Finding a Roommate on Craigslist: Racial Discrimination and Residential Segregation in Urban Areas

Introduction/Objectives/Theoretical Framework
High levels of racial residential segregation still exist throughout the U.S. today, and changes toward more integration have been slow (Logan, Stults, and Farley 2004; Reardon, et al. 2009). Housing and location play key roles in maintaining racial inequality as they determine the availability of jobs and where children go to school (Massey and Denton 1993; Wilson 1987; Yinger 1995). Thus, inequalities in housing serve as a portal for continued cumulative disadvantage in other dimensions and across generations (Blank et al. 2004). Despite advances in race relations, some current research suggests that race, even after accounting for neighborhood poverty characteristics, still plays a strong role in residential preferences among whites (Bobo and Zubrinsky 1996; Charles 2006; Krysan and Bader 2007; Krysan et al. 2009). Prior research based on observational data suggests that higher levels of discrimination occur in areas with higher levels of white residents (Galster 1987; Galster and Kenney 1988). However, it is unclear whether intermediary actors (i.e. real estate agents) act in a way that protects their own economic interests or reflects the social views of these neighborhoods. Do white residents themselves discriminate to avoid living with or near non-white residents?

This project uses experimental methods to investigate covert racial discrimination in “roommate wanted” ads on Craigslist, bringing together two important but previous unconnected streams of prior social science research. Some prior research has used experimental methods to study how prospective tenants’ perceived race affects prospective landlords’ and real estate agents’ responses to expressions of interest in renting or purchasing housing – a primarily economic relationship. In-person audit studies, originally developed in research supported by the Department of Housing and Urban Development (HUD) in the 1970s (Hakken 1979; Wienk et al. 1979), have been used to examine differential treatment of white and black applicants with similar characteristics (Galster 1990a, 1990b, 1992; Turner et al. 2002; Urban Institute 1991; Yinger 1986, 1989, 1995). In response to modern technology, researchers have updated the audit method to send messages to various “tenant wanted” ads over the internet using different email addresses and names designed to call to mind racial cues (such as Connor Cleary, Jamal Riddick, and Parag Patel) and monitor racial response rates (Carpusor and Loges 2006; Hogan and Berry 2011). This line of research has generally found that African Americans face significant discrimination and other non-white groups face moderate discrimination in obtaining replies from landlords. A second vein of research has investigated racial discrimination in social relationships such as dating by monitoring patterns of racial exclusion in online daters’ stated preferences (Robnett and Feliciano 2011) or message-sending patterns (Rudder 2009). This research has generally found that African American women and all types of Asian (South Asian, East Asian, and Middle Eastern) American men receive less favorable treatment than other groups in this realm of social life, even after factoring in daters’ self-reported personality traits and compatibility.

In this study, we investigate discrimination in online searches for roommates, a category of relations that combines economic and social dimensions, but has received very little attention by researchers. To better understand discrimination in social relationships and the association with residential segregation, we focus on the following main questions: (1) Does race affect response rates to roommate requests? (2) If so, does neighborhood racial composition moderate the effect of race on response rates?

Data and Methods
We conduct a computerized audit study to examine the effect of race on finding a roommate. In general, an audit study is a field experiment that matches two individuals with nearly identical characteristics to participate in a test of some outcome. Ideally, the only variation between the two individuals is on the characteristic of interest (independent variable). Audit studies similar to the one we conduct successfully examine discrimination in the housing market by matching similar candidates who differ on race (either in-person or online). In a computerized audit study, researchers randomly select and inquire about housing with two or more candidates of different races. The dependent variable is the number of email or phone responses for housing information. Using audit studies, researchers consistently find significant differences despite small sample sizes.

