/j.regsciurbeco.2010.12.005

Elliott-Cooper, A., Hubbard, P., & Lees, L. (2020). Moving beyond Marcuse: Gentrification, displacement and the violence of un-homing. *Progress in Human Geography*, *44*(3), 492–509. https://doi.org/10.1177/0309132519830511

Federal Reserve Board. (2023). *Survey of consumer finances, 1989–2022*. https://www.federalreserve.gov/econres/scf/dataviz/scf/chart/#series:Transaction_Accounts;demographic:agecl;population:1,2,3,4,5,6;units:mean;range:1989,2019

Finio, N. (2022). Measurement and definition of gentrification in urban studies and planning. *Journal of Planning Literature*, *37*(2), 249–264. https://doi.org/10.1177/08854122211051603

Fone, D., Dunstan, F., Lloyd, K., Williams, G., Watkins, J., & Palmer, S. (2007). Does social cohesion modify the association between area income deprivation and mental health? A multilevel analysis. *International Journal of Epidemiology*, *36*(2), 338–345. https://doi.org/10.1093/ije/dym004

Freeman, L. (2005). Displacement or succession?: Residential mobility in gentrifying neighborhoods. *Urban Affairs Review*, *40*(4), 463–491. https://doi.org/10.1177/1078087404273341

Freeman, L., Hwang, J., Haupert, T., & Zhang, I. (2024). Where do they go? The destinations of residents moving from gentrifying neighborhoods. *Urban Affairs Review*, *60*(1), 304–348. https://doi.org/10.1177/10780874231169921

Fritz, M. S., & Mackinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, *18*(3), 233–239. https://doi.org/10.1111/j.1467-9280.2007.01882.x

Fryberg, S. A., & Markus, H. R. (2007). Cultural models of education in American Indian, Asian American and European American contexts.

Social Psychology of Education, 10(2), 213–246. https://doi.org/10.1007/s11218-007-9017-z

Galster, G., & Sharkey, P. (2017). Spatial foundations of inequality: A conceptual model and empirical overview. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 3(2), 1–33. https://doi.org/10.7758/rsf.2017.3.2.01

Galvan, M. J., Payne, B. K., Hannay, J., Georgeson, A. R., & Muscatell, K. A. (2023). What does the MacArthur scale of subjective social status measure? Separating economic circumstances and social status to predict health. *Annals of Behavioral Medicine*, 57(11), 929–941. https://doi.org/10.1093/abm/kaad054

García, I., & Rúa, M. M. (2018). 'Our interests matter': Puerto Rican older adults in the age of gentrification. *Urban Studies*, 55(14), 3168–3184. https://doi.org/10.1177/0042098017736251

Ghaffari, L., Klein, J.-L., & Angulo Baudin, W. (2018). Toward a socially acceptable gentrification: A review of strategies and practices against displacement. *Geography Compass*, 12(2), Article e12355. https://doi.org/10.1111/gec3.12355

Gibbons, J., Barton, M. S., & Reling, T. T. (2020). Do gentrifying neighbourhoods have less community? Evidence from Philadelphia. *Urban Studies*, 57(6), 1143–1163. https://doi.org/10.1177/0042098019829331

Golash-Boza, T. (2021, November 16). *Census tract 72 | Navy Yard | Washington, D.C.* Mapping Gentrification in Washington D.C. https://storymaps.arcgis.com/stories/b6843312f4c145efbef65a8942fb987b

Gonyea, J. G., Curley, A., Melekis, K., & Lee, Y. (2018). Perceptions of neighborhood safety and depressive symptoms among older minority urban subsidized housing residents: The mediating effect of sense of community belonging. *Aging and Mental Health*, 22(12), 1564–1569. https://doi.org/10.1080/13607863.2017.1383970

Goya-Tocchetto, D., & Payne, B. K. (2022). How economic inequality shapes thought and action. *Journal of Consumer Psychology*, 32(1), 146–161. https://doi.org/10.1002/jcpy.1277

