

RESEARCH REPORT

FRIENDS AND NEIGHBORS:
Homeownership and Social Capital Among Low- to Moderate- Income Families

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**Friends and Neighbors: Homeownership and Social Capital among Low- to Moderate-
Income Families**

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Abstract

This research explores whether homeownership leads to increased individual social capital among low- to moderate-income families. Social capital refers to social resources a person can access through contacts with others in his or her social networks. We theorize that homeownership can motivate interactions with others in one's neighborhood and therefore build social capital. Using a sample of low- and moderate-income homeowners and a matched sample of renters, we collect data on overall social resources and neighborhood-specific social resources. We find that homeowners have more total social capital resources and more neighborhood social capital resources than renters. Neighborhood group involvement has an indirect effect on social capital, but explains only a small amount of the influence of homeownership. These findings hold when controlling for household-level and neighborhood-level socio-demographic variables, as well as when using statistical models that account for endogeneity. Based on this evidence, we conclude that homeownership gives people access to social capital via increased social ties to others. We discuss the implications of this finding for housing policy and suggest new directions for research on social capital.

Introduction

Social capital, at the individual level, refers to connections within social networks and the resources exchanged via those connections (Van Der Gaag and Snijders 2005; Burt, Cook, and Lin 2001). While considerable research over the past fifty years has sought to document the benefits of social capital, far fewer studies have explored its origins, particularly in terms of homeownership (Glaeser 2001; Glaeser and Sacerdote 2000). In this paper, we analyze whether homeownership gives low- and moderate-income residents access to social capital via expanded social networks. Do homeowners have larger social networks as a result of being homeowners, or does homeownership simply concentrate their social networks without meaningfully changing the size of those networks? Further, if homeowners have more social capital resources than renters, is it because they are homeowners, or rather the result of an unobserved co-occurrence such as being more community-oriented or more sociable?

We test these questions using data collected from a matched sample of homeowners and renters. We measure social capital using a resource generator survey (Van Der Gaag and Snijders 2005) that collects information on how many people a respondent knows who could provide a given resource. We differentiate between an individual's overall social capital and the social capital connected with his or her neighborhood by asking whether any of the people a respondent knows who could provide a given resource reside in his or her neighborhood. If homeownership creates social capital, we expect homeowners to have more overall social capital resources *and also* more resources within their neighborhoods. If homeownership only influences the geographical distribution of social capital, we expect homeowners to know more people in their neighborhoods but not more people overall. We also test whether any apparent homeownership effects can be explained away by including a measure of how long a respondent has lived in his or her neighborhood and modeling techniques that account for endogeneity.

Significance

Past research on the social benefits of homeownership has been limited in three ways. First, research has failed to differentiate between homeownership and co-occurring conditions such as decreased mobility (Rohe, Van Zandt, and McCarthy 2000; Rossi 1996). This makes it impossible to evaluate whether homeownership causes various outcomes, or whether homeownership and social outcomes are both results of some other factor. Some studies have suggested that tenure choice and mobility are highly correlated (Boehm 1981); it is plausible that social outcomes such as civic engagement and volunteerism appear to be related to homeownership but are actually functions of homeowners' decreased residential mobility. Our research offers an important contribution by differentiating between tenure status and neighborhood residential duration in order to evaluate the association between homeownership and social capital.

The second gap in previous research concerns the use of imprecise methods and measures. One of the ever-present difficulties associated with conducting research on homeownership is the issue of endogeneity (Dietz and Haurin 2003; Rohe, Van Zandt, and McCarthy 2000). Homeownership and social capital likely share an overlapping set of predictors; people who choose to become homeowners may already have more social capital resources. Statistical models that fail to account for such endogeneity present a flawed picture of the actual relationship between homeownership and social capital. Our study incorporates a treatment effects model that accounts for endogeneity within our theoretical framework and therefore yields more accurate results.

Along similar lines, studies of social capital have tended to operationalize social capital as a person's group affiliations or the number of their network ties to others (Glaeser, Laibson, and Sacerdote 2002). It is true that most social capital is accumulated through group affiliations, and people with larger social networks have more opportunities to gain social capital. However, it is more precise to measure the actual resources a person can access rather than his or her network ties,

which may or may not contain social resources available for exchange. If none of the many people one knows has any resources one could access, then those network ties do not result in social capital. Our study collects data on specific resources to which people have access through their social networks, rather than looking only at the size of those networks.

Past research on homeownership has disproportionately focused on middle-class, suburban households. Historically, the majority of homeowners have been white and middle- to upper-class, and research on the benefits of homeownership has focused largely on this group (Denton 2001; Lui et. al, 2006). In recent years, however, homeownership policy has expanded to promote opportunities for lower-income households, yet despite this policy agenda, relatively few studies have examined the impact of homeownership specifically on low-income households (Herbert & Belsky 2006). Our study focuses on low- and moderate-income urban homeowners in order to assess whether homeownership in these particular communities can generate new social capital for residents. Not only does this study represent a unique methodological contribution to research on social capital, it also presents a contribution to urban housing policy research.

Background

Sustained homeownership has long played an integral role in wealth and asset accumulation, community growth, and positive social outcomes for individuals and families (Rohe and Stewart 1996; Retsinas and Belsky 2002). There is also general agreement among researchers that homeowners are more involved in their communities than their renter counterparts, although it is not clear whether this is by choice or because there are fewer opportunities for renters to participate in neighborhood activities and organizations (Aaronson 2000; Dietz and Haurin 2003; Rossi 1996). In either case, neighborhoods with higher rates of homeownership have been shown to have “relatively high participation in local political activities and organizations, relatively high rates of voting, and self-help activities such as participating in neighborhood crime watch, local school

parents-teachers organizations, and other local volunteer actions” (Haurin, Dietz, and Weinberg 2002). We hypothesize that these types of social involvement provide opportunities for homeowners to form social ties to others, ties which can lead to increased social capital among homeowners.