To investigate how race affects response rates back to those who reply to “roommate wanted” ads, we create and use email addresses associated with female names that carry race/ethnic cues (white, black, Hispanic), and reply to several hundred different “roommate wanted” ads on Craigslist in different U.S. metropolitan areas. To date, we have replied to approximately 100 ads in each of three urban areas (Boston, Chicago, and Philadelphia) for a total of nearly 900 data points (3 applicants * 3 cities * 100 ads). We plan to include additional cities and to expand our analysis to include male names in the coming weeks. We rotate three textually different but substantively identical messages through our purported senders, so each email address/name sends each message text one-third of the time. The three message texts are of identical length, and we vary the order of sending (so that each name sends first one-third of the time, etc.). We monitor both response rates and the type of response received in order to determine whether and how much roommate-seekers factor in race cues in choosing who they reply to and how favorably they reply.

To examine how racial composition moderates any effect of race on response rates, we first record any information from the individual Craigslist ads about location. Over 50% of the ads include information on the nearest cross-streets and the remaining ads include varying levels of details. For these remaining ads, we contact each poster from a neutral fourth email account requesting more specific location information. In 30-40% of these remaining cases we receive a response with cross-street information. We then look up the associated Census tract using the American Fact Finder 2 website (factfinder2.census.gov) and merge with Census tract data racial composition data from the 2010 Census.

Results

Table 1 shows the number of positive roommate responses by race and metropolitan area. In the Boston area, our overall response rate is 34%. The response rates for our white and Hispanic candidates are not significantly different, but our black candidate has a significantly lower response rate (24.5%) than the others. In metro Chicago, we see a drastic and statistically significant difference between our black candidate and the other two candidates. The response rate for our black candidate is a paltry 8.2%, compared to 51.8% for our white candidate, and 57.3% for our Hispanic candidate. In metro Philadelphia, the results are somewhat similar to metro Boston. We find a non-significant difference between white and Hispanic candidates but a significantly lower response rate for our black candidate. Our total response rate across all three cities (Table 1, column 4) suggests that white and Hispanic candidates are over twice as likely to receive a response as our black candidate.

Although these results show that in the social realm of roommate selection there is discrimination against blacks, it is unclear why these differences are so pronounced across urban areas. To address this question, we first look at the geographic sample of Craigslist ads as it relates to the rest of the area. In Table 2, we show the average racial composition of all Census tracts from which an ad was drawn (listed as “From Sample (any ad)” compared with the
average racial composition of all Census tracts from which an ad was not drawn. We only include counties from the Metropolitan Statistical Area (MSA) for each area with two exceptions (see Table 2 note). These calculations suggest that the Census tracts from which the sample of Craigslist ads come from are not representative of the MSA as a whole, particularly in terms of black composition. For instance, in metro Chicago our ads come from Census tracts with an average black composition of 11.1% while the rest of the MSA has an average black composition of 22.0%. Figures 1 (Chicago) and 2 (Philadelphia) put a visual to these stark differences. In both cities, large blue areas, which represent Census tracts whose residents are mostly black, are without many Craigslist roommate wanted ads.

Our next stage in this research is to run a spatial regression analysis to analyze how racial composition within each Census tract affects the likelihood of a response for our white, black, and Hispanic candidates. Preliminary descriptive analyses suggest there is a negative association between high white composition within Census tracts and low black response rates. Moreover, we plan to include additional urban areas, such as Atlanta, Detroit, and/or Washington DC to expand our sample and help us better understand differences across cities.

**Significance**

We know of no research to date that investigates racial discrimination in roommate searches. According to the latest Census data, approximately 35% of Americans live in rental units and large numbers of Americans live with roommates. Craigslist boards in most major urban areas feature dozens to hundreds of “roommate wanted” ads daily. It is important to better understand this realm of life: if roommate-seekers are race-blind in choosing roommates, online roommate searching can reduce racial distance by bringing together people of different races into relationships that intrinsically require economic and social cooperation. However, if roommate-seekers are not race-blind, roommate-seeing practices may help reproduce racial segregation.

