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# The impact of low- and moderate-wealth homeownership on parental attitudes and behavior: Evidence from the community advantage panel

Michal Grinstein-Weiss<sup>a,b,\*</sup>, Johanna K.P. Greeson<sup>b</sup>, Yeong H. Yeo<sup>b</sup>, Susanna S. Birdsong<sup>b</sup>, Mathieu R. Despard<sup>b</sup>, and Roberto G. Quercia<sup>a</sup>

<sup>a</sup>Center for Community Capital, University of North Carolina at Chapel Hill, United States

bSchool of Social Work, University of North Carolina at Chapel Hill, United States

#### **Abstract**

Considerable research has suggested that homeownership imparts a variety of positive individual, family, neighborhood, and community effects. Yet, much of the research to date has failed to examine such effects by level of income [Dietz, R.D., & Haurin, D.R. (2003). The social and private micro-level consequences of homeownership. Journal of Urban Economics, 54(3), 401–450.]. This study adds to the limited research on the impact of assets on parental attitude and behavior among low- and moderate-income (LMI) families. Data used in this study are from the evaluation of Self-Help's Community Advantage Home Loan Secondary Market Program. Specifically, we focus on the differences in the demographic and financial backgrounds, and parental attitudes and behavior between LMI homeowners and a comparison group of renters (n=815 owners; n=333 renters). Logistic regression analyses are used to model parental attitude and behavior outcomes on tenure, controlling for a variety of household characteristics. Results show that the overall differences between homeowners and renters on parental outcomes are statistically nonsignificant. This finding implies that tenure *per se* is not associated with parental attitudes and behavior. Explanations for the possible reasons for the lack of a tenure effect are discussed. Policy implications are forwarded.

#### **Keywords**

Homeownership; Renters; Tenure; Parent attitudes and behavior; Outcomes; Low-income; Self-Help; Community Advantage Home Loan Secondary; Market Program

#### 1. Introduction

As the beacon of the American Dream, current rates of homeowner-ship reached an all time high in 2004 (69.2%) and remain near historic highs (U.S. Department of Commerce, 2007).

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<sup>\*</sup>Corresponding author. School of Social Work at the University of North Carolina -Chapel Hill. michalgw@email.unc.edu (M. Grinstein-Weiss).

Reprints are available from Michal Grinstein-Weiss, School of Social Work, University of North Carolina-Chapel Hill, 325 Pittsboro Street, CB #3550, Chapel Hill, NC 27599; michalgw@email.unc.edu.

Fueled by actions of both the Clinton and Bush administrations, each of which enacted policies focused on increasing affordable homeownership opportunities (e.g., the Bush 2002 Blueprint for the American Dream initiative to encourage minority homeownership), America's preference for homeownership over rental housing remains strong (Rohe & Watson, 2007).

Considerable research on the benefits of homeownership has suggested that homeownership imparts a variety of positive individual, family, neighborhood, and community effects. This array of beneficial effects includes increased household wealth (McCarthy, Van Zandt, & Rohe, 2001; Skinner, 1989), greater financial stability (Haurin & Gill, 2002; South & Deane, 1993), increased labor force participation (Coulson & Fisher, 2002), better housing maintenance and property improvements (Galster, 1983; Henderson & Ioannides, 1983), increased environmental awareness (Daneshvary, Daneshvary, & Schwer, 1998; Mainieri, Barnett, Valdero, Unipan, & Oskamp, 1997), greater involvement in political and social activities (DiPasquale & Glaeser, 1999; Drier, 1994), improved health status of residents (Robert & House, 1996; Rossi & Weber, 1996), enhanced child outcomes (Aaronson, 2000; Haurin, Parcel, & Haurin, 2002) and higher parental expectations for children (Zhan & Sherraden, 2003). Yet, much of the research to date has neglected to examine such effects by level of income (Dietz & Haurin, 2003). That is, our collective knowledge base is built primarily on studies of middle- and high-income homeowners (Shlay, 2006). As such, whether the benefits of homeownership generalize to low- and moderate-income populations remains relatively unproven (Reid, 2004). Furthermore, the mechanisms by which homeownership may result in positive outcomes are little explored. In short, the effects of homeownership may not be consistent across socioeconomic classes (Shlay, 2006), and the pathways that may account for such outcomes are unclear.

Over the last two decades, a number of community-based programs and policies have been developed to promote homeownership among low- and moderate-income (LMI) households (Reid, 2004). In recent years, loans to low-income homebuyers have increased considerably (Quercia, McCarthy, & Wachter, 2003). The American Dream Down Payment Act and the U.S. Department of Housing and Urban Development's (HUD, 1995) Homeownership Vouchers are two examples of federally funded programs recently created to promote lowincome homeownership by providing assistance for down payments and housing rehabilitation as well as mortgage payment assistance. Federal provision of mortgage revenue bonds to state housing finance agencies is promoting increased loan opportunities for low-income homebuyers at the local level (National Council of State Housing Agencies, 2007). Individual Development Account programs are another example of a program that facilitates saving for a home by low- and moderate- income households and provides incentives to save and invest in assets. One program that reaches many LMI households is Self-Help's Community Advantage Secondary Home Loan Mortgage Program (CAP). CAP was created with the intent of expanding LMI homeownership opportunities by increasing secondary market liquidity for mortgages made to these households.

Despite these new initiatives and the increased rates of LMI homeownership that have resulted, little evidence exists regarding the benefits of LMI homeownership. Moreover, as a relatively new trend, few efforts have been made to collect longitudinal data for the purpose

of examining the impact of homeownership on LMI families. Therefore, many critical questions are unanswered. Examples of these questions include, "Does homeownership positively influence the financial and social outcomes of LMI families; How does homeownership affect the communities in which LMI homebuyers live; and How does home-ownership influence parental involvement among LMI homebuyers?"

Building on the premise that LMI homeownership is an effective strategy for social and economic development, CAP was launched as a national pilot program in 1998. The program's short-term goals were to expand the secondary market for affordable mortgages and to increase the accessibility of home loans for LMI homebuyers. In the longer term, CAP will ultimately provide evidence to lenders that LMI borrowers are "bankable," and that Fannie Mae and Freddie Mac can significantly expand the purchase of affordable housing loans without compromising their concerns for safety and fiscal soundness. The purpose of this study is to examine the impact of homeownership on several parental characteristics (i.e., supervision of children, expectation for children's education, and level of volunteering) as compared to characteristics of a group of parents living in rental housing.

### 2. Homeownership, parenting practices, and child outcomes

The effects of homeownership and parenting practices on child well-being are frequently used as outcome measures in research studies. Although the two measures have rarely been studied in combination, the literature appears unanimous in the assertion that children benefit from living families in which parents own their homes, and that children benefit from increased parental supervision and involvement. However, research demonstrating a clear connection among the three areas of asset ownership, parenting practices and child outcomes is scarce. Therefore, we review child well-being outcomes associated with both homeownership and parental practice in three different categories: (a) educational attainment; (b) behavioral, emotional, and social problems; and (c) health issues. We then review emerging research that examines the pathways between asset ownership, parenting practices, and child outcomes.