This subject is particularly relevant in light of the housing downturn that began in 2006. As housing values have decreased and foreclosures have increased, researchers and policy makers have been particularly interested in understanding both the financial and social outcomes of supporting homeownership. While the wealth-building benefits of homeownership have been well-documented, less attention has been paid to research on whether homeownership can build social capital. It is important to consider all of the possible costs and benefits of homeownership in discussions of how to construct effective policies that support homeownership, and whether such policies should be implemented at all.

Social Capital

We argue that homeownership produces cohesion and stability, at least in part, by promoting social interaction. Social capital is one of the most useful, albeit ambiguous, concepts for understanding how social networks produce social outcomes. In the flurry of research that surrounded the publication of *Bowling Alone* (Putnam 2001), the idea of social capital has been employed to explain everything from micro-level individual outcomes such as career advancement (Seibert, Kraimer, and Liden 2001) and parenting (Parcel and Dufur 2001) to organizational and city-level outcomes such as technology adoption (Frank, Zhao, and Borman 2004) and crime rates (Messner, Baumer, and Rosenfeld 2004). However, these studies have focused on the effects rather than the causes of social capital. In his call for a redirection of social capital research towards causes rather than consequences, Edward Glaeser (2001) writes:

Indeed, the weakness of this research is not in either the theory or the empirical work on the *effects* of social capital. The real weakness is the lack of both theory and

empirical work focusing on the *causes* of social capital. If we are going to change the level of social capital, we must have a coherent model of the formation of social capital and a body of empirical work that we trust about the formation of norms and networks. This is not to say that Putnam and others haven't done important work in this area, but rather that such work has taken the backseat to research documenting social capital's effects.

In this study, we explore social capital as an individual-level construct and test whether homeownership can provide a platform for the creation of new social capital resources. Social capital can be studied as either an individual (Van Der Gaag and Snijders 2004) or a collective structural (Bourdieu 1977) attribute. For the purpose of this research, we focus on individual social capital, defined as an individual's collection of social network connections that are potential locations for exchange relationships (Burt, Cook, and Lin 2001). The stipulation that network ties must have the potential to transmit resources is an important one; indeed, social capital as defined in this study is explicitly functional. People acquire network relations with awareness of how those relations could be beneficial in the future (Portes 2000). In order for a social network connection to produce social capital, there must be some resources that can be exchanged, just as a financial investment must yield dividends in order to produce wealth.

Another defining characteristic of social capital is that the resources exchanged within networks are social resources. Social resources are resources that can be used to achieve an objective but are only temporarily accessed because they require connections with others (Lin 1999). For example, one could receive from an acquaintance help fixing a computer or finding a job. However, the knowledge of how to fix the computer or the contact with a potential employer remains the property of the acquaintance. This underlines the need for ongoing contact with social network ties in order to retain access to social capital. Because the social resource is borrowed rather than given, at least semi-regular interaction is needed in order to maintain a social capital resource connection (Son and Lin 2008).

Homeownership and Social Capital

When examining how homeownership can play a role in people developing and retaining relationships which yield social capital, there are three important influences: opportunity structures which facilitate social interaction, place attachment which fosters feelings of social cohesion, and expectations of mobility which affect relationship reciprocity. First, in order for people to acquire social capital there needs to be an opportunity structure that puts them in regular contact with others who have resources (Van De Bunt 1999), such as a neighborhood or place of employment. By “opportunity structure”, we mean a social space that facilitates routine interaction with others. The most common opportunity structure is the workplace; people who share a common workplace interact with each other and often form weak ties which build social capital (Granovetter 1973). Once people leave the workplace, however, they often cease having regular contact with their former co-workers because such interactions are no longer facilitated by an opportunity structure. Since maintaining social capital requires regular contact, structures which facilitate regular interpersonal interaction are conducive to social capital acquisition.

Like a workplace, homeownership serves as an opportunity structure to facilitate interactions within a neighborhood and open opportunities for the acquisition of social capital. Prior research has demonstrated that homeowners are more likely to belong to neighborhood groups, and that membership rates are highest among new homeowners (Manturuk, Lindblad, and Quercia 2009). Regardless of whether this is an individual choice or a structural constraint – some groups may prohibit or discourage renters from joining – the increased participation in neighborhood groups on the part of homeowners provides an opportunity to form new social ties because it puts them in at least semi-regular contact with others in the neighborhood.

In addition to interactions which occur within the context of organizations, homeowners are more likely to seek out opportunities to interact with their neighbors because they feel a sense of

attachment to others who live near them, particularly in urban communities. Owning a home means owning part of a neighborhood, and a homeowner's feelings of commitment to the home can arouse feelings of commitment to the neighborhood which, in turn, can produce interactions with neighbors. Brown, Perkins, and Brown (2003) term this phenomenon "place attachment" – a sense of attachment and commitment to the home and those in the immediate neighborhood. Overall, place attachment is stronger for homeowners and long-term renters than for more transient residents. Woldoff (2002) found that the strongest predictor of place attachment is not a "place characteristic" but rather whether the subject is a homeowner. Thus homeownership creates a strong attachment to one's home and neighborhood, leading to increased interaction with like-minded others in the immediate area.