Gregor, A. (2014). Bushwick takes the spotlight. *The New York Times*. https://www.nytimes.com/2014/09/14/realestate/brooklyn-condos-now-in-bushwick.html

Gregory, J. (n.d.). *Seattle's race and segregation story in maps 1920–2020.* Seattle Civil Rights and Labor History Project. Retrieved September 26, 2023, from https://depts.washington.edu/civilr/segregation_maps.htm

Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4–40. https://doi.org/10.1080/03637751.2017.1352100

Hernandez, I. A., Silverman, D. M., & Destin, M. (2021). From deficit to benefit: Highlighting lower-SES students' background-specific strengths reinforces their academic persistence. *Journal of Experimental Social Psychology*, 92, Article 104080. https://doi.org/10.1016/j.jesp.2020.104080

Hess, C. L. (2020). Light-rail investment in Seattle: Gentrification pressures and trends in neighborhood ethnoracial composition. *Urban Affairs Review*, 56(1), 154–187. https://doi.org/10.1177/1078087418758959

Hochstenbach, C., & Musterd, S. (2018). Gentrification and the suburbanization of poverty: Changing urban geographies through boom and bust periods. *Urban Geography*, 39(1), 26–53. https://doi.org/10.1080/02723638.2016.1276718

Hoebel, J., & Lampert, T. (2020). Subjective social status and health: Multidisciplinary explanations and methodological challenges. *Journal of Health Psychology*, 25(2), 173–185. https://doi.org/10.1177/1359105318800804

Hom, L. D. (2022). Symbols of gentrification? Narrating displacement in Los Angeles Chinatown. *Urban Affairs Review*, 58(1), 196–228. https://doi.org/10.1177/1078087420954917

Hwang, J. (2016). While some things change, some things stay the same: Reflections on the study of gentrification. *City & Community*, 15(3), 226–230. https://doi.org/10.1111/cico.12188

Hwang, J. (2020). Gentrification without segregation? Race, immigration, and renewal in a diversifying city. *City & Community*, 19(3), 538–572. https://doi.org/10.1111/cico.12419

Hwang, J., & Ding, L. (2020). Unequal displacement: Gentrification, racial stratification, and residential destinations in Philadelphia. *American Journal of Sociology*, 126(2), 354–406. https://doi.org/10.1086/711015

Hyra, D. (2015). The back-to-the-city movement: Neighbourhood redevelopment and processes of political and cultural displacement. *Urban Studies*, 52(10), 1753–1773. https://doi.org/10.1177/0042098014539403

Jury, M., Smeding, A., Stephens, N. M., Nelson, J. E., Aelenei, C., & Darnon, C. (2017). The experience of low-SES students in higher education: Psychological barriers to success and interventions to reduce social-class inequality. *Journal of Social Issues*, 73(1), 23–41. https://doi.org/10.1111/josi.12202

Kawachi, I., & Berkman, L. (2000). Social cohesion, social capital, and health. In L. Berkman & I. Kawachi (Eds.), *Social epidemiology* (pp. 174–190). Oxford University Press. https://doi.org/10.1093/oso/9780195083316.003.0008

Kazak, A. E. (2018). Editorial: Journal article reporting standards. *American Psychologist*, 73(1), 1–2. https://doi.org/10.1037/amp0000263

Kochnar, R., & Cilluffo, A. (2018). *Income inequality in the U.S. is rising most rapidly among Asians.* Pew Research Center. https://www.pewresearch.org/social-trends/2018/07/12/income-inequality-in-the-u-s-is-rising-most-rapidly-among-asians/

Kraus, M. W., & Stephens, N. M. (2012). A road map for an emerging psychology of social class. *Social and Personality Psychology Compass*, 6(9), 642–656. https://doi.org/10.1111/j.1751-9004.2012.00453.x

Krieger, N., Williams, D. R., & Moss, N. E. (1997). Measuring social class in US public health research: Concepts, methodologies, and guidelines. *Annual Review of Public Health*, 18(1), 341–378. https://doi.org/10.1146/annurev.publhealth.18.1.341

