Diversifying Neighborhoods and Schools Engender Perceptions of Foreign Cultural Threat Among White Americans

Linda X. Zou1 and Sapna Cheryan2

1 Department of Psychology, University of Maryland
2 Department of Psychology, University of Washington

A nationally representative survey (N = 2,213) and five experiments (four preregistered, total N = 1,920) revealed that Whites perceived a foreign cultural threat, or a threat to their American culture and way of life, from the projected growth of racial and ethnic minority populations in their majority-White neighborhoods (Studies 1–5) and schools (Study 6). Whites perceived the increasing presence of Arab Americans, Latinos, and Asian Americans to pose an especially strong degree of perceived foreign cultural threat relative to Black Americans, who were perceived as more threatening than no demographic change. Furthermore, perceptions of foreign cultural threat predicted Whites’ desires to move out above and beyond other established intergroup threats (e.g., realistic and symbolic threats). These findings highlight how Whites’ concerns about losing their American culture and way of life as racial and ethnic minority groups enter majority-White neighborhoods and schools may contribute to the maintenance of racial segregation.

Keywords: stereotypes, race, threat, segregation, immigration

Supplemental materials: https://doi.org/10.1037/xge0001115.supp

The United States’ racial and ethnic minority population is growing at a rapid rate (Frey, 2014). Since 2000, the population growth of Latinos in the U.S. has accounted for over half of total national population growth (Flores, 2017). Asian Americans, currently the fastest growing major racial or ethnic group, are projected to nearly double their population by 2060 (Colby & Ortman, 2015; Lopez et al., 2017). Arab Americans experienced nearly a 50% increase in population in the decade following 2000 (Brown et al., 2012). These groups’ increasing presence can be felt not only in large metropolitan areas and immigration hubs, but in cities and towns across the U.S. (Massey, 2008). As such populations grow in local neighborhoods and schools, Whites often respond with ambivalence or concern. For example, growing Latino populations have spurred Whites’ resentment about the proliferated use of Spanish instead of English (Flores, 2014; Massey, 2008), while growing Asian American populations have been perceived by Whites to transform their community’s values and cultural fabric (Lung-Amam, 2017), and growing Arab American populations have been met with suspicion and fear among Whites due to perceived differences of religion and culture (Bailey, 2015).

We propose that Whites perceive the increasing presence of racial and ethnic minority groups to pose a foreign cultural threat, or a threat to their American culture and way of life. This perceived foreign cultural threat builds on existing intergroup threat research by capturing Whites’ distinct reactions to stereotypically foreign racial and ethnic minority groups. Although Whites may perceive racial and ethnic minority groups each to be threatening to some degree, they may perceive Latinos, Asian Americans, and particularly Arab Americans to evoke a stronger degree of foreign cultural threat relative to groups that are stereotyped as less foreign (e.g., Black Americans). Furthermore, perceptions of foreign cultural threat may predict Whites’ desires to leave neighborhoods that racial and ethnic minority groups are entering.

Perceived Foreign Cultural Threat

The blending of different groups into broader mainstream society is considered central to the American creed (Citrin & Sears, 2014; Schildkraut, 2010). With each wave of immigration in U.S. history, Whites have expressed concerns about whether newcomers will assimilate to American culture and way of life or instead fragment and erode the nation’s cultural core (Brimelow, 1996; Portes & Rumbaut, 2014; Tichenor, 2002). Such concerns
may be heightened when those newcomers are racial and ethnic minorities who are perceived to have cultural backgrounds distinct and dissimilar from the dominant Anglo-Protestantism of American culture (Lee, 2019; Schrag, 2010). For example, at the height of 1800s anti-Asian sentiment, Whites described Asian Americans as “tenaciously adhering to the customs and usages of their own country, unfamiliar with our institutions, and apparently incapable of assimilating with our people” (Ancheta, 1998, p. 66). Similarly, Whites have warned in contemporary discourse of Latinos’ unwillingness or inability to assimilate: “the persistent inflow of Hispanic immigrants threatens to divide the United States into two peoples, two cultures, and two languages” (Huntington, 2004, p. 30). Finally, Arab Americans are often characterized by Whites in political rhetoric as being so alien in their cultural and religious values as to be incompatible with and antagonistic toward the U.S. and the West (Gerges, 2003; Hawley, 2019).

Whites may perceive racial and ethnic minority groups to pose a foreign cultural threat. We define foreign cultural threat as a concern about the perceived invasion or replacement of the current dominant culture by an outgroup’s foreign (i.e., non-American) culture. Whites may perceive the increased presence of such outgroups to threaten to pollute or overtake their existing American way of life with the cultural norms and practices of a foreign country (Newman et al., 2012; Ostfield, 2017). For instance, Whites may worry about English being replaced by a foreign language, or American culture being eroded by the music, art, food, celebrations, and styles of worship that other groups bring with them (Jiménez, 2017).

**Stereotypically Foreign Minority Groups Pose a Greater Perceived Foreign Cultural Threat to Whites**

Stereotypes are an important antecedent to perceptions of intergroup threat (Stephan et al., 2009). Outgroups may elicit differing degrees of perceived threat based on how they are stereotyped (Riek et al., 2006; Rios et al., 2018). Whites may be more likely to perceive a foreign cultural threat from racial and ethnic minority groups that are specifically stereotyped as foreigners.

Whites are robustly perceived as the most prototypically American racial and ethnic group (Devos & Banaji, 2005; Huynh et al., 2015; see Devos & Mohamed, 2014 for a review). However, there is evidence for perceived “shades of Americanness” among racial and ethnic minority groups (Dovidio et al., 2010). The Racial Position Model (Zou & Cheryan, 2017) demonstrates that racial and ethnic minority groups vary in their perceived deviation from the American national prototype. Black Americans and Native Americans are stereotyped as less American than Whites, occupying a position outside of American mainstream culture and identity; however, these groups are perceived as more American than they are foreign. In comparison, Latinos and Asian Americans are stereotyped as so distant from the American identity as to be considered foreign. Furthermore, Arab Americans are stereotyped as extremely foreign, more so than both Latinos and Asian Americans.

We predict that such stereotypically foreign racial and ethnic minority groups (e.g., Latinos, Asian Americans, and Arab Americans) will be perceived by Whites to pose a stronger foreign cultural threat compared with racial and ethnic minority groups that tend not to be stereotyped as altogether foreign (e.g., Black Americans, Native Americans). Indeed, Latinos, Asian Americans, and particularly Arab Americans are often associated with foreign cultural ways of life that may be stereotyped as incompatible and unassimilable with those of the U.S.

**Whites’ Perceptions of Foreign Cultural Threat and Living Preferences**

Whites’ perceptions of foreign cultural threat may predict their avoidance of diverse neighborhoods and schools. Despite unprecedented racial diversity, racial segregation in the U.S. endures (Iceland & Sharp, 2013; Lichter et al., 2015; Logan & Stults, 2011; Reardon & Owens, 2014). Segregated neighborhoods often have disparate employment opportunities, health outcomes, and quality of public services and facilities (Massey & Denton, 1993; Williams & Collins, 2001), while school segregation contributes to racial gaps in academic achievement (Orfield & Lee, 2005; Reardon & Owens, 2014). Segregated living also reduces the probability of intergroup contact between Whites and racial and ethnic minority groups, thus limiting potential opportunities to improve Whites’ racial attitudes via contact (Hewstone & Swart, 2011).

One contributor to racial segregation is Whites’ living preferences: Whites continue to seek out racially homogenous schools and neighborhoods, while avoiding or moving away from those with racial and ethnic minority populations (Glazerman & Dotter, 2017; Krysan et al., 2009). Negative stereotypes about poverty or criminality contribute to Whites’ decisions to avoid living in diverse neighborhoods, particularly those with large Black American populations (Krysan, 2002; Krysan & Crowder, 2017; Massey & Denton, 1993). However, less work has established the other reasons that may also underlie Whites’ avoidance. We propose that perceptions of foreign cultural threat will predict Whites’ desires to avoid residential neighborhoods with growing populations of racial and ethnic minority groups. By examining predictors of Whites’ desires to move, we may gain insight into how to better tailor interventions that decrease Whites’ resistance to integrating with racial and ethnic minority populations.