Third, individuals select the others with whom they form social ties within an opportunity structure. Not all people within a given neighborhood will actually form network connections with each other, just as not all co-workers in a given workplace interact on a regular basis. When selecting which others to connect to within a given structure, people consider the potential long-term costs and benefits (Van Der Gaag and Snijders 2005). Homeowners and renters may be similarly motivated to form ties to their neighbors, but those neighbors may see ties to homeowners as more valuable because such relationships may last longer. We argue that both homeowners and renters are less likely to seek out social ties with renters because - correctly or not - they view renters as temporary residents. Homeownership implies permanence, while renting implies mobility (Coffe 2009).

While expectations of mobility affect a renter's ability to form new social ties in a neighborhood, actual mobility can make it difficult for renters to sustain existing social ties. Several previous studies have found that communities with higher in-migration and out-migration have lower levels of social capital (Coffe and Geys 2006, Coffe 2009). Data from the Community

Advantage Program (CAP) used in this study indicate that, over a four year period, twice as many renters as homeowners moved. This finding is consistent with other research that has found strong correlations between tenure choice and mobility. Prior studies have shown that, when controlling for economic conditions and household wealth, expected mobility within 3-5 years is the strongest predictor of whether a family elects to rent or purchase a home (Henderson and Ioannides 1989; Boehm 1981). Even homeowners who live in neighborhoods with visible signs of disorder are more likely to stay in their homes and work to improve their neighborhoods rather than move (Lee, Oropesa, and Kanan 1994). Mobility is therefore a double-edged sword for renters; neighbors are less likely to form ties with them due to expectations of mobility, and renters have a harder time retaining ties they do form due to realized mobility.

Theoretical Model

To evaluate the relationship between social capital and homeownership, we developed statistical models predicting social capital resources, both in general and within one's neighborhood. In both models, we control for the length of time a respondent has been living in his or her neighborhood and his or her tenure status (homeowner or renter). This approach allows us to consider whether homeownership is associated with increased social capital, and whether the apparent effect of homeownership is a result of decreased residential mobility. We further test whether, if homeownership does predict social capital, one mechanism of this relationship is homeowners' increased involvement in local neighborhood groups. Our analyses seek to answer the following questions:

1. Do homeowners have more social capital resources than renters?
2. What role does residential mobility play in social capital accumulation?
3. Do neighborhood groups contribute to social capital?

Data

We test these questions using data collected for the Community Advantage Program (CAP) study. CAP began as a secondary mortgage market program developed out of a partnership between the Ford Foundation, Fannie Mae, and Self-Help, a leading community development financial institution in North Carolina. The goal of this program was to underwrite 30-year fixed-rate mortgages for families who would have otherwise received a sub-prime mortgage or been unable to purchase a home at all. In order to qualify for the program, participants had to meet one of the following criteria: 1) have an annual income of no more than 80% of the area median income (AMI), 2) be a minority with an income not in excess of 115% of AMI, 3) purchase a home in a high-minority (>30%) or low-income (<80% of AMI) census tract and have an income not in excess of 115% of AMI. By the end of 2004, 28,573 families had purchased homes through CAP.

The data used in this study originated from a survey conducted by RTI International and designed to evaluate the impacts of homeownership on the families who purchased homes through CAP. In order to facilitate this analysis, a random sample of CAP borrowers was selected to participate in annual surveys covering social and financial outcomes related to homeownership. Once the sample of homeowners was selected, a comparison group of renters was matched to the homeowners based on neighborhood proximity and income. This matching was limited to the 30 metropolitan areas in the United States with the highest number of CAP owners. The renter sample was obtained by randomly selecting households who lived within the same census blocks¹ as already-enrolled homeowners, based on public telephone directory lists. Like the CAP homeowners, the renters had to meet income or racial criteria. Respondents had to be between 18 and 65 years old, pay rent to the owner of their residence, and have an annual income of less than 80% AMI or 115% AMI in a predominantly-minority neighborhood. The final year one sample was comprised of 3,743 homeowners and 1,530 renters.

¹ When eligible renters could not be found within the census block, the radius was expanded up to four miles.

The data used in this study came from the year four wave of data collection, collected in 2007. This is the only year during which respondents were asked about their social capital resources. The year four sample included 2,079 homeowners and 903 renters. These returns represent an overall attrition rate of 44% for owners and 41% for renters. The majority of attrition, around 30% for both groups, occurred between the year one and year two surveys. As with most surveys, attrition is higher among minorities, respondents with less education, and those over age 40. The vast majority of attrition was due to respondents who could not be located; very few participants declined to be re-interviewed.

In order to assess how CAP compares to a random national sample, Riley and Ru (2009) compared the CAP sample with a sample of low-income homeowners who participated in the 2004 Current Population Survey (CPS). The socio-demographic composition of CAP is very similar to the CPS sample. The CAP sample of homeowners includes a greater percentage of minority respondents than the CPS sample of homeowners since one of the goals of the original program was to increase minority homeownership. The other notable difference between CAP and CPS is that over 90% of CAP homeowners are employed compared to only 70% of CPS low-income homeowners. We presume this is because all CAP owners purchased their homes fairly recently and therefore had to have a steady source of income at that time, while the CPS owners likely include more retirees who purchased their homes much earlier.

Measures

The key dependent variables in this study are overall social capital resources and neighborhood-specific social capital resources. To measure social capital, we use a resource generator survey instrument (Van der Gaag & Snijders 2005). The advantage of using a resource generator to measure social capital is that it measures the actual resources to which a person has access through his or her social network. Alternative measures such as a name generator or position

generator measure the size or prestige of one's social networks, but not the social resources within those networks.