Krings, A., & Schusler, T. M. (2020). Equity in sustainable development: Community responses to environmental gentrification. *International Journal of Social Welfare*, 29(4), 321–334. https://doi.org/10.1111/ijsw.12425

Landis, J. D. (2016). Tracking and explaining neighborhood socioeconomic change in U.S. metropolitan areas between 1990 and 2010. *Housing Policy Debate*, 26(1), 2–52. https://doi.org/10.1080/10511482.2014.993677

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, 95(1), 144–165. https://doi.org/10.1037/0022-3514.95.1.144

Lickel, B., Hamilton, D. L., Wieczorkowska, G., Lewis, A., Sherman, S. J., & Uhles, A. N. (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology*, 78(2), 223–246. https://doi.org/10.1037/0022-3514.78.2.223

Loukaitou-Sideris, A., Gonzalez, S., & Ong, P. (2019). Triangulating neighborhood knowledge to understand neighborhood change: Methods to study gentrification. *Journal of Planning Education and Research*, 39(2), 227–242. https://doi.org/10.1177/0739456X17730890

Markus, H. R., & Kitayama, S. (2003). Culture, self, and the reality of the social. *Psychological Inquiry*, 14(3–4), 277–283. https://doi.org/10.1207/S15327965PLI1403&4_17

Martin, I. W., & Beck, K. (2018). Gentrification, property tax limitation, and displacement. *Urban Affairs Review*, 54(1), 33–73. https://doi.org/10.1177/1078087416666959

McDonald, M., Gough, B., Wearing, S., & Deville, A. (2017). Social psychology, consumer culture and neoliberal political economy. *Journal for the Theory of Social Behaviour*, 47(3), 363–379. https://doi.org/10.1111/jtsb.12135

McKendry, C., & Janos, N. (2015). Greening the industrial city: Equity, environment, and economic growth in Seattle and Chicago. *International*

Environmental Agreement: Politics, Law and Economics, *15*(1), 45–60. https://doi.org/10.1007/s10784-014-9267-0

McLeod, J. D. (2013). Social stratification and inequality. In C. S. Aneshensel, J. C. Phelan, & A. Bierman (Eds.), *Handbook of the sociology of mental health* (pp. 229–253). Springer Netherlands. https://doi.org/10.1007/978-94-007-4276-5_12

McPherson, M., & Smith-Lovin, L. (2002). Cohesion and membership duration: Linking groups, relations and individuals in an ecology of affiliation. In S. R. Thye & E. Lawler (Eds.), *Advances in group processes* (Vol. 19, pp. 1–36). Emerald Group Publishing Limited. https://doi.org/10.1016/S0882-6145(02)19002-3

Moyano-Díaz, E., & Mendoza-Llanos, R. (2021). Membership, neighborhood social identification, well-being, and health for the elderly in Chile. *Frontiers in Psychology*, *11*, Article 608482. https://doi.org/10.3389/fpsyg.2020.608482

Nakagawa, S., & Cuthill, I. C. (2007). Effect size, confidence interval and statistical significance: A practical guide for biologists. *Biological Reviews of the Cambridge Philosophical Society*, *82*(4), 591–605. https://doi.org/10.1111/j.1469-185X.2007.00027.x

Newman, B. J., Velez, Y., & Pearson-Merkowitz, S. (2016). Diversity of a different kind: Gentrification and its impact on social capital and political participation in Black communities. *Journal of Race, Ethnicity, and Politics*, *1*(2), 316–347. https://doi.org/10.1017/rep.2016.8

Oishi, S., Kesebir, S., & Diener, E. (2011). Income inequality and happiness. *Psychological Science*, *22*(9), 1095–1100. https://doi.org/10.1177/0956797611417262

Oishi, S., Koo, M., & Buttrick, N. R. (2019). The socioecological psychology of upward social mobility. *American Psychologist*, *74*(7), 751–763. https://doi.org/10.1037/amp0000422