#### 2.1. Educational outcomes

In their study using multiple nationally representative data sets (i.e., Panel Study for Income Dynamics [PSID], Public Use Microsample of the 1980 Census of Population and Housing, and High School and Beyond), Green and White (1997) found that homeownership significantly influenced the probability of children staying in school until age 17 years, with the strongest effect occurring among children living in low-income families. PSID data were also used in four studies that assessed the influence of homeownership on educational outcomes of children (Aaronson, 2000; Boehm & Schlottman, 1999; Harkness & Newman, 2002; Haurin et al., 2002). All four studies found a positive and significant association between homeownership and children's educational attainment. Homeownership has also been shown to predict higher academic achievement in both reading and math for the children of homeowners as compared to children living in rental housing (Gagne & Ferrer, 2006; Haurin et al., 2002; Zhan & Sherraden, 2003).

The influence of parental factors on children's academic achievement has been an issue of long-standing interest (Englund, Luckner, Whaley, & Egeland, 2004; Fan & Chen, 2001). Increasing parental involvement and expectations are often considered two of the primary ways to improve children's educational performance; a belief that is supported by a substantial body of research. Parental involvement has been linked with enhanced academic achievement among students of various backgrounds and grades, from kindergarten (Miedel & Reynolds, 1999) through middle and high school (Keith & Keith, 1993; Keith & Lichtman, 1994; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Similarly, parental expectation for a child's achievement has emerged as an important characteristic that influences later child outcomes. Studies have consistently confirmed the *expectancy of success* theory, whereby parents' high expectation for child achievement predicts later educational success (e.g., Alexander, Entwisle, & Bedinger, 1994; Davis-Kean, 2005; Halle, Kurtz-Costes, & Mahoney, 1997; Hess, Holloway, Dickson, & Price, 1984).

#### 2.2. Behavioral, social, and emotional problems

The impact of low-income homeownership on child emotional and behavioral problems has also been closely examined. Using data from the Ontario Child Health Study and the National Longitudinal Study of Children and Youth, both of which are large-scale general population surveys, Boyle (2002) found an inverse association between home-ownership and ratings of child emotional and behavior problems. That is, homeownership was associated with lower incidence of child emotional and behavior problems, with the strongest homeownership influence found in teacher ratings, followed by parent ratings, and then youth ratings. Similarly, in a separate study Haurin, Parcel and Haurin (2002) found a decreased rate of behavioral problems among children of homeowners. Based on mothers' reports on 28 items, the mothers of children living in owned homes reported 1% to 3% lower incidence of behavior problems than did mothers of children living in rented homes. Cairney (2005) investigated the hypothesis that age moderates the relationship between housing tenure and emotional problems. Among 12- to 14-year olds, the incidence of depressionwas approximately three times higher among youth living in rental housing as compared to those living in owner-occupied housing.

Several studies have examined the impact of parental home-ownership on children's later social problems, including welfare receipt, average hourly wage rates, idleness, and teenage pregnancy. Harkness and Newman (2002) showed that children of homeowners had a 9% lower chance of receiving welfare and a \$0.70 increase in wage rates between ages 24 and 28 years as compared to children of renters. These authors also showed that by the age 20, children of homeowners had rates of idleness 7% lower than their peers who were children of renters. Similarly, Green and White (1997) demonstrated that daughters of homeowners were significantly less likely than daughters of renters to have a child by age 18.

The link between parenting practices and child behavior is well documented. Parental supervision is a proven protective factor against negative behaviors such as delinquency, alcohol use, and drug use (Barber & Olsen, 1997; Barrera, Biglan, Ary, & Li, 2001; Herman, Dornbush, Herron, & Herting, 1997). In addition, parental supervision has an effect on adolescent delinquency. Parents who provide adequate supervision (either direct or

indirect) reduce the likelihood of their child engaging in delinquent behavior (Warr, 2005). Moreover, the quality of parental bonding can mitigate the level of influence that delinquent peers exert on adolescents. In other words, the more positively involved a parent is in a child's life, the less likely that child is to be negatively influenced by his or her peers (Vitaro, Brendgen, & Tremblay, 2000).

#### 2.3. Health issues

Using homeownership as a proxy for socioeconomic status (SES), researchers have also examined the relationship between parental SES and later health outcomes. For example, Cohen, Doyle, Turner, Alper, and Skoner (2004) investigated whether childhood SES is associated with adult host resistance to infectious illness. Results showed that homeownership during early childhood was associated with decreased resistance to upper respiratory infections in adulthood. Childhood asthma has also been used as a health outcome related to parental SES. Chen et al. (2006) found that in children with asthma, lower SES (i.e., rental housing) was associated with heightened production of inflammatory proteins (cytokines IL-5 and IL-13) related to asthma and higher numbers of white blood cells (eosinophils) associated with allergy and asthma. Recently, Miller and Chen (2007) found that young adults whose families owned homes during their childhood years showed lower expression of a pro-inflammatory phenotype in adolescence — a profile that suggests better regulation of inflammatory responses and, therefore, better overall physical health.

Parental supervision and involvement play an important role in either discouraging or facilitating risk behaviors, such as drug and alcohol use, for both children and adolescents (Fothergill & Ensminger, 2006). Many studies have found that low levels of parental supervision and few bonds to school increase the risk of substance use disorders beginning in adolescence (Ensminger, Juon, & Thergill, 2002; Hawkins, Catalano, & Miller, 1992; Jessor, Donovan, & Costa, 1991; Kandel, Simcha-Fagan, & Davies, 1986; Li, Feigelman, & Stanton, 2000; O'Donnell, Hawkins, & Abbott, 1995; Patterson & Dishion, 1988). In addition, low levels of parental supervision and decreased levels of parent—child bonding have also been show to contribute to higher rates of teen pregnancy, whereas increased parental supervision and closer parent—child relationships lead to higher rates of contraceptive use (Miller, 2002).

It is important to note that many of the studies regarding the impact of homeownership reviewed above did not account for self-selection bias. Thus, it is hard to establish a causal relationship between homeownership and social and economic outcomes (Rohe, McCarthy, & Van Zandt, 2000). For example, it is entirely conceivable that a person might develop an interest in community activities independent of becoming a homeowner. Therefore, the relationship between homeownership and social tendencies, such as community participation, is spurious (Rohe et al., 2000).