A key consideration when using a resource generator is that the questions must be constructed based on theoretically-informed decisions about relevant social resources within the study population. For example, it would make little sense theoretically to ask respondents in our study whether they know someone who could help them learn to speak French, since that social resource likely has little value within our study population. We therefore selected social resources that are not homeowner-specific but are relevant to a general low- to moderate-income population. For each item, we asked respondents whether they know someone who could provide a certain resource. If they answered affirmatively, we asked whether they knew anyone within their neighborhood who could provide that resource. We specified that we only wanted to know about people living outside the home who would provide the resource without being paid. The eight items in our resource generator are:

Do you know someone who...

1. Could help you move to a new home?
2. Would bring you food or medicine if you were sick?
3. Has contacts in the media?
4. Is politically active?
5. Gives good advice for handling stress?
6. Is good with computers?
7. Could help you find a job?
8. Would lend you \$500 if you needed it?

We measure overall social capital as the total number of resources a person reports (0-8), and neighborhood-specific social capital as the sum of resources to which a person has access within his or her neighborhood. Descriptive statistics for this and all other variables are presented in Table 1.

TABLE 1 ABOUT HERE

Independent Variables

Homeownership and length of time in the neighborhood are the two key independent variables in our analysis. We measure homeownership with a dummy variable indicating whether or not someone is a homeowner. We measure length of time in their neighborhood using 3 indicator variables: less than one year, one to three years, and more than three years. We also tested running this variable as a continuous variable, but determined that measuring it categorically more appropriately captured any threshold effect of neighborhood tenure duration.

Some studies have suggested that the mechanism by which homeownership produces beneficial social impacts is by reducing residential mobility (Henderson and Ioannides 1989; Boehm 1981), although more recent studies have concluded that homeownership increases social capital even when controlling for mobility (Coffe 2009; Coffe and Geys 2006). One point to note here is that most studies which have concluded homeownership increases social capital through decreased residential mobility have failed to differentiate between moving from one city to another (migration) and moving from one house to another within the same community (intra-metropolitan mobility). In this study, we measure mobility at the neighborhood level – how long a respondent has lived within the same neighborhood. This is a crucial distinction because we would not expect intra-metropolitan mobility to have an effect on social ties within a neighborhood.

Indirect Effects

We expect that participation in a neighborhood organization will have an indirect effect on social capital. If homeowners are more likely to participate in neighborhood groups, that could be an important mechanism through which owners expand their social capital ties to others in their communities. We therefore include a dummy variable indicating whether or not a respondent participates in a neighborhood group. This is modeled as an indirect effect.

Control Variables

The treatment effects model includes two equations, one for homeownership and one for social capital. Both models incorporate individual-level control variables for age, race/ethnicity, marital status, education, parenthood, income, and employment status. The models also include neighborhood-level controls for a variety of index measures described in full below. For each outcome, the final model includes only significant covariates.

Age is measured using a series of dummy variables in 10-year increments. The reference category is Age under 30. We measure race/ethnicity using dummy variables for black, Hispanic, and other race. The reference category is white. Marital status is measured using dummy variables for cohabiting, divorced or separated, widowed, and single. The reference category is married. Education is measured using dummy variables for high school degree or less, 2-year degree, 4-year degree, and graduate or professional degree. The reference category is high school degree or less. Employment status is measured using dummy variables for unemployed, retired, and not in the paid labor force. The reference group is employed.

Relative income is measured as the total household income divided by the area median income at the census tract level. This variable is logged to correct for the skewed distribution that results from our focus on only low- and moderate-income households. Using relative income rather than gross income accounts for geographic differences in the cost of living and better reflects the degree to which income affects a respondent's likelihood of being a homeowner in a particular area. The equations also include a control variable for whether or not a family has children living in the home, since past research has suggested that having children is a trigger event for homeownership (Townsend 2002).

The models test four neighborhood-level indices, all of which are based on data from the 2000 census. For each index, we calculate a z-score based on the tract-level percentage of two or more population characteristics and then calculate the mean of the characteristics. The models

include traditionally-used measures for concentrated economic disadvantage and concentrated immigration (Sampson, Morenoff and Gannon-Rowley 2002; Wilson 1987), but also newer measures of concentrated affluence and residential stability (Brooks-Gunn, Duncan, and Aber 1997; Morenoff, Sampson, and Raudenbush 2001). The measure of neighborhood disadvantage includes: % receiving public assistance, % unemployed adults, % households below poverty, and % single-parent households. Neighborhood immigration combines % Hispanic and % foreign-born residents. The index of neighborhood affluence combines the following: % of households earning more than \$75,000/year, % residents with at least a college degree, and the % residents employed in a management position. Residential stability combines the % owner-occupied homes and the % of residents who have been in the same more five years or longer.

Method

We use a treatment effects model to account for endogeneity within our theoretical model. Because people self-select homeownership, and homeownership and social capital are predicted by a similar set of socio-demographic indicators, a simple regression model would produce correlation between the variables and the residuals and thus skew the results. The treatment effects model accounts for this correlation by measuring the effect of a binary endogenous variable (homeownership) on another endogenous continuous variable (social capital), conditional on 2 sets of independent variables (Vella and Verbeek 1999). We therefore estimate two equations: a probit model predicting homeownership (the treatment model) and a linear model predicting social capital as a function of homeownership, neighborhood tenure, and the confounding control variables. These are estimated using the */treatreg/* routine in Stata.