Ostrove, J. M., & Long, S. M. (2007). Social class and belonging: Implications for college adjustment. *The Review of Higher Education*, *30*(4), 363–389. https://doi.org/10.1353/rhe.2007.0028

Oyserman, D., & Destin, M. (2010). Identity-based motivation: Implications for intervention. *The Counseling Psychologist*, *38*(7), 1001–1043. https://doi.org/10.1177/0011000010374775

Payne, B. K., Brown-Iannuzzi, J. L., & Hannay, J. W. (2017). Economic inequality increases risk taking. *Proceedings of the National Academy of Sciences of the United States of America*, *114*(18), 4643–4648. https://doi.org/10.1073/pnas.1616453114

Phillips, L. T., Martin, S. R., & Belmi, P. (2020). Social class transitions: Three guiding questions for moving the study of class to a dynamic perspective. *Social and Personality Psychology Compass*, *14*(9), Article e12560. https://doi.org/10.1111/spc3.12560

Pickett, C. L., Silver, M. D., & Brewer, M. B. (2002). The impact of assimilation and differentiation needs on perceived group importance and judgments of ingroup size. *Personality and Social Psychology Bulletin*, *28*(4), 546–558. https://doi.org/10.1177/0146167202287011

Pickett, K. E., & Wilkinson, R. G. (2015). Income inequality and health: A causal review. *Social Science & Medicine*, *128*, 316–326. https://doi.org/10.1016/j.socscimed.2014.12.031

Pottie-Sherman, Y. (2013). Vancouver's Chinatown night market: Gentrification and the perception of Chinatown as a form of revitalization. *Built Environment*, *39*(2), 172–189. https://doi.org/10.2148/benv.39.2.172

Preis, B., Janakiraman, A., Bob, A., & Steil, J. (2021). Mapping gentrification and displacement pressure: An exploration of four distinct methodologies. *Urban Studies*, *58*(2), 405–424. https://doi.org/10.1177/0042098020903011

Richardson, J., Mitchell, B., & Franco, J. (2019). *Shifting neighborhoods: Gentrification and cultural displacement in American cities*. National Community Reinvestment Coalition. https://ncrc.org/wp-content/uploads/2019/03/NCRC-Research-Gentrification-FINAL.pdf

Rucks-Ahidiana, Z. (2022). Theorizing gentrification as a process of racial capitalism. *City & Community*, *21*(3), 173–192. https://doi.org/10.1177/15356841211054790

Sampson, R. J. (1991). Linking the micro- and macrolevel dimensions of community social organization. *Social Forces*, *70*(1), 43–64. https://doi.org/10.2307/2580061

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, *277*(5328), 918–924. https://doi.org/10.1126/science.277.5328.918

Seattle Office of Planning and Community Development. (2016). *Growth and equity: Analyzing impacts on displacement and opportunity related to Seattle's growth strategy*. City of Seattle. https://www.seattle.gov/documents/departments/opcd/ongoinginitiatives/seattlescomprehensiveplan/finalgrowthandequityanalysis.pdf

Shaw, K. S., & Hagemans, I. W. (2015). 'Gentrification without displacement' and the consequent loss of place: The effects of class transition on low-income residents of secure housing in gentrifying areas. *International Journal of Urban and Regional Research*, *39*(2), 323–341. https://doi.org/10.1111/1468-2427.12164

Shiro, A. G., Pulliam, C., Sabelhaus, J., & Smith, E. (2022). *Stuck on the ladder: Intragenerational wealth mobility in the United States*. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2022/06/2022_FMCI_IntragenerationalWealthMobility_FINAL.pdf

Slater, T. (2014). Unravelling false choice urbanism. *City*, *18*(4–5), 517–524. https://doi.org/10.1080/13604813.2014.939472

Smith, N. (1979). Toward a theory of gentrification: A back to the city movement by capital, not people. *Journal of the American Planning Association*, *45*(4), 538–548. https://doi.org/10.1080/01944367908977002

Smith, N. (1982). Gentrification and uneven development. *Economic Geography*, *58*(2), 139–155. https://doi.org/10.2307/143793