The findings from our research have a number of important implications. First, black candidates responding to roommate wanted ads face very high levels of discrimination compared to white and Hispanic candidates. Second, Hispanic female candidates do not face discrimination compared to white candidates. This is surprising, given findings of inequalities between whites and Hispanics in other areas, though it is consistent with some scholars’ suggestion that Hispanics are now becoming incorporated within the boundaries of “whiteness” in significant ways (Lee and Bean 2007); it is also consistent with evidence that racial stereotypes are gendered and in some cases are less marked for women than for men (Robnett and Feliciano 2011). Third, there appears to be an association between an area’s racial composition and the response rate for black inquiries. This may be due to the higher likelihood of drawing a white ad-poster looking specifically for a white roommate or it may be due to selection into low-minority areas for other reasons related to residential segregation. Fourth, our research shows that using Craigslist for social science research may not be totally generalizable due to the types of people using the website. Future studies using Craigslist or even other online site should be aware of this bias. More importantly, this suggests that there may be racially segregated networks in posting and obtaining information, such as housing and employment. Studies from the 1980s and 1990s showed that employers used racially segregated networks such as referrals and ethnically-targeted newspapers to avoid black candidates (Braddock and McPartland 1987; Kirschenman and Neckerman 1991; Mouw 2002). Non-black users of Craigslist may be aware of the low likelihood of blacks to use Craigslist but future research should attempt to address this issue. These findings suggest that residential segregation and discrimination are still quite prevalent and strongly connected.
Table 1. Positive Roommate Responses by Race and Metropolitan Area

<table>
<thead>
<tr>
<th></th>
<th>Boston</th>
<th>Chicago</th>
<th>Philadelphia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>38/94 (40.4%)</td>
<td>57/110 (51.8%)</td>
<td>46/85 (54.1%)</td>
<td>141/289 (48.8%)</td>
</tr>
<tr>
<td>Black</td>
<td>23/94 (24.5%)</td>
<td>9/110 (8.2%)</td>
<td>28/85 (32.9%)</td>
<td>60/289 (20.8%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>36/94 (38.3%)</td>
<td>63/110 (57.3%)</td>
<td>56/85 (65.9%)</td>
<td>155/289 (53.6%)</td>
</tr>
</tbody>
</table>

Note: a denotes the response rate of the white candidate is significantly different from response rate of the black candidate (p<0.05), b denotes the response rate of the Hispanic candidate is significantly different from response rate of the black candidate (p<0.05). All significance tests conducted using a 2-tailed test for proportions.

Table 2. Average Census Tract Racial Composition

<table>
<thead>
<tr>
<th></th>
<th>Boston From Sample (any ad)</th>
<th>Boston Not in Sample</th>
<th>Chicago From Sample (any ad)</th>
<th>Chicago Not in Sample</th>
<th>Philadelphia From Sample (any ad)</th>
<th>Philadelphia Not in Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>78.2%</td>
<td>77.3%</td>
<td>59.4%</td>
<td>50.0%</td>
<td>69.1%</td>
<td>62.8%</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>6.6%</td>
<td>9.1%</td>
<td>11.1%</td>
<td>22.0%</td>
<td>17.3%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3.9%</td>
<td>4.1%</td>
<td>20.1%</td>
<td>20.8%</td>
<td>6.3%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

Note: Columns 1, 3, and 5 indicate the average racial composition of all Census tracts from which an ad was drawn. Columns 2, 4, and 6 indicate the average racial composition of all Census tracts from which an ad was not drawn. Only Census tracts from counties in the MSA are included in this calculation (Boston – Essex, Middlesex, Norfolk, Plymouth, and Suffolk; Chicago – Cook, DeKalb, DuPage, Grundy, Kane, Kendall, McHenry, and Will; Philadelphia – Bucks, Chester, Delaware, Montgomery, and Philadelphia) except in the case of Boston, which also includes Bristol County, and Chicago, which also includes Lake County, because some ads were posted from these two counties.
Figure 1. Residential Segregation and Craigslist Postings in Chicago, IL
Figure 2. Residential Segregation and Craigslist Postings in Philadelphia, PA
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