A key component of the treatment effects model is that the equation predicting homeownership must include an independent variable which predicts homeownership but is unrelated to social capital (Pearl 2000). For the instrument variable in this analysis, we include a

measure of the relative cost of homeownership at the MSA level based on 2000 Census data. This measure is calculated as the ratio of mean monthly mortgage payment for homeowners to mean monthly rent payment for renters; higher values mean that owning a home is more costly than renting. The relative homeownership cost is an ideal measure for instrumenting homeownership because it is strongly correlated with homeownership rate (Green and White 1997) yet is unrelated to social capital². We run two identical models, one predicting overall social capital and one predicting neighborhood-specific social capital. Because we have multiple observations within MSAs, we obtain robust variance estimates to account for clustering at the MSA level (Froot 1989). This is accomplished using the */cluster/* command.

Findings

Table 2 presents the model instrumenting homeownership. Because this is the first equation in all the subsequent analyses, it is presented only in Table 2 in order to simplify the interpretation of later results. The variables for education and whether a child lived at home were non-significant and therefore cut from the model. All the significant variables are related to homeownership as expected. Unlike Green and White (1997), we find that the likelihood of homeownership increases as the relative cost of owning a home versus renting increases. One possible explanation for this is that people may decide to purchase a home when house values are appreciating rapidly because they expect to gain equity and build wealth rapidly. Another explanation is that mean rent cost in some inner-city neighborhoods may be so low that even when owning a home costs significantly more than renting, it is still a viable option. Regardless of the reason, the relative homeownership cost variable is statistically significant and therefore functions as an appropriate instrumental variable.

TABLE 2 ABOUT HERE

² We ran OLS regression models to verify that there is no significant relationship between social capital and area housing cost in the CAP data set.

TABLE 3 ABOUT HERE

Overall Social Capital

Table 3 presents the treatment effects model predicting overall social capital. The first model is a bivariate model predicting social capital based only on the instrumented homeownership variable. In this model, homeownership is associated with a 1.72 point increase in social capital, a substantial effect given that social capital is being measured on a 0-8 scale.

The second model includes the full set of socio-demographic control variables. Of these, only having children in the home is not related to social capital. Age appears to have a threshold effect around age 40 with no significant differences among respondents under 40. People over 40, however, had fewer social capital resources with the effect size increasing with age.

We find that, compared to whites, being black is associated with a 0.4 increase in one's social capital resources. This is consistent with Stack's (1983) work on the social networks of lower-income black households. Interestingly, we find the opposite effect when looking at Hispanic households, which have 0.6 fewer resources than whites. We speculate that this may be because more recent immigrants have not had the opportunity to develop extensive social networks; additionally, language barriers may limit the social networks of some Hispanic families. It is also possible that certain social resources we measure in this analysis, such as contacts in the media or political activism, are less relevant to some Hispanic families, particularly undocumented residents or recent immigrants.

Another notable finding is that only being divorced (as opposed to married) is statistically significant. This is likely because people who get divorced rely more on their social networks for assistance with things they may have previously received from their partner like handling stress or obtaining food when sick. Another possibility is that divorced respondents may spend more time socializing in groups and therefore may have larger social networks than married or cohabiting

respondents.

Higher levels of education are associated with increased social capital, and the effect size increases as level of education increases. This trend has two possible explanations. First, as mentioned earlier, attending college may give one an opportunity to interact with more people and therefore expand one's social networks. Another explanation is that education is closely tied to occupation and, in turn, occupational prestige. In fact, the position generator instrument used to measure social capital is based on the theory that people with higher occupational prestige have more social resources (Lin & Dumin 1986). The principal of social homophily suggests that people with more education and therefore more occupational prestige are more likely to socialize with others similar to themselves, putting them in contact with others who have social resources. However, this connection between educational attainment and social capital resources merits further study, as it has not been extensively studied within low- to moderate-income populations.

Finally, comparing employment status and social resources, we find that only unemployed respondents differ significantly from those who are employed. Being unemployed is associated with a 0.4 decrease in social capital resources. This is likely due to a decline in frequent interactions with co-workers and the stigma of unemployment.

The third model in Table 3, the full model, adds variables for neighborhood tenure duration and neighborhood effects. Unexpectedly, none of these measures are significant. Finally, we add the measure of neighborhood group membership, hypothesized to have an indirect effect by mediating the association between homeownership and social capital. This measure is significant, so we run the Sobel-Goodman mediation test³ to determine how much of the direct effect of homeownership is mediated by the inclusion of the neighborhood group membership variable. The test indicates that the indirect effect is significant but small, accounting for only 2.68% of the total

³ Available in STATA through the *sgmediation* module.

homeownership effect.

TABLE 4 ABOUT HERE

Neighborhood Social Capital

Table 4 presents the treatment effects model predicting neighborhood social capital. In contrast to the measure of overall social capital, neighborhood social capital is a measure only of the number of social resources a person can access through network connections within his or her neighborhood. This model includes the instrumented variable for homeownership obtained from the results presented in Table 2. The dependent variable is the sum total of resources to which people have access through social connections with others in their neighborhoods.

There are three important findings in Table 3. First, homeownership does significantly predict neighborhood social capital. The bivariate model yields a coefficient of 0.88 and the trimmed (best fit) model yields a coefficient of 1.14. This supports our hypothesis that homeownership provides residents with a platform from which to connect and interact with neighbors.

A second notable finding is that most of the socio-demographic characteristics that were predictive of social capital resources overall are not significant when looking at social capital within the neighborhood. The age effect is largely gone with only those age 80 and older differing significantly from respondents under 30. The most highly educated respondents have more neighborhood-specific social capital, but the remaining age categories are not significant in this model. Finally, having a child in the home does increase social capital resources within the neighborhood.

Third, both neighborhood tenure duration and neighborhood effects have no impact on social capital acquired via social ties with neighbors. Neighborhood group membership, however, is

significant. We ran the Sobel-Goodman mediation test and determined that 5.05% of the overall homeownership effect on neighborhood social capital is explained by neighborhood group membership.