#### 3. Parental involvement, expectations, and child outcomes

Recent and innovative research is exploring how parental involvement and expectations may mediate the relationship between assets and child outcomes. Zhan (2006) found that parental assets were associated with higher parental expectations and increased parental involvement

in their child's school activities. In addition, parental expectations were found to partially mediate the relationship between asset holding and children's educational performance. Specifically, higher maternal expectations for educational achievement were related to higher math and reading scores. Similarly, Zhan and Sherraden (2003) examined the relationship between mothers' assets (homeownership and savings) and mothers' expectations for their child's educational achievement, and actual child educational outcomes in poor, female-headed households. Results revealed that mothers who were homeowners had higher expectations than those who were renters. In addition, when other assets, such as savings, were examined, researchers found that mothers with \$3000 or more in savings had higher educational expectations for their children than those mothers with no savings or less than \$3000 in savings.

This study adds to the very limited research on the impact of LMI assets on parental attitude and behavior, and is the first quantitative evaluation of the effect of homeownership on these outcomes. Using a unique data set from the CAP program of homeowners and a comparison group of renters, this study offers a unique opportunity to examine the effect of LMI homeownership on parental supervision, parental education expectations, and volunteering behavior. Moreover, using a comparison group of renters, this study attempts to address the self-selection problem that pertains to the current homeownership research, and offers an improved opportunity to examine the relationship between homeownership and parenting practices. Specifically, we addressed the following questions:

- **1.** Are there differences on key demographic and financial characteristics between homeowners with children and the comparison group of renters with children?
- **2.** Are there differences between the homeowners and the comparison group of renters on levels of parental supervision, parental expectations, and parental volunteering?

#### 4. Method

#### 4.1. Context of this investigation

Data used in this study came from the evaluation of Self-Help's Community Advantage Home Loan Secondary Market Program (CAP), a secondary market program developed out of a partnership between the Ford Foundation, Fannie Mae and Self-Help, a leading Community Development Financial Institution. With a Ford Foundation grant to underwrite a significant portion of the credit risk, Self-Help purchases affordable mortgages such as Community Reinvestment Act (CRA) loans from participating lenders. These loans could not otherwise be readily sold in the secondary market due to such features as high debt to income levels, limited assets, lack of private mortgage insurance and/or non-traditional employment or credit history. Participating lenders originate and service the loans under contract with Self-Help. Because Self-Help retains recourse on these loans, it then consolidates and sells the loans to Fannie Mae, effectively creating a traditional outlet for otherwise illiquid loans. This contract with Self-Help allows lenders to extend home loans to customers who may not qualify under traditional mortgage guidelines.

To qualify, borrowers must meet one of three criteria: (a) have income under 80% of the area median income (AMI) for the metropolitan area; (b) be a minority with income below

120% of AMI; (c) or purchase a home in a high-minority (>30%) or low-income (<80% AMI) census tract and have an income below 120% AMI. With an average loan size of \$86,472 as of September 2007, the participating lenders appear to be serving the affordable market successfully. Median borrower income is \$30,600, and 86% of borrowers earn less than 80% of AMI. Thirty-eight percent of the borrowers are minority and 42% are femaleheaded households. The loans are overwhelmingly fixed-rate, purchase-money mortgages originated through retail channels. Sixty-nine percent of the loans had an original loan-to-value higher than 95%. Losses to date, as of its ninth year of operation, remain below 1% of loans purchased.

In 1998, the Ford Foundation enlisted the Center for Community Capital to conduct an evaluation of CAP to assess loan performance and the social and wealth impacts of homeownership for LMI borrowers. A quasi-experimental, longitudinal panel design allows the isolation of tenure effects and the close examination of the transition from rental to ownership. The study includes six annual interviews of borrowers to collect data on household and community characteristics.

As of 2007, four panel interviews (three for renters) have been collected and a fifth (fourth for renters) is in the field. The first survey (baseline) focused on the mortgage origination process, homeownership education, lender selection, closing costs, and so forth. The second survey wave repeated a set of core questions and added an additional module on parenting practices, the results of which are the topic of this paper. Waves three and four included an in-depth review of wealth, assets, and liabilities; financial literacy and attitudes; and sense of community. Based on the large number of study participants as well as the rigorous design, the CAP panel study provides a unique opportunity to advance the knowledge base regarding the performance of CAP loans and the diverse potential impacts of homeownership.

#### 4.2. Data and sample

The data used in this studycame from the 2004 to 2005 waves of data collection from the CAP panel of LMI homeowners and a comparison panel of LMI renters. All data were collected by Research Triangle Institute, International (RTI). The renter panel was chosen to mirror the homeowner population in terms of neighborhood location and income criteria (as previously described). Renters were chosen from the 31 U.S. metropolitan areas with the largest number of outstanding CAP loans. Further, the renter panel was created following the first year of data collection among homeowners with the aim of better isolating and understanding the effects of homeownership (Akin et al., 2004). All interviews lasted approximately 30 min and all respondents received a small monetary incentive for their participation. Twenty states and the District of Columbia are represented in the samples of CAP homeowners and their renter counterparts (Akin et al., 2004).

The CAP data set includes 4267 households (2616 owners; 1651 renters). Of these households, 1174 contained at least one school-age child (5 to 17 years old). After a listwise deletion of cases (n=26; n=22 owners, n=4 renters) with missing data on all outcome variables, the final analysis sample was comprised of 1148 households (815 owners; 333 renters).

#### 4.3. Measurement

**4.3.1. Dependent variables**—Parental attitude and behavior outcomes were based on six survey items that included two items addressing parental expectations, one item addressing parent volunteering at school, and three items addressing parental supervision.

Expectation was based on two items: "Do you expect that your child will graduate from high school?" and "Do you expect that your child will graduate from college?" These two items were then combined into a single outcome variable called *parental expectations*. Less than 1% of the sample indicated that they did not expect their child to graduate high school. Therefore, the expectation variable was re-coded into a dummy variable, where expectation for graduating from college was re-coded as 1, and graduating from high school or less than high school was re-coded as 0.

Volunteering was based on a single item that asked, "In the past 12 months, have you or your spouse/partner volunteered at a school, or been on a school committee?" Responses of "yes" were coded as 1; all other responses were coded as 0.

Principal component analysis (varimax rotation) indicated that three supervision items grouped into a single factor (alpha 0.86) and included the following items: "Do you or your spouse/partner know who the child's companions are when the child is not at home?; When the child is not at home, do you or your spouse/partner know where he/she is?; and "When the child is out do you or your spouse/partner know what time he or she will be home?" All items used the same response options: *mostly or all of the time, sometimes*, and *rarely*. Because the number of responses for *rarely* was small, we combined those responses with responses for *sometimes* into a single response for the factor analysis. When respondents answered *mostly* or *all of the time*, supervision was coded 1, otherwise supervision was coded 0.