**The Role of Other Intergroup Threats**

Extant literature has identified key intergroup threats that elucidate Whites’ reactions toward racial and ethnic minority groups. However, foreign cultural threat may capture Whites’ specific reactions toward stereotypically foreign racial and ethnic minority groups. As a result, foreign cultural threat may distinguish Whites’ reactions toward groups that have been found in previous research to evoke undifferentiated threat profiles (e.g., Latinos and Black Americans; Cottrell & Neuberg, 2005).

**Realistic Threat**

Intergroup threat theory identifies two broad classes of intergroup threats (e.g., Riek et al., 2006; Rios et al., 2018; Stephan et al., 2009). Building on realistic conflict theory (Sherif & Sherif, 1969), the first class of threats arises due to perceived competition for resources between groups and the obstruction of physical or material welfare (i.e., realistic threat; Stephan et al., 2009). Concerns about outgroup competition may involve tangible resources such as jobs, wealth, and housing (Bobo & Hutchings, 1996), as well as more abstract resources such as political power and social status (Craig & Richeson, 2014; Major et al., 2016). Perceptions of realistic threat predict Whites’ prejudiced reactions toward
Black Americans (e.g., Stephan et al., 2002), Latinos (e.g., Zárate et al., 2004), Asian Americans (e.g., Maddux et al., 2008), and Arab Americans (e.g., Obaidi et al., 2018).

Rather than representing a concern about perceived harm to the in-group’s resources or welfare, foreign cultural threat is concerned with perceived harm to the in-group’s dominant culture. As such, foreign cultural threat may share more similarities with symbolic threat.

**Symbolic Threat**

The second class of intergroup threats identified by intergroup threat theory is symbolic threat. Building on symbolic racism theory (Kinder & Sears, 1981), symbolic threat arises due to perceived conflicting values, norms, or cultural ways of life between groups (Stephan et al., 2009). Symbolic racism focuses on Whites’ perceptions of Black Americans as violating traditional White American values (e.g., the Protestant work ethic; Kinder & Sears, 1981). However, other social groups that are perceived to be in violation of an in-group’s values may also elicit symbolic threat (e.g., gay men and lesbians engender symbolic threat in heterosexual individuals; Biernat et al., 1996; Esses et al., 1993; Haddock et al., 1993). Like realistic threat, symbolic threat has been shown to predict Whites’ prejudiced reactions toward a range of racial and ethnic minority groups (e.g., Obaidi et al., 2018; Stephan et al., 1999; Stephan et al., 2002; Zárate et al., 2004).

Foreign cultural threat, which similarly describes a perceived threat to cultural norms, values, and ways of life, may be classified as a specific form of symbolic threat. Whereas the measurement of symbolic threat tends to broadly assess perceived differences in values and norms between two groups (e.g., “Whites and Blacks have very different values”; Stephan et al., 2002), foreign cultural threat specifically captures the perception of outgroups’ violation of the norms and values of mainstream American culture. For instance, Black Americans and Asian Americans may both elicit a perceived symbolic threat to Whites, in that both groups are perceived to differ in some way from Whites in their values and norms. However, Asian Americans may be perceived by Whites to violate the norms of mainstream American culture to a greater extent than Black Americans. In contrast, Black Americans may be perceived to more strongly evoke a different form of symbolic threat involving the violation of norms related to independence and work ethic (Kinder & Sears, 1981). Attending to perceptions of foreign cultural threat as a specific form of symbolic threat allows a nuanced understanding of Whites’ reactions toward different racial and ethnic minority groups. Perceptions of foreign cultural threat may be elicited more strongly to the extent that a group is stereotyped as having maintained distinct “foreign” languages, religious values, food, dress, and other cultural norms.

**Prototypicality Threat**

In addition to realistic and symbolic threats, Danbold and Hoo (2015) found that the growth of racial and ethnic minorities in the aggregate is perceived by Whites to pose a prototypicality threat to their sense of representativeness within the American superordinate category. Whereas the population growth of any racial or ethnic minority group (e.g., Black Americans) may elicit a perceived threat to Whites’ claim as the most prototypical Americans, perceptions of foreign cultural threat may capture which racial and ethnic minority groups are most strongly perceived by Whites as potentially replacing existing “Americanness” with a foreign culture and way of life.

**Sociofunctional Threats**

Cottrell and Neuberg’s (2005) sociofunctional approach to prejudice compares the perceived threats evoked by a range of different social groups (e.g., Black Americans, feminists, gay men). Whites perceive a similar level of threat to property and physical safety (i.e., realistic threat) from Mexican Americans and Black Americans. These two groups cluster together separately from Asian Americans, who are instead viewed as a threat to Whites’ values (i.e., symbolic threat). Perceptions of foreign cultural threat may be able to differentiate Whites’ threat reactions toward Black Americans and Latinos by capturing a distinct concern elicited more strongly by Latinos and other stereotypically foreign racial and ethnic minority groups.

**Overview of Current Work**

Across two local contexts (i.e., neighborhoods and schools), we tested whether growing populations of racial and ethnic minority groups are perceived by Whites to pose a foreign cultural threat. Specifically, we hypothesized that growing populations of stereotypically foreign racial and ethnic minority groups (i.e., Latinos, Asian Americans, and Arab Americans) would elicit a perceived foreign cultural threat to a greater extent than a growing population of Black Americans, while the latter would be perceived as more threatening than no demographic change. Furthermore, we hypothesized that Whites’ perceptions of foreign cultural threat would predict their greater desires to move away from racial and ethnic minority groups.

In Study 1, we used nationally representative survey data in an initial examination of foreign cultural threat as a predictor of Whites’ living preferences. In Studies 2–4 (preregistered) and Study 5, we experimentally investigated whether Whites perceive a foreign cultural threat from the projected increase in Latino, Asian American, Arab American, and Black American neighbors, and the extent to which this perceived threat predicts Whites’ desires to move out. In Study 6 (preregistered), we moved to a school context and examined whether White parents spontaneously report greater perceptions of foreign cultural threat in reaction to a projected increase of Latino compared to Black American students at their children’s majority-White schools. Open materials, data, and codebooks are available for Studies 2-5 (https://osf.io/z5eth) and Study 6 (https://osf.io/cqbvy).

**Study 1: Living Preferences Among a Nationally Representative Sample of White Adults**

To begin to examine whether perceptions of foreign cultural threat predict Whites’ avoidance of different racial and ethnic minority populations, Study 1 made use of General Social Survey (GSS) data, in which a nationally representative sample of White adults in the U.S. reported on their perceptions of foreign cultural threat from Latinos, Asian Americans, and Black Americans, as well as their opposition to living in neighborhoods with significant Latino, Asian American, and Black American populations. We hypothesized that greater perceptions of foreign cultural threat
among Whites would be related to stronger opposition to living with racial and ethnic minority neighbors. We also explored whether Whites’ perceptions of foreign cultural threat predicted their living preferences regardless of the specific racial and ethnic minority group.

Method

The 2000 GSS included 2,213 White Americans (53.9% female). The mean age was 45.7 years old (SD = 17.2). The 2000 GSS was selected because it was the most recent survey to include all the following measures. Data were analyzed using the provided weighting variable (WTSSALL), which takes into account the subsampling of nonrespondents and variation in household size.

Living Preferences

Participants in the 2000 GSS were asked the extent to which they favored or opposed living in a neighborhood where half of their neighbors were “Hispanic or Latin Americans,” “Asian Americans” and “Blacks” (1 = strongly favor, 5 = strongly oppose). Participants rated their living preferences in relation to all three groups.

Perceived Foreign Cultural Threat

The 2000 GSS included six items (α = .66) assessing general pro-English attitudes, which we used as our proxy for perceptions of foreign cultural threat. Participants were asked the extent to which they agreed with the following statements (1 = strongly agree, 4 = strongly disagree): “English will be threatened if other languages are frequently used in large immigrant communities in the U.S.,” “Speaking English as the common national language is what unites all Americans,” “Bilingual education programs should be eliminated in American public schools,” “Children in the U.S. should learn a second language fluently before they finish high school,” “Learning a foreign language is as valuable as learning math and science in school,” and “Election ballots should be printed in other languages in areas where lots of people do not speak English.” Items were aggregated such that higher scores indicated stronger perceptions of foreign cultural threat.