Stancato, D. M., Keltner, D., & Chen, S. (2023). The gap between us: Income inequality reduces social affiliation in dyadic interactions. *Personality and Social Psychology Bulletin*, *50*(8), 1280–1296. https://doi.org/10.1177/01461672231164213

Stefaniak, A., Bilewicz, M., & Lewicka, M. (2017). The merits of teaching local history: Increased place attachment enhances civic engagement and social trust. *Journal of Environmental Psychology*, *51*, 217–225. https://doi.org/10.1016/j.jenvp.2017.03.014

Stephens, N. M., Emery, L. F., & Townsend, S. S. M. (in press). Social class. In D. T. Gilbert, S. T. Fiske, E. J. Finkel, & W. Berry Mendes (Eds.), *The handbook of social psychology* (6th ed.). Situational Press. https://www.nicolemstephens.com/uploads/3/9/5/9/39596235/stephensemerytownsend_hsp_r1_final_12.12.pdf

Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, *102*(6), 1178–1197. https://doi.org/10.1037/a0027143

Stephens, N. M., Markus, H. R., & Phillips, L. T. (2014). Social class culture cycles: How three gateway contexts shape selves and fuel inequality. *Annual Review of Psychology*, *65*(1), 611–634. https://doi.org/10.1146/annurev-psych-010213-115143

Stephens, N. M., Markus, H. R., & Townsend, S. S. (2007). Choice as an act of meaning: The case of social class. *Journal of Personality and Social Psychology*, *93*(5), 814–830. https://doi.org/10.1037/0022-3514.93.5.814

Stephens, N. M., Townsend, S. S. M., & Dittmann, A. G. (2019). Social-class disparities in higher education and professional workplaces: The role of cultural mismatch. *Current Directions in Psychological Science*, *28*(1), 67–73. https://doi.org/10.1177/0963721418806506

Sullivan, D. M., & Shaw, S. C. (2011). Retail gentrification and race: The case of Alberta Street in Portland, Oregon. *Urban Affairs Review*, *47*(3), 413–432. https://doi.org/10.1177/1078087410393472

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Nelson Hall.

Talhelm, T., Zhang, X., & Oishi, S. (2018). Moving chairs in Starbucks: Observational studies find rice–wheat cultural differences in daily life in China. *Science Advances*, *4*(4), Article eaap8469. https://doi.org/10.1126/sciadv.aap8469

Tan, J. J. X., Kraus, M. W., Carpenter, N. C., & Adler, N. E. (2020). The association between objective and subjective socioeconomic status and subjective well-being: A meta-analytic review. *Psychological Bulletin*, *146*(11), 970–1020. https://doi.org/10.1037/bul0000258

Thurber, A. (2021). The neighborhood story project: A practice model for fostering place attachments, social ties, and collective action. *Journal of Prevention & Intervention in the Community*, *49*(1), 5–19. https://doi.org/10.1080/10852352.2019.1633072

Thurber, A., & Christiano, J. (2019). Confronting gentrification: Can creative interventions help people keep more than just their homes? *Engaged Scholar Journal: Community-Engaged Research, Teaching, and Learning*, *5*(2), 95–115. https://doi.org/10.15402/esj.v5i2.68338

Torres, S. (2020). "For a younger crowd": Place, belonging, and exclusion among older adults facing neighborhood change. *Qualitative Sociology*, *43*(1), 1–20. https://doi.org/10.1007/s11133-019-09441-z

Townsend, S. S. M., Stephens, N. M., Smallets, S., & Hamedani, M. G. (2019). Empowerment through difference: An online difference-education intervention closes the social class achievement gap. *Personality and Social Psychology Bulletin*, *45*(7), 1068–1083. https://doi.org/10.1177/0146167218804548

Trawalter, S., Hoffman, K., & Palmer, L. (2021). Out of place: Socioeconomic status, use of public space, and belonging in higher education. *Journal of Personality and Social Psychology*, *120*(1), 131–144. https://doi.org/10.1037/pspi0000248

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.