- **4.3.2. Independent variable**—The independent variable indicates tenure, that is, whether the family owned the home or rented the home. Homeowners were coded as 1 and renters were coded as 0.
- **4.3.3. Control variable**—The control variables included various individual and household characteristics. Individual characteristics were based on the response from one respondent in each household. Individual demographics included age (in years); gender (1=male, 0=female); employment status (1=employed; 0=unemployed); a set of dummy variables indicating race/ethnicity: Black, Hispanic, Others, and White (the reference group); a set of dummy variables for marital status: married (the reference group), living with unmarried partner, divorced/separated/widowed, and never married; a set of dummy variables for education level: less than a high-school diploma (the reference group), high-school diploma, some college but no degree, and graduated from college; car ownership (1=yes, 0=no) and general credit card ownership (1=yes, 0=no). Household characteristics included the number of children (under 18 years) and adults (18 years and older) in the household; and a set of dummy variables for annual household income; income less than \$10,000 (the reference group), income between \$10,000 and \$19,999, income between \$20,000 and \$29,999,

income between \$30,000 and \$39,999, income between \$40,000 and \$49,999, and income between \$50,000 and \$80,000.

#### 4.4. Data analysis

This study focuses on the differences in the demographic and financial backgrounds, and parental attitudes and behavior between LMI homeowners and renters at baseline. Descriptive statistics were produced to capture a summary of the renters and owners in the CAP panel data. To answer our first research question regarding the differences in the demographic and financial characteristics between CAP homeowners and counterparts who were renters, we performed *t* and chi-square tests. To address our second question on the differences in the parental attitude and behavior outcomes, we used descriptive statistics for each outcome with chi-square tests. To confirm these results, we then conducted logistic regression analyses that modeled parental attitude and behavior outcomes on tenure (i.e., homeowner versus renter), controlling for a variety of household characteristics.

#### 5. Results

#### 5.1. Comparison of CAP homeowners and renters to AHS homeowners and renters

To establish the relative "representativeness" of the CAP homeowners and renters, we first compare the CAP homeowners and renters to the general population of LMI homeowners and renters in the United States based on data obtained from the American Household Survey (AHS). The U.S. Census Bureau conducts the national AHS every 2 years, and gathers information from approximately 55,000 households to determine the quality of U.S. housing. Reflecting CAP program criteria, the AHS data in Table 1 excludes homeowners over 65 years of age but includes all remaining households with income at or below 80% of the AMI. In addition, the AHS data also include all minority households with income at or below 120% of AMI. However, the census tracts for AHS participants could not be determined from the available data; therefore, the AHS sample does not reflect the third CAP participant criterion (i.e., nonminority borrowers with income from 80% to 120% of AMI who purchase a home in a high-minority or low-income census tract).

The comparison of AHS homeowners and renters with CAP homeowners and renters revealed many similarities in key areas as well as some interesting differences. The two samples were similar with respect to racial and ethnic makeup, gender, marital status, number of children, and size of household for both homeowners and renters. However, on average CAP homeowners, were more likely to be employed, have higher household income, and reported higher educational attainment than their AHS counterparts.

#### 5.2. Demographic and financial differences of homeowners and renters with children

Homeowners were found to have significantly better demographic and financial backgrounds compared to renters (Table 2). The majority of homeowners were White, college educated, and married. In contrast, most of the renters sampled were Black, had attained only a high-school education, and were not married. Further, when compared to renters, homeowners were more likely to be male and employed (p<0.001).

In addition, homeowners had significantly better economic resources than did renters. For example, 70% of homeowners had two or more vehicles, as compared to only 31% of renter household (p<0.001). In addition, 72% of homeowner households had at least one credit card, as compared to 29% of renter households (p<0.001). Moreover, homeowners reported significantly higher annual household income (\$41,147) as compared to renter households (\$23,599; p<0.001).

# 5.3. Parental attitude and behavior differences between homeowners and renters with children

We next conducted chi-square tests to assess differences between LMI owners and renters on each of the three outcome variables (Table 3). Homeowners reported significantly higher educational expectations for their children. Specifically, 90% of the owners indicated that they expected their children to graduate from college, as compared to 86% of renters (p<0.05). Homeowners also reported significantly greater supervision of their children as compared to renters, with 88% of the homeowners indicating that they knew a majority of their child's companions, their child's location when the child is not at home, and when their child will return home, versus 83% of the renters who reported equal levels of child supervision (p<0.05). Finally, a statistically significant greater percentage of homeowners (46%) reported volunteering at their child's school as compared to renters (34%; p<0.001).

#### 5.4. Logistic regression analysis

After adjusting for control variables, we found there were no overall differences between the LMI owners and renters on any of the three outcome variables. We next tested for significant predictors of the outcome variables (Table 4).

**5.4.1. Education expectations**—The following covariates emerged as significant predictors of parental education expectations: child gender and age, parent race or ethnicity and level of education, and number of adults in household. Controlling for all other covariates, a 1-year increase in child age was associated with an 11% decrease in the predicted odds of increased parental education expectations (p<0.001). Being a boy was associated with a 68% decrease in the predicted odds of increased parental education expectations (p<0.001). The odds of greater education expectations for Black parents were 123% higher than the odds for White parents (p < 0.01). The odds of greater education expectations for Hispanic parents were 361% higher than the odds for White parents (p<0.001). The odds of greater education expectations for parents who completed high school were 99% higher than the odds for parents with less than a high-school diploma (p<0.05). The odds of greater education expectations for parents who completed some college were 213% higher than the odds for parents with less than a high-school education (p<0.001). The odds of greater education expectations for parents who completed college and more were 558% higher than the odds for parents with less than a high-school education (p<0.001). A one adult increase in number of adults in household was associated with a 25% decrease in the predicted odds of increased parental education expectations (p<0.01).

**5.4.2. Supervision**—Parent age and race or ethnicity also emerged as significant predictors of supervision. Controlling for all other covariates, a 1-year increase in parent age

was associated with 2.7% decrease in the predicted odds of increased parental supervision (p<0.05). Regarding parent race, the odds of greater supervision for Black parents were 43.6% less than the odds for White parents (p<0.05). The odds of greater supervision for Hispanic parents were 49% less than the odds for White parents (p<0.05). The odds of greater supervision for parents of other races were 70.7% less than the odds for White parents (p<0.01).

**5.4.3. Volunteering**—Child age and parent race and education were significant predictors of volunteering. Controlling for all other covariates, a 1-year increase in child age was associated with a 16% decrease in the predicted odds of parents' increased time spent volunteering at the child's school (p<0.001). The odds of spending a greater amount of time volunteering at school for Hispanic parents were 41% less than the odds for White parents (p<0.01). The odds of spending a greater amount of time volunteering at school for parents who completed some college were 96.5% greater than the odds for parents with less than a high-school education (p<0.01). The odds of spending a greater amount of time volunteering at school for parents who completed college and more were 193% greater than the odds for parents with less than a high-school education (p<0.001).