Discussion

Taken together, our findings offer strong support for Hypothesis 1. In every model, homeowners have more social capital overall and within their neighborhoods than renters. Given that our models accounted for endogeneity and included an extensive set of individual-level and neighborhood-level controls, we feel confident in the assertion that homeownership is associated with increased social capital in low- to moderate-income urban neighborhoods.

The second hypothesis was that the relationship between homeownership and social capital remains significant when accounting for residential mobility and neighborhood effects. Findings support this hypothesis also, but it must be noted that our models show no significant relationship between social capital and either neighborhood tenure duration or any measures of neighborhood effects. This is in direct contrast to some prior studies which have suggested that neighborhood conditions such as overall residential stability or economic conditions may impact the degree to which residents form social capital ties within their neighborhoods (Dietz 2002). Indeed, it is possible that there are interaction effects between tenure status and neighborhood conditions. Renters who live in neighborhoods with high homeownership rates may act more like homeowners than renters who live in areas with low homeownership rates. This possibility points to the need for future studies to explore the specific mechanisms by which homeownership increases social capital.

Our final hypothesis was that neighborhood group membership has an indirect effect on social capital but does not completely mediate the homeownership effect. This hypothesis is fully supported by our findings. Neighborhood group membership does have a significant positive impact on social capital, but it accounts for a relatively small portion of the direct homeownership

effects.

Limitations

Our study is limited to low- and moderate-income homeowners. It is likely that unmeasured factors influence whether or not someone within this population elects to become a homeowner, factors that differ from those that motivate homeownership among the middle- and upper-classes. Lower-income residents who rent their homes likely do so out of financial necessity, while middle-class renters may feel that they have the option to buy a home and elect not to do so for non-financial reasons. These findings therefore should not be generalized to all homeowners. It is also important to note, especially in light of the recent housing downturn in the United States, that all of the homeowners who participated in the CAP program initially received 30-year fixed-rate mortgages with a maximum 38% debt-to-income ratio⁴. We therefore stipulate that our conclusions on the benefits of homeownership are predicated on home buyers obtaining responsible mortgage products that do not create financial strain.

Finally, we acknowledge there is likely a reciprocal relationship between homeownership and social capital. Potential homebuyers who have social ties to people such as mortgage brokers or real estate agents may find it easier to be successful in their efforts to purchase a home. In order to minimize the impact that this had on our empirical models, we selected measures of social capital which we believe would not influence one's ability to become a homeowner. Further research, particularly longitudinal analysis, is needed to determine the role that social capital plays in facilitating homeownership.

Implications

Our research speaks to an ongoing debate surrounding the costs and benefits of promoting homeownership among low- to moderate-income families. Much of the research on this topic has

⁴ Of the original CAP borrowers who remain in their CAP homes, 43% have refinanced out of the CAP program. Of those who refinanced, 87% received a fixed-rate mortgage with a mean APR reduction of 1.7%.

focused on economic costs and benefits, as homeownership provides an opportunity to build wealth but can be financially burdensome for families with limited resources. However, there are also important social benefits to homeownership that need to be considered in this discussion.

Our research suggests that homeownership provides an opportunity structure for social interaction and fosters greater social involvement within one's neighborhood. We conclude that, through this involvement, homeowners have opportunities to expand their social networks and interact with others with social resources in their local communities. Importantly, the increased social capital of low- and moderate-income homeowners is not entirely a result of being less mobile, although other people's expectations of future mobility may make them less likely to initiate social ties with renters. Homeownership, therefore, can provide a pathway to "social wealth" for low- and moderate-income families.

This is especially important in light of the economic housing market downturn that began in early 2006. Our research suggests that there are social benefits to policies aimed at supporting homeownership among the low- and moderate-income population. Programs designed to help homeowners remain in their homes during the housing market decline may not only provide a financial safety net, but could also help these owners retain social capital. Based on the findings presented in this paper, we conclude that policy makers need to consider both the economic and social costs and benefits of homeownership when evaluating potential policy interventions.

Our research also contributes to a sociological understanding of how social capital is developed. Past studies of social capital have documented socio-demographic patterns in the distribution of social capital but have often failed to account for the causes of those differences beyond explanations that rely on macro-level social structures. According to such studies, different groups have more or less social capital due to the opportunities or disadvantages those groups face overall. Our analysis asks whether an individual-level decision can create opportunities to gain social

capital when controlling for the structural differences documented in other studies. Based on the finding that entry into homeownership does increase social capital among lower-income residents, we encourage other scholars to expand research on social capital beyond the traditional focus on structural antecedents and consider individual-level catalysts.

TABLES

Table 1 : Descriptive Statistics (N=2902)