The 2000 GSS also assessed negative stereotypes of different racial and ethnic minority groups. See online supplemental materials for an analysis showing that foreign cultural threat predicted Whites’ living preferences over and above negative racial stereotypes.

Results

We conducted a repeated-measures ANOVA examining Whites’ opposition to living with neighbors of different racial and ethnic minority groups (i.e., Latinos, Asian Americans, and Black Americans), with perceptions of foreign cultural threat entered as a continuous predictor (see Table 1 for descriptive statistics). Greenhouse–Geisser corrections were used because assumptions of sphericity were violated.

There was a significant main effect of Whites’ perceptions of foreign cultural threat on their living preferences, $F(1, 1145) = 68.80, p < .001$, such that greater perceptions of foreign cultural threat predicted greater opposition toward living with neighbors of different races. There was no difference in Whites’ living preferences in this study based on the specific race of the neighbors, $F(1.89, 2158.44) = 1.27, p = .28$. There was also no Neighbor

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living preferences towards...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latin Americans</td>
<td>2.97a</td>
<td>.98</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>2.86b</td>
<td>.95</td>
</tr>
<tr>
<td>Blacks</td>
<td>3.02a</td>
<td>1.05</td>
</tr>
<tr>
<td>Foreign cultural threat</td>
<td>2.33</td>
<td>.51</td>
</tr>
</tbody>
</table>

Note. Higher living preference scores indicate greater opposition to living among neighbors of that race. Different subscripts indicate means that differ at the $p < .05$ level, with Bonferroni corrections made for multiple pairwise comparisons.

Discussion

In a nationally representative sample of White Americans, the more they perceived a foreign cultural threat, the more they opposed living in neighborhoods with Latinos, Asian Americans, and Black Americans. Furthermore, this relationship was not moderated by the specific racial or ethnic minority group among which Whites imagined living. To the extent that Whites perceive any group to pose a foreign cultural threat, this sense of perceived threat predicts Whites’ living preferences. These findings provide preliminary support that perceptions of foreign cultural threat play a role in shaping Whites’ living preferences. In the following controlled experiments, we tested the extent to which Whites perceive different racial and ethnic minority groups to pose a foreign cultural threat. We also further tested whether perceived foreign cultural threat, relative to other established intergroup threats, would predict Whites’ desires to leave diversifying residential communities.

Studies 2–4: Perceptions of Foreign Cultural Threat and Whites’ Desire to Move From Racial and Ethnic Minority Groups

Three preregistered studies examined Whites’ distinct threat reactions to the population growth of Latinos, Asian Americans, and Black Americans in a residential context. We hypothesized that Whites would perceive the population growth of Latinos and Asian Americans to pose a stronger foreign cultural threat compared with the population growth of Black Americans. We further predicted that the population growth of Black Americans would be perceived by Whites as more threatening than a control condition in which no demographic change is projected. We conducted internal meta-analyses in order to obtain better estimates of effect sizes.

Studies 2–4 further examined whether perceptions of foreign cultural threat would predict Whites’ desires to leave diversifying neighborhoods. Past work examining Whites’ decisions to avoid living in diverse communities has largely focused on Whites’ beliefs that racial and ethnic minority neighbors, in particular Black Americans, would negatively impact their neighborhood safety and property values (e.g., Farley et al., 1994; Krysan, 2002; Krysan & Crowder, 2017; Massey & Denton, 1993). These concerns can be characterized as perceived realistic threats to Whites’
resources and welfare. We sought to examine whether perceptions of foreign cultural threat would predict Whites’ desires to move away from racial and ethnic minority neighbors above and beyond perceptions of realistic threat.

Finally, Studies 2–4 investigated the different forms of realistic threat that Whites may perceive from stereotypically low-status neighbors compared to stereotypically high-status neighbors. Consistent with past research, the Racial Position Model demonstrates that in addition to a dimension of perceived cultural foreignness, racial and ethnic minority groups are stereotyped distinctly along a dimension of perceived status as well (Fiske et al., 2002; Zou & Cheryan, 2017). Specifically, Black Americans and Latinos are stereotyped as relatively low-status, and Asian Americans as relatively high-status. Whites may perceive Black Americans and Latinos to threaten to drain Whites’ capital, undermine their resources, and pose a danger to their property and physical safety (e.g., Cottrell & Neuberg, 2005). Indeed, Whites may associate an increase in Latino neighbors with crime and degradation similar to Whites’ associations with Black Americans (Massey, 2008).

In the current article, we call this perceived low-status realistic threat. In contrast, Asian Americans are often stereotyped positively (e.g., as competent) and perceived to have already achieved success and advantage (Fiske et al., 2002; Siny & Cheryan, 2013). Whites may be more concerned that Asian Americans pose a threat to Whites’ dominant group standing through their perceived potential to outperform Whites educationally (Jiménez & Horowitz, 2013; Lung-Amam, 2017; Maddux et al., 2008) or surpass them economically (Butz & Yogoesswaran, 2011). In the current article, we call this perceived high-status realistic threat.

Method and Materials

Sample sizes, hypotheses, and analyses were preregistered for all three studies (https://osf.io/gp4fw, https://osf.io/6d29a, https://osf.io/e43yn). For each study, we had a target final sample size of 280 participants after exclusions. We preregistered a stopping point of 320 participants in Studies 2 and 3, and 380 participants in Study 4, in order to account for overestimates of effect size and participants who may not pass the manipulation check.¹

White Amazon Mechanical Turk (MTurk) workers in the U.S. were recruited to complete an online study for monetary compensation. In Study 2, 326 participants completed the survey procedures, but one wished to withdraw their data, nine were not monoracial White, and 24 failed a manipulation check (described below). This left a final sample of 292 White adults (54.8% female) with a mean age of 37.3 years ($SD = 12.8$). Two subsequent studies sought to replicate Study 2. In Study 3, 324 participants completed survey procedures, but five wished to withdraw their data, 13 were not monoracial White, and 25 did not pass a manipulation check. This left a final sample of 281 White adults (55.9% female) with a mean age of 38.5 years ($SD = 13.0$). Finally, in Study 4, 384 participants completed the survey procedures, but five wished to withdraw their data, 17 were not monoracial White, and 36 did not pass a manipulation check. This left a final sample of 326 participants (53.1% female) with a mean age of 37.7 years ($SD = 12.6$).

In each of the three studies, participants were randomly assigned to one of four conditions in which they were told to imagine that they lived in an 80% White community. In the experimental conditions, participants were then told: “Statisticians at the U.S. Census Bureau have projected that by the year 2025, the racial makeup of your community will change dramatically. U.S.-born [Latino Americans/Asian Americans/African Americans] are estimated to enter your community at higher rates in the next 10 years until they become the dominant group.” This information was accompanied by a corresponding census block map illustrating the community’s 2015 racial demographics alongside the projected 2025 racial demographics (see Figure 1). In the control condition, participants were told instead that no demographic change was projected to occur in their community: “Statisticians at the U.S. Census Bureau have projected that in the year 2025, the racial makeup of your community will stay relatively the same.” This information was accompanied by a census block map that showed little change between the community’s 2015 and projected 2025 racial demographics.

Exclusions

As per our preregistrations, participants who failed a manipulation check in which they were asked to correctly select which group (i.e., “Hispanic/Latino Americans,” “Asian Americans,” “Black/African Americans,” or “no major change”) had been projected to increase in their community were excluded from analyses. Twenty-four participants were excluded from Study 2, 25 participants were excluded from Study 3, and 36 participants were excluded from Study 4.

Measures

In each study, participants completed the measures below in the following order.

Moving Out. Participants responded to a single item assessing their desires to move out: “How likely would you be to move out of this community?” (1 = not at all, 7 = extremely).

Perceived High-Status Realistic Threat. Three items ($\alpha = .88–.92$) assessed perceived high-status realistic threat: “By 2025, Whites will no longer have the highest academic achievement in this community”; “By 2025, it will be harder for Whites to be top-ranked students in the schools of this community”; and, “By 2025, Whites’ financial wealth and income will be surpassed in this community” (1 = strongly disagree, 7 = strongly agree). Items were adapted from existing realistic threat measures (i.e., Maddux et al., 2008).