Twigge-Molecey, A. (2014). Exploring resident experiences of indirect displacement in a neighbourhood undergoing gentrification: The case of Saint-Henri in Montréal. *Canadian Journal of Urban Research*, *23*(1), 1–22.

U.S. Census Bureau. (2022). *U.S. census bureau quickfacts*. https://www.census.gov/quickfacts/fact/table/seattlecitywashington/PST045222

Valli, C. (2015). A sense of displacement: Long-time residents' feelings of displacement in gentrifying Bushwick, New York. *International Journal of Urban and Regional Research*, *39*(6), 1191–1208. https://doi.org/10.1111/1468-2427.12340

Van der Meer, T., & Tolsma, J. (2014). Ethnic diversity and its effect on social cohesion. *Annual Review of Sociology*, *40*(1), 459–478. https://doi.org/10.1146/annurev-soc-071913-043309

Versey, H. S. (2018). A tale of two Harlems: Gentrification, social capital, and implications for aging in place. *Social Science & Medicine*, *214*, 1–11. https://doi.org/10.1016/j.socscimed.2018.07.024

Versey, H. S. (2022). Disproportionate risk at both ends: Housing, health, and systems of exposure. *Perspectives in Biology and Medicine*, *65*(2), 283–294. https://doi.org/10.1353/pbm.2022.0024

Wagner, B., & McLaughlin, K. (2015). Politicising the psychology of social class: The relevance of Pierre Bourdieu's habitus for psychological research. *Theory & Psychology*, *25*(2), 202–221. https://doi.org/10.1177/0959354315580606

Walton, E. (2016). "It's not just a bunch of buildings": Social psychological investment, sense of community, and collective efficacy in a multiethnic low-income neighborhood. *City & Community*, *15*(3), 231–263. https://doi.org/10.1111/cico.12189

Walton, G. M., & Brady, S. T. (2017). The many questions of belonging. In A. J. Elliot, C. S. Dweck, & D. S. Yeager (Eds.), *Handbook of competence and motivation: Theory and application* (2nd ed., pp. 272–293). The Guilford Press.

Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, *92*(1), 82–96. https://doi.org/10.1037/0022-3514.92.1.82

Walton, G. M., Murphy, M. C., Logel, C., Yeager, D. S., Goyer, J. P., Brady, S. T., Emerson, K. T. U., Paunesku, D., Fotuhi, O., Blodorn, A., Boucher, K. L., Carter, E. R., Gopalan, M., Henderson, A., Kroeper, K. M., Murdock-Perriera, L. A., Reeves, S. L., Ablorh, T. T., Ansari, S., … Krol, N. (2023). Where and with whom does a brief social-belonging intervention promote progress in college? *Science*, *380*(6644), 499–505. https://doi.org/10.1126/science.ade4420

Wolf-Jacobs, A., Wilson, J. P., & Margulies, E. (2023). Promoting self-determination, minimizing green gentrification, and maximizing community benefits in urban forestry expansion: A systematic review. *Urban Forestry & Urban Greening*, *84*, Article 127933. https://doi.org/10.1016/j.ufug.2023.127933

Wong, D. (2019). Shop talk and everyday sites of resistance to gentrification in Manhattan's Chinatown. *Women's Studies Quarterly*, *47*(1 & 2), 132–148. https://doi.org/10.1353/wsq.2019.0032

Yoon, H. (2022, February 19). *Stigma or authenticity? Effects of ethnoracial composition on neighborhood perceptions*. Society for Personality and Social Psychology.

Zou, L. X., & Cheryan, S. (2022). Diversifying neighborhoods and schools engender perceptions of foreign cultural threat among White Americans. *Journal of Experimental Psychology: General*, *151*(5), 1115–1131. https://doi.org/10.1037/xge0001115

Zuk, M., Bierbaum, A. H., Chapple, K., Gorska, K., & Loukaitou-Sideris, A. (2017). Gentrification, displacement, and the role of public investment. *Journal of Planning Literature*, *33*(1), 31–44. https://doi.org/10.1177/0885412217716439