Variable	Mean	Std. Dev.	Freq.	Min	Max
Social capital resources	6.04	1.71	--	0	8
Neighborhood social capital	2.46	2.28	--	0	8
Homeowner	--	--	69.70%	0	1
Member of neighborhood group	--	--	18.86%	0	1
Neighborhood concentrated disadvantage	0.04	0.57	--	-0.78	4.33
Neighborhood concentrated immigration	-0.12	0.76	--	-0.69	4.74
Neighborhood residential stability	-0.07	0.52	--	-5.57	1.27
Neighborhood concentrated affluence	-0.24	0.74	--	-1.52	3.10
<1yr. in neighborhood	--	--	19.08%	0	1
1-3yrs. In neighborhood	--	--	52.07%	0	1
3+yrs. In neighborhood	--	--	28.85%	0	1
Age <30 years	--	--	16.21%	0	1
Age 30-39	--	--	36.03%	0	1
Age 40-49	--	--	23.22%	0	1
Age 50-59	--	--	15.98%	0	1
Age 60-69	--	--	07.24%	0	1
Age 70-79	--	--	01.11%	0	1
Age 80+	--	--	00.20%	0	1
White	--	--	60.36%	0	1
Black	--	--	23.53%	0	1
Hispanic	--	--	12.67%	0	1
Other race	--	--	03.43%	0	1
Married	--	--	46.73%	0	1
Cohabiting	--	--	07.82%	0	1
Widowed	--	--	03.67%	0	1
Divorced/separated	--	--	21.00%	0	1
Single	--	--	20.76%	0	1
HS degree or less	--	--	56.05%	0	1
2-year degree	--	--	14.46%	0	1
4-year degree	--	--	19.85%	0	1
Advanced degree	--	--	09.64%	0	1
Employed	--	--	80.25%	0	1
Unemployed	--	--	04.95%	0	1
Retired	--	--	05.19%	0	1
Not in labor force	--	--	09.60%	0	1
Relative income	1.13	0.76	--	0	8.37
Child(ren) in home	--	--	57%	0	1
Median housing cost to rent ratio	2.13	0.19	--	1.70	2.79

Table 2: Logistic Regression Model Instrumenting Homeownership

Variable ¹	Effect ²
Housing cost to rent ratio	+
Age 30-39 ³	+
Age 40-49 ³	+
Age 50-59 ³	+
Age 60-69 ³	+
Age 70-79 ³	+
Age 80+ ³	+
Black ⁴	-
Hispanic ⁴	-
Other race ⁴	-
Cohabiting ⁵	-
Widowed ⁵	-
Divorced/separated ⁵	-
Single ⁵	-
Unemployed ⁶	-
Retired ⁶	-
Not in labor force ⁶	-
Relative income	+

¹Variables for education and having child(ren) in the home were non-significant and trimmed from the final model

²All reported effects are significant at the p<0.05 level

³Reference group is Age under 30; ⁴reference group is White; ⁵reference group is Married; ⁶reference group is Employed

Table 3: Overall Social Capital Regressed on Homeownership, Residential Mobility, and Neighborhood Measures: Treatment Effects Model

	Bivariate model	Base model	Full model	Trimmed model	Indirect effect
Homeowner (instrumented)	1.72*** (0.16)	0.91*** (0.30)	0.89*** (0.30)	0.91*** (0.29)	0.88*** (0.30)
Age 30-39 ¹		-0.18 (0.10)	-0.19 (0.10)	-0.18 (0.10)	-0.19 (0.10)
Age 40-49 ¹		-0.22* (0.11)	-0.21 (0.11)	-0.22* (0.11)	-0.23* (0.11)
Age 50-59 ¹		-0.44*** (0.14)	-0.43*** (0.14)	-0.44*** (0.13)	-0.47*** (0.13)
Age 60-69 ¹		-0.52*** (0.18)	-0.49** (0.18)	-0.51*** (0.18)	-0.59*** (0.18)
Age 70-79 ¹		-1.26*** (0.42)	-1.22*** (0.42)	-1.26*** (0.41)	-1.31*** (0.41)
Age 80+ ¹		-0.93** (0.36)	-0.97** (0.38)	-0.92** (0.36)	-1.13* (0.49)
Black ²		0.40*** (0.09)	0.43*** (0.10)	0.40*** (0.09)	0.31*** (0.09)
Hispanic ²		-0.62*** (0.12)	-0.56*** (0.13)	-0.63*** (0.12)	-0.62*** (0.12)
Other race ²		-0.16 (0.20)	-0.15 (0.20)	-0.16 (0.20)	-0.19 (0.20)
Cohabiting ³		-0.05 (0.13)	-0.03 (0.13)	-0.04 (0.13)	-0.03 (0.13)
Widowed ³		0.40 (0.23)	0.41 (0.23)	0.40 (0.23)	0.44* (0.22)
Divorced/separated ³		0.32*** (0.11)	0.33*** (0.11)	0.32*** (0.10)	0.33*** (0.10)
Single ³		0.16 (0.11)	0.18 (0.11)	0.17 (0.10)	0.17 (0.10)
2-year degree ⁴		0.35*** (0.10)	0.34*** (0.10)	0.35*** (0.10)	0.35*** (0.10)
4-year degree ⁴		0.55*** (0.08)	0.53*** (0.08)	0.55*** (0.08)	0.51*** (0.08)
Advanced degree ⁴		0.77*** (0.10)	0.76*** (0.10)	0.78*** (0.10)	0.69*** (0.10)
Unemployed ⁵		-0.42** (0.17)	-0.39* (0.17)	-0.42** (0.17)	-0.44** (0.17)
Retired ⁵		-0.43 (0.24)	-0.42 (0.24)	-0.43 (0.24)	-0.47* (0.24)
Not in labor force ⁵		-0.29 (0.15)	-0.27 (0.16)	-0.29 (0.15)	-0.29 (0.15)
Relative income		0.18*** (0.06)	0.20*** (0.06)	0.18*** (0.06)	0.17** (0.06)
Child(ren) in home		-0.02 (0.07)	-0.01 (0.07)		

Table 3 (cont.): Overall Social Capital Regressed on Homeownership, Residential Mobility, and Neighborhood Measures: Treatment Effects Model