Perceived Low-Status Realistic Threat. Three items ($\alpha = .81–.89$) assessed perceived low-status realistic threat: “By 2025, the tax burden on Whites will increase in this community”; “By 2025, White workers in this community will be displaced from their jobs by less qualified individuals”; and “By 2025, Whites’ physical possessions and safety will be endangered in this community” (1 = strongly disagree, 7 = strongly agree). Items were

¹We specified 320 (Studies 2 and 3) and 380 (Study 4) as the total numbers of participants needed on MTurk; however, a few more MTurk workers completed the surveys than requested. This may be due to MTurk workers who completed the survey but did not submit the HIT and thus were not counted by MTurk towards the participant total. We did not analyze the data before data collection was completed or make a subsequent decision to collect more responses.
adapted from existing realistic threat measures (i.e., Stephan et al., 2002; Stephan et al., 1999).

**Perceived Foreign Cultural Threat.** Three items ($\alpha = .93–.96$) assessed perceived foreign cultural threat: “By 2025, foreign cultural practices (e.g., holiday celebrations, food traditions) will overtake American practices in this community”; “By 2025, American religion, language, dress, and culture in this community will be overshadowed by foreign ones”; and “By 2025, foreign customs and traditions will gain prominence in this community at the expense of American ones” (1 = strongly disagree, 7 = strongly agree).

**Other Items.** Additional items beyond the scope of the current research question were also included. These items assessed: political and racial group identification (Study 2), desires to engage with the community (Study 3), and racial stereotypes (Studies 3 and 4). Results on these measures are available from the first author.

**Results**

Aggregating the data across the three studies found that foreign cultural threat was correlated with both low-status realistic threat, $r(899) = .66$, and high-status realistic threat, $r(899) = .46$, and that low-status and high-status realistic threat were correlated with each other, $r(899) = .29$, all $p < .001$. See online supplemental materials for correlations from each study.
Whites’ Perceptions of Foreign Cultural Threat in Reaction to the Population Growth of Different Racial and Ethnic Minority Groups

Internal meta-analyses were conducted on the three studies (Goh et al., 2016; see online supplemental materials for the preregistered one-way ANOVA results from each individual study). Every study that was run using these procedures was included in the meta-analyses. We used the MetaF SpS macro (see Lipsey & Wilson, 2001) to perform fixed-effects models to estimate weighted mean effect sizes. We chose a fixed-effects approach due to the small number of studies included and the similar methodology and samples across studies (Goh et al., 2016). Note that the fixed-effects approach assumes one common, fixed effect underlies all studies within a meta-analysis (whereas the random-effects approach assumes the effects in the studies represent a random sample drawn from a population). As such, with the fixed-effects approach, findings may be generalized only to the specific studies in a meta-analysis (rather than to an infinite population of studies; Hedges & Vevea, 1998).

In addition, because we had access to each study’s original raw data, we conducted an integrative data analysis (i.e., the analysis of multiple data sets merged into one) following recommendations by Curran and Hussong (2009). The results of the integrative data analysis are reported in online supplemental materials.

**Desires to Move.** Whites’ desires to move out of a community depended on which racial group was moving in, $Q_d(5) = 70.36$, $p < .001$. Whites were no more likely to want to move out in response to Black American population growth compared to Latino population growth, $d_i = .09, 95\% \text{ CI } [-.09, .27]$; $p = .32$. Whites were more likely to want to move out in response to both Black American population growth, $d_i = .64, 95\% \text{ CI } [.46, .83]$, $p < .001$, and Latino population growth, $d_i = .56, 95\% \text{ CI } [.37, .74]$, $p < .001$, compared to Asian American population growth. Finally, Whites were more likely to want to move out in all experimental conditions compared with the control condition in which no demographic change was projected (Black American: $d_i = 1.09, 95\% \text{ CI } [.88, 1.30]$, $p < .001$; Latino: $d_i = 1.01, 95\% \text{ CI } [.81, 1.22]$, $p < .001$; Asian American: $d_i = .45, 95\% \text{ CI } [.26, .65]$, $p < .001$).

**Perceived Foreign Cultural Threat.** Whites’ perceptions of foreign cultural threat depended on which racial group was moving in, $Q_d(5) = 199.22$, $p < .001$ (see Figure 2). Whites perceived a greater foreign cultural threat from Latino population growth compared with Asian American population growth, $d_i = .25, 95\% \text{ CI } [.07, .43]$, $p = .006$. Whites perceived a greater foreign cultural threat from both Latino population growth, $d_i = .68, 95\% \text{ CI } [.50, .87]$, $p < .001$, and Asian American population growth, $d_i = .43, 95\% \text{ CI } [.25, .61]$, $p < .001$, compared with Black American population growth. Finally, Whites perceived a greater foreign cultural threat in all experimental conditions compared to the control condition in which no demographic change was projected (Latino: $d_i = 1.57, 95\% \text{ CI } [1.35, 1.79]$, $p < .001$; Asian American: $d_i = 1.28, 95\% \text{ CI } [1.07, 1.49]$, $p < .001$; Black American: $d_i = .83, 95\% \text{ CI } [.63, 1.03]$, $p < .001$).

**Perceived Low-Status and High-Status Realistic Threats.** Whites’ perceptions of low-status realistic threat depended on which racial group was moving in, $Q_d(5) = 59.79$, $p < .001$. There was no difference in Whites’ perceptions of low-status realistic threat from Latino population growth compared to Black American population growth, $d_i = .14, 95\% \text{ CI } [-.04, .32]$, $p = .12$. Whites perceived a greater low-status realistic threat from both Latino population growth, $d_i = .51, 95\% \text{ CI } [.33, .69]$, $p < .001$, and Black American population growth, $d_i = .39, 95\% \text{ CI } [.20, .57]$, $p < .001$, compared with Asian American population growth. Finally, Whites perceived a greater low-status realistic threat in all experimental conditions compared to the control condition in which no demographic change was projected (Latino: $d_i = 1.05, 95\% \text{ CI } [.84, 1.25]$, $p < .001$; Black American: $d_i = .94, 95\% \text{ CI } [.74, 1.15]$, $p < .001$; Asian American: $d_i = .56, 95\% \text{ CI } [.36, .75]$, $p < .001$).

Whites’ perceptions of high-status realistic threat also depended on which racial group was moving in, $Q_d(5) = 160.71$, $p < .001$. Whites perceived a greater high-status realistic threat in response to Asian American population growth compared to both Black American population growth, $d_i = .78, 95\% \text{ CI } [.59, .97]$, $p < .001$, and Latino population growth, $d_i = .63, 95\% \text{ CI } [.45, .82]$, $p < .001$. There was no difference in Whites’ perceptions of high-status realistic threat from Latino population growth compared with Black American population growth, $d_i = .11 [-.07, .30]$, $p = .21$. Finally, Whites perceived a greater high-status realistic threat in all experimental conditions compared with the control condition in which no demographic change was projected (Asian American: $d_i = 1.89, 95\% \text{ CI } [1.66, 2.12]$, $p < .001$; Latino: $d_i = 1.16, 95\% \text{ CI } [.95, 1.36]$, $p < .001$; Black American: $d_i = 1.07, 95\% \text{ CI } [.86, 1.27]$, $p < .001$).

The Association Between Perceptions of Foreign Cultural Threat and Whites’ Desires to Move Away From Different Racial and Ethnic Minority Groups

Parallel mediation analyses (preregistered as exploratory) were conducted using the PROCESS macro (Hayes, 2013) with 10,000 bootstrap resamples (see Figure 3). Data from Studies 2–4 were aggregated to conduct these analyses. In each of the three mediation analyses, we compared one of the experimental conditions (i.e., Latino population growth, Asian population growth, or Black American population growth) with the control condition representing no demographic change, excluding from the analysis cases in other conditions. While our mediation analyses cannot be used to make causal inferences, our primary interest lies in examining how strongly perceptions of foreign cultural threat, above and beyond forms of perceived realistic threat, is associated with Whites’ desires to move out in reaction to growing populations of different racial and ethnic minority groups. Descriptive statistics for each measure are reported in Table 2.