#### 6. Discussion

This is the first thorough quantitative investigation of the impact of participating in the CAP program on parental supervision, expectation, and volunteering among LMI homeowners and a comparison group of renters. This study offers an important contribution to the field of asset building and LMI homeownership given two major strengths. First, there is limited evidence concerning the effects of homeownership on LMI populations in the field. Second, there are few opportunities to test such effects using rigorously collected and representative data.

The results of this study suggest that tenure per se is not associated with parental attitudes and behavior. Without adjustment for covariates, CAP homeowners had greater levels of parental supervision (i.e., know their children's companions, where their children are, and when they will be home), greater expectations for their children to go to college, and were more likely to volunteer at their children's schools. However, when we included control variables in the model, the overall differences between owners and renters on these parental outcomes were shown to be statistically nonsignificant. The fact that the two groups are very different in terms of important demographic and financial characteristics might also account for the higher levels of parental supervision, expectations, and volunteering among CAP homeowners when not controlling for covariates. These findings reinforce the proposition suggested by Rohe, McCarthy and Van Zandt (2000), which holds that when the independent effects of homeownership are examined, it is imperative to control for those characteristics that incline a household to homeownership. These characteristics include age, race or ethnicity, marital status, income, family composition, education and occupation. As suggested by Rohe et al. (2000), failing to control for these covariates may lead researchers to overstate the positive social outcomes of homeownership. As suggested earlier, although homeowners and renters were matched on similar characteristics, the subsample of renters

with school-age children was more disadvantaged than homeowners with school-age children.

Several explanations emerged as possible reasons for the lack of a tenure effect on parental attitudes and behavior. First, the CAP homeowner population surveyed had been homeowners for a maximum of 6 years at the time of survey. The benefits of homeownership are not typically immediate and may take time to come to fruition. As with the equity accumulation in a house that occurs over time, an accumulation of social benefits is a measured progression that often takes time before the recognition of benefit is measurable (Rohe & Quercia, 2003). Relatedly, this is the first cross-sectional analysis of these data. As a result, there are no baseline data currently available for comparison purposes. Collection of follow-up data is underway, which will allow us to address this issue in future studies. Therefore, this paper serves as the baseline examination and will facilitate future comparisons between early and long-term effects of CAP on parental attitudes and behavior.

Second, there may be some other possible explanations for how certain social and economic disadvantages may lessen any tenure effects on parental attitude and behavior outcomes. For example, parental supervision in single parent households may be more difficult regardless of tenure. Similarly, an inclination among single parent homeowners to volunteer at their child's school may be disrupted by practical considerations of being a lone parent, including not having or being able to afford a babysitter. In addition, LMI homeowners may be more likely to have jobs with little or no scheduling flexibility that would allow them to volunteer.

Third, congruent with the LMI homeownership field, there is longstanding debate regarding whether LMI homeownership can generate substantial positive effects for LMI populations. The beneficial effects of homeownership that have been established for middle- and high-income homeowners may not translate to LMI homeowners. LMI families may buy homes in neighborhoods with problematic conditions like high rates of poverty and residential instability. They may also be less likely to meet the financial responsibilities associated with homeownership (Rohe & Quercia, 2003). For example, when LMI families are encouraged to purchase homes, but can only do so in neighborhoods where neighborhood quality is deficient (i.e., poverty, segregation, residential instability), their decisions to become homeowners may not impart the same benefits as compared to families who are capable of purchasing homes in middle and upper-income communities (Reid, 2004).

Although of secondary importance to this paper, an interesting finding is the role that parental race or ethnicity played in explaining expectation and supervision. The results suggest that African American and Hispanic parents had lower supervision scores as compared to White parents, but were more likely to expect their children to graduate from college as compared to White parents. The results also suggest that older parents had lower supervision scores as compared to younger parents. Another important finding is that Hispanic parents had a lower rate of volunteering at school as compared to White parents. Several explanations may account for this difference. First, if there is a language barrier, parents may not feel comfortable coming to an English-speaking school. Second, these parents may be more likely to work in the low-wage employment market where there is less flexibility with work hours. Third, due to cultural differences, Hispanic parents may not be

accustomed to volunteering at school as compared to other racial/ethnic groups. Finally, the generally high level of educational expectation across all parents is an interesting result, considering theses are LMI households; less than 1% of the sample did not expect their children to graduate from high school and a very high percentage expected their children to graduate from college (86% renters, 90% owners).

Three limitations of this study are noteworthy. As previously discussed, the CAP homeowners surveyed had been homeowners for a maximum of 6 years at the time of survey, and many had been homeowners for only a year or two. Future research that examines parental attitudes and behavior of these LMI homeowners should be undertaken with more distal data collection points. Second, given the potential influence of structural characteristics, future research should also include neighborhood-level variables and use hierarchical linear modeling (HLM) techniques to estimate the differences between owners' and renters' parental attitudes and behavior as a function of family and neighborhood characteristics. HLM is an analytic approach that is well suited for disentangling the complex interactions of individual and contextual factors in tenure outcomes, which concern multilevel influences and macro-to-micro relations. Third, in their review of the economic and social consequences of homeownership, Dietz and Haurin (2003) proposed the possibility of omitted variable bias beyond demographic and financial characteristics in home-ownership research. That is, additional attributes that prompt individuals to become homeowners may also account for the observed social outcomes. These include personality traits, such as a strong sense of personal responsibility and willingness to invest (Dietz & Haurin, 2003). Our study did not control for these personality traits among parents. Finally, two out of three dependent variables (i.e., parental educational expectation and parental supervision) were composite variables that combined only two categories. Therefore, these variables may not have fully captured the differences in parental expectations and supervision.

Despite these limitations, the results of this study have important implications for public policy and future research. First, this study reinforces the evidence that even though the CAP homeowners and renters had been matched by income and geographic location, when narrowing the sample to families with school-age children, the renters were at a significantly greater demographic and financial disadvantage compared with the CAP homeowners. This cumulative disadvantage may affect the renters' abilities to provide the requisite levels of care and supervision to ensure the best outcomes for their children. Therefore, a critical implication for policy makers is to discover and implement additional strategies to improve the quality of life for LMI renters with children by expanding social, educational, and economic opportunities among this subpopulation of LMI renters. Potential strategies could include addressing factors other than tenure, such as neighborhood safety, rental housing quality, neighborhood infrastructure (e.g., playgrounds, sidewalks, and housing stock quality). One possible way to achieve such outcomes may be to complement the efforts of increasing homeownership for the LMI population via CAP by developing funding priorities under major federal programs like Community Development Block Grants (CDBG) that address neighborhood-level factors among LMI renters. For instance, local governments, working in collaboration with citizen groups, could submit CDBG plans that focus on

neighborhood improvement activities such as crime prevention in census block groups with disproportionately high LMI renters.