	Bivariate model	Base model	Full model	Trimmed model	Indirect effect
<1yr. in neighborhood ⁶			0.10 (0.11)		
1-3yrs. in neighborhood ⁶			0.04 (0.09)		
Neighborhood disadvantage			-0.08 (0.08)		
Neighborhood immigration			-0.03 (0.06)		
Neighborhood stability			0.04 (0.07)		
Neighborhood affluence			0.02 (0.06)		
Neighborhood group membership					0.59*** (0.08)
Constant	4.88*** (0.12)	5.16*** (0.21)	5.10*** (0.22)	5.15*** (0.20)	5.12*** (0.20)
Log pseudolikelihood	-5817.92	-5686.27	-5683.88	-5686.29	-5660.89
rho	-0.46	-0.19	-0.20	-0.19	-0.20
lambda	-0.80	-0.30	-0.32	-0.30	-0.31

Robust standard errors in parentheses, adjusted for 1766 tract-level clusters

*p<0.05; **p<0.01; ***p<0.001

¹Reference group is Age under 30; ²reference group is White; ³reference group is Married; ⁴reference group is HS degree or less; ⁵reference group is Employed; ⁶reference group is 3+yrs. in neighborhood

Table 4: Neighborhood Social Capital Regressed on Homeownership, Residential Mobility, and Neighborhood Measures: Treatment Effects Model

	Bivariate model	Base model	Full model	Trimmed model	Indirect effect
Homeowner (instrumented)	0.88*** (0.19)	0.80 (0.63)	0.75 (0.66)	1.14*** (0.23)	1.11*** (0.22)
Age 30-39 ¹		-0.07 (0.17)	-0.07 (0.17)	-0.12 (0.14)	-0.15 (0.14)
Age 40-49 ¹		0.31 (0.17)	0.31 (0.17)	0.25 (0.15)	0.20 (0.14)
Age 50-59 ¹		0.18 (0.19)	0.17 (0.19)	0.11 (0.16)	0.03 (0.16)
Age 60-69 ¹		0.45 (0.24)	0.39 (0.24)	0.49* (0.21)	0.34 (0.20)
Age 70-79 ¹		-0.48 (0.64)	-0.47 (0.64)	-0.58 (0.44)	-0.65 (0.44)
Age 80+ ¹		-1.92*** (0.59)	-1.80*** (0.62)	-1.89*** (0.34)	-2.01*** (0.50)
Black ²		0.07 (0.14)	-0.03 (0.16)		
Hispanic ²		-0.19 (0.14)	-0.17 (0.16)		
Other race ²		-0.35 (0.25)	-0.35 (0.25)		
Cohabiting ³		-0.04 (0.19)	-0.06 (0.19)		
Widowed ³		-0.20 (0.26)	-0.25 (0.26)		
Divorced/separated ³		-0.09 (0.16)	-0.12 (0.16)		
Single ³		0.05 (0.17)	-0.01 (0.17)		
2-year degree ⁴		0.34 (0.13)	0.34 (0.13)	0.35 (0.13)	0.34 (0.13)
4-year degree ⁴		0.14 (0.12)	0.15 (0.12)	0.18 (0.12)	0.09 (0.11)
Advanced degree ⁴		0.51*** (0.17)	0.52*** (0.17)	0.52*** (0.17)	0.38* (0.17)
Unemployed ⁵		-0.13 (0.25)	-0.18 (0.26)		
Retired ⁵		0.36 (0.30)	0.34 (0.30)		
Not in labor force ⁵		0.25 (0.24)	0.17 (0.25)		
Relative income		0.17 (0.12)	0.17 (0.12)		
Child(ren) in home		0.26** (0.10)	0.26** (0.10)	0.23* (0.10)	0.25** (0.09)

Table 4 (cont.): Neighborhood Social Capital Regressed on Homeownership, Residential Mobility, and Neighborhood Measures: Treatment Effects Model

	Bivariate model	Base model	Full model	Trimmed model	Indirect effect
<1yr. in neighborhood ⁶			-0.03 (0.15)		-0.01 (0.15)
1-3yrs. in neighborhood ⁶			-0.27 (0.11)		-0.27 (0.11)
Neighborhood disadvantage			0.19 (0.11)		
Neighborhood immigration			-0.05 (0.06)		
Neighborhood stability			0.08 (0.10)		
Neighborhood affluence			0.05 (0.08)		
Neighborhood group membership					1.04*** (0.12)
Constant	1.82*** (0.13)	1.31*** (0.41)	1.55*** (0.43)	1.48*** (0.18)	1.35*** (0.17)
Log pseudolikelihood	-6948.37	-6921.61	-6915.69	-6925.60	-6879.50
rho	-0.15	-0.13	-0.09	-0.19	-0.20
lambda	-0.33	-0.29	-0.21	-0.44	-0.45

Robust standard errors in parentheses, adjusted for 1766 tract-level clusters
 *p<0.05; **p<0.01; ***p<0.001
¹Reference group is Age under 30; ²reference group is White; ³reference group is Married; ⁴reference group is HS degree or less; ⁵reference group is Employed; ⁶reference group is 3+yrs. in neighborhood

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Kim Maturuk received a PhD in sociology from the University of North Carolina at Chapel Hill and is a research associate at the Center for Community Capital. Her research examines social networks, social capital, and civic engagement with a focus on urban neighborhoods. She has published several articles on civic and political engagement in low-income communities, and she is currently writing a book on the social impacts of homeownership in low-income urban neighborhoods.

Mark Lindblad, Ph.D., is research director for UNC-CH's Center for Community Capital and manages a panel study evaluation of an affordable secondary mortgage market initiative. The longitudinal study examines the financial and social impacts of homeownership among low-income borrowers and a comparison group of renters. Dr. Lindblad's research interests include community economic development, social capital, housing and bankruptcy.

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