Panel A of Figure 3 shows which perceived threats predicted Whites’ desires to move out of a community with a growing Latino population (relative to the no-change control condition). Pairwise contrasts revealed that the indirect effects of perceived foreign cultural threat and perceived low-status realistic threat did

---

2 Values in brackets represent the lower and upper bounds of the 95% confidence interval for the corresponding estimate.

3 We also conducted hierarchical linear regression (similar to the approach taken in Study 5) as an alternative data analytic approach that uses a single model to test for the associations between perceived threats and desires to move across all conditions simultaneously. These results are reported in the online supplemental materials. We retain the mediation analyses in the main manuscript, as they allow us to demonstrate how Whites’ perceptions of threat relate to their desires to move for each racial and ethnic minority group projected as moving in.
not differ in strength (95% CI [-.28, .85]). Both were stronger than the indirect effect of perceived high-status realistic threat (95% CI [.73, 1.52] and 95% CI [.47, 1.21], respectively).

Panel B of Figure 3 shows which perceived threats predicted Whites’ desires to move out of a community with a growing Asian American population (relative to the no-change control condition). Pairwise contrasts revealed that the indirect effect of perceived foreign cultural threat was stronger than both that of perceived low-status realistic threat (95% CI [.03, .69]) and perceived high-status status threat (95% CI [.27, 1.14]). In addition, the indirect effects of perceived low-status realistic threat and high-status realistic threat did not differ in strength (95% CI [-.003, .70]).

Panel C of Figure 3 shows which perceived threats predicted Whites’ desires to move away from Latinos and Asian Americans compared with Black Americans. In addition, Whites rated Black Americans as evoking a stronger degree of foreign cultural threat relative to the control condition in which no demographic change was projected. Though not predicted, our findings also revealed that Whites perceived Latino population growth to pose an even greater foreign cultural threat compared with Asian American population growth. The combined stereotype of Latinos’ “low-status foreignness” may be perceived as more threatening than Asian Americans, who are often stereotyped as high-status instead.

Next, perceptions of foreign cultural threat predicted Whites’ desires to move away from Latinos and Asian Americans and did so above and beyond measures of both low-status and high-status forms of realistic threat. Specifically, Whites’ desires to move away when Latinos were projected to move in (relative to no demographic change) were mediated by both perceived foreign cultural threat and perceived low-status realistic threat. Desires to move away when Asian Americans were projected to move in (relative to no demographic change) were mediated most strongly by perceived foreign cultural threat. In comparison, consistent with literature on Whites’ flight from neighborhoods with growing numbers of Black American residents (e.g., Krysan & Crowder, 2017), Whites’ desires to move away from Black American population growth (relative to no demographic change) were mediated most strongly by perceptions of low-status realistic threat.

Whites’ perceptions of foreign cultural threat arose despite being told that the racial and ethnic minority group populations

### Discussion

Consistent with preregistered hypotheses, internal meta-analyses revealed that Whites perceived a stronger degree of foreign cultural threat from the population growth of Latinos and Asian Americans compared with Black Americans. In addition, Whites rated Black Americans as evoking a stronger degree of foreign cultural threat relative to the control condition in which no demographic change was projected. Though not predicted, our findings also revealed that Whites perceived Latino population growth to pose an even greater foreign cultural threat compared with Asian American population growth. The combined stereotype of Latinos’ “low-status foreignness” may be perceived as more threatening than Asian Americans, who are often stereotyped as high-status instead.
Note. The extent to which perceived foreign cultural threat and different forms of perceived realistic threat mediate Whites' desires to move away in response to the population growth of Latinos, Asian Americans, and Black Americans (coded 1) versus a control condition (coded 0) in Studies 2–4. Solid lines indicate significant paths. Bolded paths indicate the strongest indirect effects based on pairwise contrasts.

**p < .01. ***p < .001.
Table 2
Descriptive Statistics for Measures Included in the Mediation Analyses of Studies 2–4

<table>
<thead>
<tr>
<th>Measure</th>
<th>Latino M (SD)</th>
<th>Asian M (SD)</th>
<th>Black M (SD)</th>
<th>No-Change control M (SD)</th>
<th>Aggregate M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign cultural threat</td>
<td>3.87 (1.56)</td>
<td>3.49 (1.55)</td>
<td>2.84 (1.47)</td>
<td>1.76 (1.03)</td>
<td>3.06 (1.63)</td>
</tr>
<tr>
<td>Low-status realistic threat</td>
<td>3.51 (1.53)</td>
<td>2.78 (1.30)</td>
<td>3.29 (1.38)</td>
<td>2.11 (1.03)</td>
<td>2.97 (1.43)</td>
</tr>
<tr>
<td>High-status realistic threat</td>
<td>3.56 (1.36)</td>
<td>4.39 (1.28)</td>
<td>3.40 (1.29)</td>
<td>2.10 (1.09)</td>
<td>3.44 (1.49)</td>
</tr>
<tr>
<td>Desires to move</td>
<td>3.56 (1.84)</td>
<td>2.61 (1.57)</td>
<td>3.72 (1.88)</td>
<td>1.96 (1.22)</td>
<td>3.02 (1.81)</td>
</tr>
</tbody>
</table>

moving in were all U.S.-born. Indeed, Whites stereotype not only foreign-born but also U.S.-born Asian Americans as less American than their White counterparts (Cheryan & Monin, 2005), and both foreign-born and U.S.-born Latinos and Asian Americans report facing foreignness-based prejudice (Huynh et al., 2011; Zou & Cheryan, 2017). Taken together, foreignness stereotypes reflect not only perceived birthplace and citizenship, but groups’ perceived fit with dominant notions of American culture.

Interestingly, although Asian American population growth elicited the strongest degree of perceived high-status realistic threat, perceived high-status realistic threat did not predict Whites’ desires to move away from Asian American population growth when controlling for other threats. It may be that the increase of a stereotypically high-status minority group, although threatening, does not cause Whites to perceive that the neighborhood will decline in quality and may not by itself lead Whites to want to leave. Furthermore, perceived low-status realistic threat did predict Whites’ desires to move away from Asian American population growth. Asian American ethnic enclaves (e.g., Chinatown) are sometimes stereotyped as dirty, poor, and undesirable (Tsui, 2009); to the extent that Whites perceive predominantly Asian American neighborhoods in this way, they may be more likely to want to move away.

Study 5 built on this set of studies in two important ways. First, Study 5 examined Whites’ perceptions of foreign cultural threat in response to the population growth of Arab Americans in addition to the racial and ethnic minority groups tested in Studies 2–4. Second, Study 5 examined the relation of foreign cultural threat to other established intergroup threats. While Studies 2–4 found Whites’ perceptions of foreign cultural threat to predict their desires to move above and beyond different forms of realistic threat that we developed based on the Racial Position Model, Study 5 investigated whether perceived foreign cultural threat has predictive power above and beyond symbolic threat, prototypicality threat, and more commonly used measures of realistic threat.

Study 5: Distinguishing Foreign Cultural Threat From Established Intergroup Threats

The first goal of Study 5 was to examine the extent of Whites’ perceptions of foreign cultural threat in reaction to Arab Americans in addition to the previously tested racial and ethnic minority groups, as Arab Americans tend to be stereotyped as even more foreign than Latinos and Asian Americans (Zou & Cheryan, 2017). We predicted that Arab Americans would be perceived to pose a stronger degree of foreign cultural threat relative to other groups. Furthermore, we tested whether Whites’ perceptions of foreign cultural threat would predict their desires to move away from racial and ethnic minority groups above and beyond other intergroup threats (e.g., realistic, symbolic, and prototypicality threats).

Method

Four hundred ninety-four (59% female) White American MTurk workers completed an online survey. The mean age was 37.8 (SD = 12.1).

The manipulation of neighborhood population growth was similar to that of Studies 2–4, with the major exception that there was no control condition representing no demographic change. Instead there was an additional Arab American experimental condition. Participants were randomly assigned to one of four conditions in which they were told to imagine that they lived in an 80% White community. Participants were then told that either Arab Americans, Latinos, Asian Americans, or Black Americans were estimated to enter their community at increasing rates until they became the dominant group. This information was accompanied by a census block map (see Figure 1).