Our findings also suggest more "mezzo-level" policy implications related to how schools interface with parents, particularly Hispanic parents. For example, schools may want to consider targeted outreach efforts designed to more effectively incorporate Hispanic parents into the school milieu. One relatively simple approach would be to ensure that all printed school information is available in Spanish and that bilingual professionals are available whenever direct communication is required between school personnel and parents. Another approach would be to purposefully design opportunities for parental involvement that not only consider possible cultural differences but also capitalize on those differences. For example, schools could ask Hispanic parents to volunteer at events or for field trips related to Hispanic culture, heritage, and ancestry. Finally, our results also showed that Hispanic and African American parents had higher educational expectations for their children compared to their White counterparts. As such, schools should also consider approaches that take advantage of these expectations in ways that facilitate actual academic achievement.

Regarding implications for research, using this baseline evidence as a springboard, future research should build on this study by testing the long-term effect of CAP. As previously suggested, the findings in this paper represent the short-term effects of participating in CAP. The long-term effects of any program can be quite different from those observed during or immediately after a program of intervention. Although limited, a small body of research has provided evidence supporting the value and importance of studying the long-term effects of government programs. These studies have frequently found programs that produced only small effects in the short-term have had long-term effects that were substantially larger and significant. For example, child IQ tests administered following Head Start program participation showed program participation had only temporary effects on IQ scores; however, long-term follow-up showed the same Head Start participation had positive effects of adult educational attainment, earnings, and rates of criminal involvement (Garces, Thomas, & Currie, 2002). Future research should also explore the possibility of interaction effects between key covariates, such as race, education, marital status, credit card ownership, and tenure, and the effects on parental attitude and behavior outcomes.

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## References

Aaronson D. A note on the benefit of homeownership. Journal of Urban Economics. 2000; 47:356–369.

Akin, D.; Burke, B.; Buczkowski, G.; Considine, K.; Gadsden-Knowles, K.; Flicker, L., et al. Accumulation of wealth and social capital among low-income renters (AWSC-R): Year 1 Final Report (RTI No. 08782). Research Triangle Park, NC: Research Triangle Institute, International; 2004

Alexander KL, Entwisle DR, Bedinger SD. When expectations work: Race and socioeconomic differences in school performance. Social Psychology Quarterly. 1994; 57:283–299.

Barber BK, Olsen JA. Socialization in context: Connection, regulation, and autonomy in the family, school, neighborhood and with peers. Journal of Adolescent Research. 1997; 12:287–315.

- Barrera M Jr, Biglan A, Ary D, Li F. Replication of a problem behavior model with American Indians, Hispanic, and Caucasian youth. Journal of Early Adolescence. 2001; 21:133–157.
- Boehm TP, Schlottman A. Does home ownership by parents have an economic impact on their children? Journal of Housing Economics. 1999; 8(3):217–232.
- Boyle MH. Home ownership and the emotional and behavioral problems of children and youth. Child Development. 2002; 73(3):883–893. [PubMed: 12038558]
- Cairney J. Housing tenure and psychological well-being during adolescence. Environment and Behavior. 2005; 37:552–564.
- Chen E, Hanson MD, Paterson LQ, Griffin MJ, Walker HA, Miller GE. Socioeconomic status and inflammatory processes in childhood asthma: The role of psychological stress. Journal of Allergy & Clinical Immunology. 2006; 117:1014–1020. [PubMed: 16675327]
- Cohen S, Doyle WJ, Turner RB, Alper CM, Skoner DP. Childhood socioeconomic status and host resistance to infectious illness in adulthood. Psychosomatic Medicine. 2004; 66:553–558. [PubMed: 15272102]
- Coulson NE, Fisher NM. Tenure choice and labor market outcomes. Housing Studies. 2002; 17:35-49.
- Daneshvary N, Daneshvary R, Schwer KR. Solid-waste recycling behavior and support for curbside textile recycling. Environment and Behavior. 1998; 30(2):144–161.
- Davis-Kean PE. The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. Journal of Family Psychology. 2005; 19(2):294–304. [PubMed: 15982107]
- Dietz RD, Haurin DR. The social and private micro-level consequences of homeownership. Journal of Urban Economics. 2003; 54(3):401–450.
- DiPasquale D, Glaeser EL. Incentives and social capital: Are homeowners better citizens? Journal of Urban Economics. 1999; 45(2):354–384.
- Drier P. Start your engines: The housing movement and the motor voter law. Shelterforce. 1994; 17:10–11.
- Englund MM, Luckner AE, Whaley GJL, Egeland B. Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectations, and quality of assistance. Journal of Educational Psychology. 2004; 96(4):723–730.
- Ensminger ME, Juon HS, Thergill KE. Childhood and adolescent antecedents of substance use in adulthood. Addiction. 2002; 97:833–844. [PubMed: 12133122]
- Fan X, Chen M. Parental involvement and students' academic achievement: A meta-analysis. Educational Psychology Review. 2001; 13(1):1–22.
- Fothergill K, Ensminger ME. Childhood and adolescent antecedents of drug and alcohol problems: A longitudinal study. Drug & Alcohol Dependence. 2006; 82:61–76. [PubMed: 16150555]
- Gagne LG, Ferrer A. Housing, neighborhoods, and development outcomes of children in Canada. Canadian Public Policy. 2006; 32(3):275–300.
- Galster GC. Empirical evidence on cross-tenure differences in home maintenance and conditions. Land Economics. 1983; 59:107–113.
- Garces E, Thomas D, Currie J. Longer term effects of Head Start. American Economic Review. 2002; 92:999–1012.
- Green R, White M. Measuring the benefits of homeowning: Effect on children. Journal of Urban Economics. 1997; 41(3):441–461.
- Halle T, Kurtz-Costes B, Mahoney J. Family influences on school achievement in low-income, African American children. Journal of Educational Psychology. 1997; 89:527–537.
- Harkness J, Newman SJ. Homeownership for the poor in distressed neighborhoods: Does this make sense? Housing Policy Debate. 2002; 13(3):597–630.
- Haurin D, Gill H. The impact of transaction costs and the expected length of stay on homeownership. Journal of Urban Economics. 2002; 51(3):564–584.
- Haurin DR, Parcel TL, Haurin RJ. Does homeownership affect child outcomes? Real Estate Economics. 2002; 30:635–666.

Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychological Bulletin. 1992; 112:64–105. [PubMed: 1529040]

- Henderson JV, Ioannides YM. A model of housing tenure choice. The American Economic Review. 1983; 73:98–113.
- Herman MR, Dornbush SM, Herron MC, Herting JR. The influence of family regulation, connection, and psychological autonomy on six measures of adolescent functioning. Journal of Adolescent Research. 1997; 12:34–67.
- Hess RD, Holloway SD, Dickson WP, Price GG. Maternal variables as predictors of children's school readiness and later achievement in vocabulary and mathematics in sixth grade. Child Development. 1984; 44:1902–1912.
- Jessor, R.; Donovan, J.; Costa, F. Beyond adolescence: Problem behavior and young adult development. New York: Cambridge University Press; 1991.
- Kandel D, Simcha-Fagan O, Davies M. Risk factors for delinquency and illicit drug use from adolescence to young adulthood. Journal of Drug Issues. 1986; 16:67–90.
- Keith PB, Lichtman MV. Does parental involvement influence the academic achievement of Mexican—American 8th graders? Results from the National Education Longitudinal Study. School Psychology Quarterly. 1994; 9(4):256–273.
- Keith TZ, Keith PB. Does parental involvement affect eighth-grade student achievement? Structural analysis of national data. School Psychology Review. 1993; 22(3):474–514.
- Li X, Feigelman S, Stanton B. Perceived parental monitoring and health risk behaviors among urban low-income African American children and adolescents. Journal of Adolescent Health. 2000; 27:43–48. [PubMed: 10867351]
- Mainieri T, Barnett EG, Valdero TR, Unipan JB, Oskamp S. Green buying: The influence of environmental concern on consumer behavior. Journal of Social Psychology. 1997; 137:189–204.
- McCarthy, G.; Van Zandt, S.; Rohe, W. The economic benefits and costs of homeownership: A critical assessment of the research. Arlington, VA: Research Institute for Housing America; 2001.
- Miedel WT, Reynolds AJ. Parent involvement in early intervention for disadvantaged children: Does it matter? Journal of School Psychology. 1999; 37(4):379–402.
- Miller BC. Family influences on adolescent sexual and contraceptive behavior. Journal of Sex Research. 2002; 39(1):22–36. [PubMed: 12476252]
- Miller G, Chen E. Unfavorable socioeconomic conditions in early life presage expression of proinflammatory phenotype in adolescence. Psychosomatic Medicine. 2007; 69(5):402–409. [PubMed: 17556642]
- National Council of State Housing Agencies. HFA programs: Housing bonds Retrieved September. 2007; 28:2007. from http://www.ncsha.org/section.cfm/3/34/36.
- O'Donnell J, Hawkins JD, Abbott RD. Predicting serious delinquency and substance use among aggressive boys. Journal of Consulting and Clinical Psychology. 1995; 63:529–537. [PubMed: 7673530]
- Patterson, GR.; Dishion, TJ. Multilevel family process models: Traits, interactions, and relationships. In: Hinde, R.; Stevenson-Hinde, J., editors. Relationships within families: Mutual influences. Oxford, UK: Oxford University Press; 1988.
- Quercia RG, McCarthy GW, Wachter SM. The impacts of affordable lending efforts on homeownership rates. Journal of Housing Economics. 2003; 12:29–59.
- Reid, CK. A longitudinal analysis of the homeownership experience of low-income households. (Working Paper No. 04-04). Seattle: Center for Studies in Demography and Ecology, University of Washington; 2004. Achieving the American dream?.
- Robert S, House JS. SES differentials in health by age and alternative indicators of SES. Journal of Aging and Health. 1996; 8:359–388. [PubMed: 10165980]
- Rohe, WM.; Quercia, R. Individual and neighborhood impacts of Neighborhood Reinvestment's homeownership pilot program. Chapel Hill, NC: University of North Carolina Center for Urban and Regional Studies; 2003. Retrieved May 7, 2008, from http://www.nw.org/network/pubs/studies/documents/UNCPilotReport.pdf

Rohe, WM.; Watson, HL. Chasing the American dream: New perspectives on affordable homeownership. Ithaca: Cornell University Press; 2007.

- Rohe, WM.; McCarthy, G.; Van Zandt, S. The social benefits and costs of homeownership: A critical assessment of the research. Washington, DC: Research Institute for Housing America; 2000.
- Rossi PH, Weber E. The social benefits of homeownership: Empirical evidence from national surveys. Housing Policy Debate. 1996; 7:1–35.
- Shlay A. Low-income homeownership: American dream or delusion. Urban Studies. 2006; 43:1-21.
- Skinner JS. Housing wealth and aggregate saving. Regional Science and Urban Economics. 1989; 19:305–324.
- South SJ, Deane GD. Race and residential mobility: Individual determinants and structural constraints. Social Forces. 1993; 72(1):147–167.
- Steinberg L, Lamborn SD, Dornbusch SM, Darling N. Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. Child Development. 1992; 63:1266–1281. [PubMed: 1446552]
- U.S. Department of Commerce. Census Bureau Reports on residential vacancies and homeownership [Press Release]. 2007 Oct 26. Retrieved May 7, 2008, from http://www.census.gov/hhes/www/housing/hvs/qtr307/q307press.pdf
- U.S. Department of Housing & Urban Development. Homeownership and its benefits. [Urban Policy Brief No. 2]. 1995. Retrieved May 7, 2008, from http://www.huduser.org/publications/txt/hdbrf2.txt
- Vitaro F, Brendgen M, Tremblay RE. Influence of deviant friends on delinquency: Searching for moderator variables. Journal of Abnormal Child Psychology. 2000; 28:313–325. [PubMed: 10949957]
- Warr M. Making delinquent friends: Adult supervision and children's affiliations. Criminology. 2005; 43(1):77–105.
- Zhan M. Assets, parental expectations and involvement, and children's educational performance. Children and Youth Services Review. 2006; 28:961–975.
- Zhan M, Sherraden M. Assets, expectations, and children's educational achievement in female-headed households. Social Service Review. 2003; 77:191–211.

Table 1

Characteristics of Community Advantage Program (CAP) homeowners in comparison with American Households Survey (AHS) homeowners

Variables	CAP owners (Wave 2) %	CAP renters (Wave 1) %	AHS owners (2003) %	AHS renters (2003) %
Sex				
Male	54.0	29.6	52.8	45.8
Female	46.1	70.5	47.2	54.2
Race				
White	58.7	39.7	66.7	48.4
Black	19.7	31.1	16.7	23.7
Hispanic	17.3	19.4	10.2	20.1
Others	4.3	9.8	6.4	7.8
Highest level of education				
11th grade or less	5.9	18.4	16.2	23.5
High-school graduate/GED	17.2	31.2	32.4	29.8
Some trade school/ college	29.5	24.4	22.1	23.1
2-year degree	13.9	7.9	8.3	6.0
Bachelor's degree	24.8	13.6	14.4	13.2
Graduate/professional degree	8.8	4.4	6.5	4.4
Income				
Less than \$10,000	1.0	23.8	8.1	16.1
\$10,000-\$14,999	1.9	14.5	5.8	11.1
\$15,000-\$19,999	4.8	14.2	8.1	12.2
\$20,000-\$24,999	9.9	13.0	10.2	12.6
\$25,000-\$34,999	26.1	20.0	28.5	23.4
\$35,000-\$49,999	31.2	11.2	28.2	18.3
\$50,000-\$74,999	19.4	2.7	9.7	5.8
\$75,000 or more	5.8	0.6	1.4	0.5
Marital status				
Living with unmarried partner	7.7	8.8	-	-
Married	51.0	22.8	49.0	27.2
Widowed	2.0	1.7	5.7	2.8
Divorced	14.6	10.7	24.0	20.2
Separated	1.9	5.0	3.2	7.4
Never married	22.8	49.5	18.1	42.4
Number of household members				
One	21.0	32.5	26.7	35.9
Two	30.6	26.1	28.2	25.1
Three	20.8	17.3	18.1	17.0
Four	14.4	13.9	15.6	12.1
Five or more	13.1	10.2	11.4	10.0