Exclusions

Participants completed a manipulation check in which they were asked to correctly select which group (i.e., “Arab Americans,” “Hispanic/Latino Americans,” “Asian Americans,” or “Black/African Americans”) had been projected to increase in their community. Fifteen participants failed this manipulation check and were excluded from subsequent analyses.

Measures

Participants first responded to a single item assessing their desires to move out: “How likely would you be to move out of this community?” (1 = very unlikely, 7 = very likely). In addition, the following intergroup threat measures were presented in randomized order.

Perceived Foreign Cultural Threat. Perceptions of foreign cultural threat was assessed using the same three items (a = .94) from Studies 2–4.

Other Intergroup Threats. We included two realistic threat scales (e.g., “<group> hold too many positions of power and responsibility in this country”; Stephan et al., 2002; Stephan et al., 1999) and two symbolic threat scales (e.g., “<group> do not value the traditions of their group as much as Whites do”; Stephan et al., 2002; Stephan et al., 1999). We also included measures of prototypicality threat (e.g., “By 2025, what it means to be a true
American will be less clear”; adapted from Danbold & Huo, 2015) and sociofunctional threats (e.g., “<group> endanger the physical safety of Whites”; Cottrell & Neuberg, 2005).

**Other Items.** We also included measures of low-status and high-status forms of realistic threat from Studies 2–4, but did not include them in the following analyses, as the current study focused on examining existing measures of intergroup threats from past literature.

**Results**

Correlations between foreign cultural threat and other intergroup threats all fell below $r = .70$, suggesting distinctiveness among measures (Carlson & Herdman, 2012). See online supplemental materials for a full report of correlations.

**Racial and Ethnic Minority Groups Elicit Differing Degrees of Perceived Foreign Cultural Threat in Whites**

We performed one-way between-subjects ANOVAs followed by pairwise comparisons using Tukey’s HSD test to examine the extent to which Whites perceived the population growth of different groups to elicit foreign cultural threat and other intergroup threats. Consistent with predictions, Whites perceived differing degrees of foreign cultural threat from different groups, $F(3, 475) = 16.30$, $p < .001$. Arab Americans ($M = 4.37, SD = 1.80$) were perceived as more threatening than Black Americans ($M = 2.89, SD = 1.57$), $p < .001$, and Asian Americans ($M = 3.62, SD = 1.52$), $p = .003$. Contrary to predictions, Arab Americans were not perceived as significantly more threatening than Latinos ($M = 3.93, SD = 1.80$), $p = .18$. Latinos and Asian Americans were perceived similarly to each other, $p = .51$, and both were perceived to elicit a greater perceived threat than Black Americans, $ps < .005$. See online supplemental materials for a full report of the descriptive statistics and ANOVA results for all intergroup threats.

**Perceptions of Foreign Cultural Threat Predict Whites’ Desires to Move out**

We performed a hierarchical linear regression to examine the extent to which perceptions of foreign cultural threat predicted Whites’ desires to move in response to the projected population growth of racial and ethnic minority groups, above and beyond other intergroup threats. As in Study 1, we also explored whether Whites’ perceptions of foreign cultural threat predicted their desires to move regardless of the specific racial and ethnic minority group.

In Step 1, three dummy coded variables were created for the Latino, Asian American, and Arab American population growth conditions (1), with the Black American population growth condition as the reference category (0). In Step 2, foreign cultural threat was entered, as well as measures of realistic threat and symbolic threat (both as measured by Stephan et al., 2002) and prototypicality threat. In Step 3, Condition $\times$ Foreign Cultural Threat interaction terms for each of the three dummy coded condition variables were entered.

As seen in Table 3, results revealed a significant effect of condition in Step 1. Relative to Black American population growth, Whites’ desires to move out were slightly (but nonsignificantly) stronger in response to Arab American population growth, equally strong in response to Latino growth, and weaker in response to Asian American population growth. Step 2 revealed that greater perceptions of foreign cultural threat predicted Whites’ increased desires to move out of the community, above and beyond perceptions of realistic threat, symbolic threat, and prototypicality threat. Finally, Step 3 revealed no significant Condition $\times$ Foreign Cultural Threat interactions. Similar to in Study 1, the relationship between Whites’ perceptions of foreign cultural threat and their desires to move out did not differ depending on the specific racial and ethnic minority group population projected to increase within the community.

**Discussion**

Foreign cultural threat appeared distinct from other established intergroup threats, including realistic, symbolic, prototypicality, and sociofunctional threats. Whites perceived the population growth of Arab Americans to elicit an especially strong degree of foreign cultural threat. Replicating Studies 2–4, Whites also perceived Latino and Asian American population growth to pose a greater foreign cultural threat compared with Black American population growth. In addition, perceptions of intergroup threats, including foreign cultural threat, predicted Whites’ desires to move away in response to the residential population growth of racial and ethnic minority groups. Indeed, perceptions of foreign cultural threat uniquely predicted Whites’ desires to move over and above other established intergroup threats (i.e., realistic threat, symbolic threat, and prototypicality threat).

The final study extends our findings to a new context and uses an open-ended approach to examine whether perceptions of foreign cultural threat would emerge spontaneously in White parents’ reactions to racial and ethnic minority population growth in their children’s schools.

**Study 6: Whites’ Spontaneous Perceptions of Foreign Cultural Threat in Schools**

Just as Whites may respond to increasing racial and ethnic minority neighbors by leaving those residential neighborhoods, Whites’ enrollment in public schools is also influenced by the racial composition of the school student body (Fairlie & Resch, 2002; Saporito & Sohoni, 2006). Study 6 investigated whether White parents would spontaneously report perceptions of distinct intergroup threats in response to the projected increase of Latino versus Black American students at their children’s public schools. We focused on Latinos and Black Americans because they are perceived by Whites as eliciting a similar degree of realistic threat (e.g., Cottrell & Neuberg, 2005); however, these two groups may be distinguished by the extent to which they are perceived as a foreign cultural threat. Specifically, we predicted that White parents would perceive a greater degree of foreign cultural threat from Latino students relative to Black American students. We tested our

---

4 The sociofunctional threat measure of threat to personal freedoms was mistakenly not included.
Step 2: Method

Hierarchical Regression Analysis Results Predicting Whites’ Desires to Move Out in Study 5

<table>
<thead>
<tr>
<th>Step and predictors entered</th>
<th>b</th>
<th>95% CI for b</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: $R^2_{\text{adj}} = .06$, $F(3, 475) = 10.61, p &lt; .001$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino population growth condition</td>
<td>$-0.28$</td>
<td>$[-0.78, 0.23]$</td>
<td>$0.26$</td>
<td>$-1.09$</td>
<td>.28</td>
</tr>
<tr>
<td>Asian population growth condition</td>
<td>$-0.92$</td>
<td>$[-1.42, -0.43]$</td>
<td>$0.25$</td>
<td>$-3.65$</td>
<td>$&lt;.001$</td>
</tr>
<tr>
<td>Arab population growth condition</td>
<td>$0.45$</td>
<td>$[-0.04, 0.95]$</td>
<td>$0.25$</td>
<td>$1.79$</td>
<td>.07</td>
</tr>
<tr>
<td>Step 2: $\Delta R^2_{\text{adj}} = .46$, $\Delta F(4, 471) = 113.16, p &lt; .001$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign cultural threat (FCT)</td>
<td>$0.25$</td>
<td>$[0.15, 0.36]$</td>
<td>$0.05$</td>
<td>$4.71$</td>
<td>$&lt;.001$</td>
</tr>
<tr>
<td>Realistic threat</td>
<td>$0.16$</td>
<td>$[0.004, 0.31]$</td>
<td>$0.08$</td>
<td>$2.02$</td>
<td>.04</td>
</tr>
<tr>
<td>Symbolic threat</td>
<td>$0.56$</td>
<td>$[0.39, 0.72]$</td>
<td>$0.08$</td>
<td>$6.68$</td>
<td>$&lt;.001$</td>
</tr>
<tr>
<td>Prototypical threat</td>
<td>$0.04$</td>
<td>$[-0.07, 0.15]$</td>
<td>$0.05$</td>
<td>$0.70$</td>
<td>.49</td>
</tr>
<tr>
<td>Step 3: $\Delta R^2_{\text{adj}} = -0.001$, $\Delta F(3, 468) = 0.57, p = .64$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino $\times$ FCT</td>
<td>$0.14$</td>
<td>$[-0.08, 0.36]$</td>
<td>$0.11$</td>
<td>$1.29$</td>
<td>.20</td>
</tr>
<tr>
<td>Asian $\times$ FCT</td>
<td>$0.09$</td>
<td>$[-0.15, 0.32]$</td>
<td>$0.12$</td>
<td>$0.74$</td>
<td>.46</td>
</tr>
<tr>
<td>Arab $\times$ FCT</td>
<td>$0.10$</td>
<td>$[-0.12, 0.32]$</td>
<td>$0.11$</td>
<td>$0.92$</td>
<td>.36</td>
</tr>
</tbody>
</table>


hypotheses with two different samples of White parents, using both online and in-person methods.

Method

We collected data from two samples of White parents. Sample size, hypotheses, and analyses were preregistered (https://osf.io/aflcj9, https://osf.io/h865z). We had a target final sample size of 241 participants for each sample after exclusions. We preregistered stopping points of at least 300 participants in order to account for overestimates of effect size and participants who may not pass the manipulation check.

Three-hundred participants completed an online study on MTurk for monetary compensation. Of these participants, two wished to have their data withdrawn, four were not monoracial White, two were not parents, and 16 did not pass a manipulation check (described below). Our final sample consisted of 276 (55.4% female) White parents in the U.S. with a mean age of 39.5 years old ($SD = 11.3$). Participants were randomly assigned to one of two conditions. All participants were told to imagine that their child attended a public middle school whose student body was currently 95% White. Participants were then told that, due to a school redistricting initiative, the number of either Latino or Black American students would increase from 5% to 25% of the student body at their child’s school next year. Afterward, all participants answered the open-ended question, “What concerns might other parents have about this initiative?”

Exclusions

As per our preregistration, 16 participants from the online sample failed a manipulation check in which they were asked to correctly select whether they had read about Latino or Black American students and were excluded from coding and analyses. No manipulation check question was asked of participants in the in-person sample.

Coding Process

For each dataset, two hypotheses-blind5 coders (four coders total) read participants’ responses and identified the presence (1) or absence (0) of different concerns about how the school would be affected by its new students. Responses about the changing American culture, language, and way of life of the school were coded as perceptions of foreign cultural threat. Responses about the diminishing academic resources, safety, and welfare of the school were coded as perceptions of realistic threat. Responses could be coded as “1” for both or neither categories. Disagreements between coders (ow concerns: 4.3% of total cases; others’ concerns: 10% of total cases) were resolved through discussion. See Table 4 for example responses and interrater reliability.

Results

For each sample, following recommendations by Gomila (2021), we conducted a mixed-effects linear regression model6 with racial group (Latino students vs. Black American students) entered as a fixed effect (with Black American students as the reference category), and threat type (foreign cultural threat vs. realistic threat) entered as a repeated measure (with realistic threat as the reference category).

5 Coders may not have been fully condition-blind, as participants’ responses were not redacted for specific references to race. However, coders were not given any explicit information about the number of conditions, what each condition entailed, or other study design details.

6 We preregistered chi-square tests, the results of which were similar and can be found in online supplemental materials.
Discussion

White parents reported a greater degree of perceived foreign cultural threat from a growing Latino student body compared to a growing Black American student body when reporting on both their own concerns and the concerns of other parents. White parents also perceived a realistic threat from both a growing Black American and Latino student body. These findings demonstrate the relevance of perceived foreign cultural threat to Whites’ reactions toward increasing racial and ethnic minority populations in a school context. Perceptions of foreign cultural threat emerged in White parents’ open-ended reactions spontaneously and unprompted.

General Discussion

Across local neighborhood and school contexts, Whites perceived the population growth of racial and ethnic minority groups to pose a foreign cultural threat to their American culture and way of life. Perceptions of foreign cultural threat were elicited more strongly by the population growth of Arab Americans, Latinos, and Asian Americans (i.e., stereotypically foreign racial and ethnic minority groups; Zou & Cheryan, 2017) relative to Black Americans, who were in turn perceived as more threatening than no demographic change. Perceptions of foreign cultural threat predicted Whites’ avoidance of diversifying neighborhoods above and beyond other established threats (e.g., realistic and symbolic threats). Indeed, perceptions of the foreign cultural threat posed by racial and ethnic minority groups predicted both personal living preferences among a sample of nationally representative White adults, as well as hypothetical desires to move among White adults online. Finally, perceptions of foreign cultural threat emerged in White parents’ spontaneous reactions to a growth in the Latino student body.

Table 4
Example Responses and Interrater Reliability in Study 6

<table>
<thead>
<tr>
<th>Category</th>
<th>Example responses</th>
<th>Kappa</th>
<th>% Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own concerns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign cultural threat</td>
<td>“That the incoming students may not be primarily English speakers and that will take the attention off of the goals that need to be accomplished.”</td>
<td>.82</td>
<td>98.2%</td>
</tr>
<tr>
<td></td>
<td>“Students speaking a different language, which could create problems for faculty and students.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realistic threat</td>
<td>“Bringing inner-city kids and potentially violence/unwanted behavior to the school.”</td>
<td>.73</td>
<td>93.0%</td>
</tr>
<tr>
<td></td>
<td>“That would mean that there will be more crime in the school and that resources will be diverted from my child.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others’ concerns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign cultural threat</td>
<td>“Other parents may be concerned with exposure to different cultural norm—music, food, language, family structure, religion.”</td>
<td>.75</td>
<td>92.4%</td>
</tr>
<tr>
<td></td>
<td>“Questions about # of ESL or Spanish speaking students and how that would impact instruction.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realistic threat</td>
<td>“A change in demographics may decrease test scores and real estate values.”</td>
<td>.75</td>
<td>87.6%</td>
</tr>
<tr>
<td></td>
<td>“I think some parents may be concerned about a degradation in their children’s education. Another concern may be drugs, crime, etc. that might not be otherwise in the school.”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Among White parents online who reported on their own reactions, there was a main effect of threat type \((b=-.17, 95\% \text{ CI} [-.24, -.10], SE=.04, t=-4.83, p<.001)\), such that reactions were less likely to be coded as indicating perceptions of foreign cultural threat compared to realistic threat. There was no effect of racial group \((b=-.05, 95\% \text{ CI} [-.14, .04], SE=.04, t=-1.09, p=.28)\).

A significant Racial Group × Threat Type interaction revealed that different perceived threats arose in reaction to Latino versus Black American students \((b=.11, 95\% \text{ CI} [.01, .21], SE=.05, t=2.11, p=.04)\). As predicted, White parents’ reported proportionally more foreign cultural threat in reaction to Latino students \((M=.07, SD=.26)\) compared with Black American students \((M=.01, SD=.12)\), \(F(1, 274)=5.78, p=.02\). In contrast, as predicted, there was no significant difference in the proportion of perceived realistic threat in reaction to Latino students \((M=.14, SE=.35)\) and Black American students \((M=.19, SE=.39)\), \(F(1, 274)=1.18, p=.28\).

Among White parents in-person who reported on others’ reactions, there was an effect of both threat type \((b=-.31, 95\% \text{ CI} [-.42, -.19], SE=.06, t=-5.38, p<.001)\) and racial group \((b=.15, 95\% \text{ CI} [.03, .27], SE=.06, t=2.41, p=.02)\). However, the Racial Group × Threat Type interaction was not significant \((b=.09, 95\% \text{ CI} [-.06, .25], SE=.08, t=1.14, p=.25)\). As predicted, White parents reported proportionally more foreign cultural threat in reaction to Latino students \((M=.32, SD=.47)\) compared to Black American students \((M=.07, SD=.26)\), \(F(1, 249)=24.90, p<.001\). Unexpectedly, White parents also reported proportionally more realistic threat in reaction to Latino students \((M=.53, SD=.50)\) compared with Black American students \((M=.38, SD=.49)\), \(F(1, 249)=5.81, p=.02\).7

---

7 That White parents in this study reported a greater proportion of perceived realistic threat in reaction to Latino students compared to African American students is contrary to our preregistered hypotheses predicting no difference, but in line with work by Axt et al. (2014) showing that Whites display more negative implicit attitudes towards Latinos compared to African Americans.
student body at their children’s schools. Strategies for improving Whites’ support of racial integration should therefore be attentive to the role of perceived foreign cultural threat in shaping Whites’ reactions to stereotypically foreign racial and ethnic minority groups.

Foreign Cultural Threat as a Novel Form of Symbolic Threat

As the presence of Latinos, Asian Americans, and Arab Americans continues to increase in the United States, it is important to understand Whites’ responses to such population growth. Perceived foreign cultural threat captures a distinct form of threat posed by such stereotypically foreign racial and ethnic minority groups to Whites’ American culture and way of life. Assessing perceptions of foreign cultural threat may allow us to predict how Whites attempt to manage the increasing populations of different groups. For example, in a residential context, Whites’ perceptions of foreign cultural threat may increase their desire for English-only instruction. Stereotypically foreign racial and ethnic minority groups may thus be faced with specific forms of discrimination and restrictive policies based on the feelings of threat they provoke in Whites.

Concerns about language may represent a particularly important source of perceived foreign cultural threat. Additional analyses of the open-ended responses generated in Study 6 revealed that, of the responses coded as reflecting perceptions of foreign cultural threat, 77% mentioned concerns about potential changes to the dominant English language of the school community. Speaking English is widely considered a crucial norm that denotes American identity (Schliedraut, 2010; Theiss-Morse, 2009), and successful assimilation to American culture is perceived to depend in large part on learning and speaking English (Paxton & Mughan, 2006). However, perceptions of foreign cultural threat are unlikely to be entirely based on concerns about perceived language differences; for instance, Black Americans speak fluent English in the same proportion as do Whites (Rumbaut & Massey, 2013), but are nonetheless perceived by Whites to evoke a degree of foreign cultural threat.

Foreign cultural threat represents one specific form of symbolic threat to norms and values. However, Whites may perceive different variants of symbolic threat that we did not explore in the current work. For example, while Whites perceived less foreign cultural threat from Black Americans relative to the other racial and ethnic minority groups we examined, research has also shown that Whites perceive Black Americans to pose a form of symbolic threat related to industriousness, independence, and hard work (e.g., Kinder & Sears, 1981). The development of a taxonomy of distinct forms of symbolic threats may be useful for understanding and differentiating the nuanced reactions that different racial and ethnic minority groups elicit from Whites.

Finally, perceptions of foreign cultural threat may be sensitive to broader historical context, such that sociocultural events heighten the perceived threat evoked by certain groups. The experimental data in the current paper were collected between 2016 and 2018, during a presidential campaign and administration that espoused strong anti-Latino and anti-Arab sentiment, which may have elevated the American public’s perceptions of the foreign cultural threat posed by these groups. Similarly, the COVID-19 global pandemic, which occurred after the current paper’s data collection, represents a period during which perceptions of the foreign cultural threat posed by Asian Americans may have been especially strong.

Disaggregating Whites’ Threat Reactions Toward Different Racial and Ethnic Minority Groups

Research has often examined Whites’ perceptions of threat posed by racial and ethnic minority groups in the aggregate (e.g., Craig & Richeson, 2014; Danbold & Huo, 2015). The current work builds on previous intergroup threat literature by identifying the unique threats that Whites perceive from the local population growth of different racial and ethnic minority groups in the United States. First, while prior research has found Latinos and Black Americans to evoke similar threat profiles (Cottrell & Neuberg, 2005), the current findings demonstrate that Whites perceive Latinos to pose a stronger foreign cultural threat relative to Black Americans. Next, some past work has shown that Whites perceive Asian Americans to pose a greater realistic threat than Black Americans (Butz & Yogoewarai, 2011), while other work shows Black Americans and Latinos posing greater realistic threats relative to Asian Americans (Cottrell & Neuberg, 2005). The current findings demonstrate that distinct forms of realistic threat may be elicited by stereotypically low-status and high-status racial and ethnic minority groups: while Black Americans and Latinos were perceived by Whites to threaten to drain or endanger their resources and well-being, Asian Americans were perceived to threaten to surpass and exceed Whites’ dominant social standing.

These findings extend the Racial Position Model (Zou & Cheryan, 2017), which demonstrates that racial and ethnic minority groups in the U.S. are stereotyped along two dimensions of not only perceived inferiority (i.e., perceived social status), but also perceived cultural foreignness (i.e., perceived distance from the American prototype). Whites’ perceptions of intergroup threats from Latinos, Asian Americans, Black Americans are consistent with each group’s position along the two dimensions, with Latinos perceived as lower status and culturally foreign, Asian Americans perceived as higher status and culturally foreign, and Black Americans perceived as lower status and culturally American (but not as American as Whites). A subsequent study also revealed that Whites’ perceptions of foreign cultural threat from Arab Americans is consistent with their culturally foreign positioning according to the Racial Position Model. While racial or ethnic minority groups’ positioning along the inferiority dimension corresponds to Whites’ perceptions of realistic threat, their positioning along the cultural foreignness dimension corresponds to Whites’ perceptions of symbolic threat. Taken together, Whites perceive distinct threat profiles from the largest racial and ethnic minority groups in the U.S.

Limitations and Future Directions

Although the current work demonstrates that increasing racial and ethnic minority populations cause Whites to perceive differing degrees of foreign cultural threat, we provided correlational evidence for the role of perceived threat in Whites’ desires to move
out. Future research could establish the causal chain by directly manipulating Whites’ perceptions of threat (Spencer et al., 2005). Future research could also examine the consequences of perceived foreign cultural threat for how Whites attempt to manage increasing neighborhood diversity, beyond moving out. For instance, Whites’ perceptions of foreign cultural threat and realistic threat may predict support for different local policies (e.g., bans on flying foreign flags vs. antivagrancy and loitering statutes). Future research should explore interventions that reduce perceptions of foreign cultural threat and improve Whites’ attitudes toward racial integration. Priming self-expansion motivations, or the view that intergroup contact experiences provide new perspectives and identities that enhance one’s sense of self (Wright et al., 2002), may be a strategy to decrease Whites’ perceptions of threat in response to interacting with culturally different outgroup members (Dys-Steenbergen et al., 2016; Kauff et al., 2021). On a broader policy level, awareness of policy proposals within their state that are designed to welcome immigrants may also help to increase Whites’ support for neighborhood and school integration by signaling positive local norms (Huo et al., 2018). Finally, future research should examine Whites’ distinct reactions to the actual (and not just hypothetical) growth of different racial and ethnic minority populations within their local communities.

**Conclusion**

Wide-scale immigration has contributed to the increasing presence of racial and ethnic minority populations across the United States. Despite growing racial diversity, there has been little improvement in racial segregation patterns (Lichter et al., 2015). The current work reveals that Whites perceive stereotypically foreign racial and ethnic minority groups—Latinos, Asian Americans, and Arab Americans—to pose a foreign cultural threat to their American culture and way of life, and that this perceived threat predicts Whites’ living preferences and desires to leave residential neighborhoods with growing racial and ethnic minority populations. This work may help us better understand Whites’ resistance toward living with racial and ethnic minority groups and how to reduce Whites’ perceptions of threat when racial and ethnic minority groups enter majority White neighborhoods and schools.

**Context of the Research**

The main impetus for this research came from the authors’ observation that the two dimensions of stereotyping in the Racial Position Model (Zou & Cheryan, 2017), perceived cultural foreignness and perceived inferiority, may correspond with distinct psychologically, a group’s position along the cultural foreignness dimension (i.e., their perceived deviation from the national prototype) may shape the extent to which they are perceived by Whites as a symbolic threat to the dominant American culture. In addition, a racial and ethnic minority group’s position along the inferiority dimension (i.e., their perceived social status) may shape the extent to which they are perceived by Whites as a realistic threat to their resources and welfare. The present research draws on the Racial Position Model (Zou & Cheryan, 2017) to make predictions about the different intergroup threats that Whites perceive and highlight the role of cultural foreignness stereotypes in shaping Whites’ responses toward increasing diversity. This work fits with the authors’ programs of research exploring how perceptions of American identity affect intergroup dynamics, with consequences for racial equity.

**References**


Psychology Compass, 8(12), 739–754. https://doi.org/10.1111/spc3.12149