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Variables	CAP owners (Wave 2) %	CAP renters (Wave 1) %	AHS owners (2003) %	AHS renters (2003) %
Zero	49.9	56.5	56.7	57.3
One	22.9	19.9	19.1	18.9
Two	16.7	14.1	16.4	14.6
Three or more	9.3	9.4	7.9	9.2
Employment status				
Employed	93.4	62.8	66.4	67.8
Unemployed	5.5	32.6	30.9	29.7
Retired	1.2	4.7	2.7	2.5
Sample size	n=1088	n=1530	n=8143	n=9378

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Table 2

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Sample characteristics of CAP owners and renters

n         %/M (s.d.)           Characteristics of child         408         50.18           Boy         815         10.52           Age         10.52         10.52           Characteristics of respondent         815         10.52           Male         393         48.22           Age         48.22         48.22           Black         400         49.14           White         400         49.14           Black         169         20.76           Hispanic         169         20.76           Others         34         4.18           Hispanic         180         20.76           Chucation         182         2.272           High-school grad.         182         2.272           Some college         384         47.94           College grad. and more         137         17.10           Marrial status         241         541           Marriad         486         59.78           Divorced/separated/widowed         189         11.56           Household characteristics         34         11.56           Household characteristics         34         11.56	Owner (N=815)	<sup>7</sup> = <b>815</b> )	Rente	Renter (N=333)	$x^2/t$
s of child  408 50.18  815 10.52  8 of respondent  939 48.22  400 49.14  400 49.14  169 20.76  34 4.18  98 12.23  98 12.23  99 47.94  1 and more 137 17.10  unmarried patrner 44 5.41  barated/widowed 189 23.25  ed 94 11.56  uracteristicss  140 60.95  141 61.156  142 11.56  143 11.87 (0.95)		M (s.d.)	u	%/M (s.d.)	
s of respondent s of respondent 393 48.22 393 48.22 394 42.24 395 48.22 397 48.22 398 47.94 399 12.23 399 47.94 399 32.72 399 32.72 399 47.94 399 47.94 399 47.94 399 47.94 399 47.94 399 32.72 399 33.25 and more 137 17.10 399 33.25 and more 137 17.10 399 33.25 and more 138 23.25 and more 139 17.56	p <sub>i</sub>				
s of respondent 393 48.22 314 48.22 315 36.50 (8.31) 316 20.76 317 25.92 318 4.18 319 30.76 310 32.72 311 32.32 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 311 30.92 312 30.92 313 30.92 314 30.92 315 30.92 317 30.92 318 30.92 318 30.92 319 30.92 319 30.92 319 30.92 319 30.92		18	179	53.75	1.20
s of respondent       393       48.22         812       36.50 (8.31)         812       36.50 (8.31)         400       49.14         211       25.92         169       20.76         34       4.18         34       4.18         34       4.18         34       47.94         384       47.94         40.92       741         90.92       741         parated/widowed       44       5.41         ed       98       59.78         parated/widowed       189       23.25         ed       94       11.56         rancteristics       14       1.87 (0.95)		52	333	10.88	1.47
393       48.22         812       36.50 (8.31)         812       36.50 (8.31)         400       49.14         211       25.92         169       20.76         34       4.18         34       4.18         384       47.94         47       47.94         48       47.94         49       17.10         10       17.10         10       189         20       25.78         parated/widowed       189       23.25         ed       94       11.56         ranceristics       181       1.87 (0.95)	vondent				
812       36.50 (8.31)         400       49.14         211       25.92         169       20.76         34       4.18         se       182       22.72         e       384       47.94         unmarried partner       137       17.10         parated/widowed       44       5.41         ed       99.78         parated/widowed       189       23.25         ed       94       11.56         rancteristics       189       11.56         Idren       814       1.87 (0.95)		22	65	19.52	81.21 ***
400 49.14 211 25.92 169 20.76 34 4.18 34 4.18 igh-school grad. 98 12.23 ige 384 47.94 i. and more 137 17.10  unmarried partner 44 5.41  parated/widowed 189 23.25 ed 94 11.56  rracteristics Idren 814 1.87 (0.95)		50 (8.31)	333	38.56 (7.98)	3.84***
400 49.14  211 25.92  169 20.76  34 4.18  182 22.72  384 47.94  137 17.10  artner 44 5.41  owed 189 23.25  owed 189 23.25  94 11.56					
211 25.92 169 20.76 34 4.18 rad. 98 12.23 182 22.72 384 47.94 741 90.92 owed 189 23.25 94 11.56		14	107	32.23	27.34***
rad. 98 12.23 182 22.72 182 22.72 384 47.94 137 17.10 attner 44 5.41 owed 189 23.25 94 11.56		92	128	38.55	18.07***
rad. 98 12.23 182 22.72 384 47.94 137 17.10 741 90.92 owed 189 59.78 94 11.56		92	85	25.60	3.20
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rad. 98 12.23 182 22.72 384 47.94 137 17.10 741 90.92 artner 44 5.41 486 59.78 owed 189 23.25 94 11.56					
182 22.72 384 47.94 137 17.10 741 90.92 autiner 44 5.41 486 59.78 owed 189 23.25 94 11.56	86	23	65	19.32	10.83**
384 47.94 137 17.10 741 90.92  autiner 44 5.41 486 59.78  owed 189 23.25 94 11.56		72	116	35.37	19.15***
137 17.10 741 90.92 artner 44 5.41 486 59.78 owed 189 23.25 94 11.56		94	114	34.76	16.41 ***
741 90.92  Dartiner 44 5.41  486 59.78  Owed 189 23.25  94 11.56	137	10	33	10.06	9.02**
owed 189 53.25 94 11.56 814 1.87 (0.95)		92	229	68.77	88.54***
owed 189 5.25 94 11.56 814 1.87 (0.95)					
486 59.78 owed 189 23.25 94 11.56 814 1.87 (0.95)	4	1	26	7.98	2.40
owed 189 23.25 94 11.56 814 1.87 (0.95)		78	66	30.37	84.58***
94 11.56	189	25	120	36.81	19.83***
814 1.87 (0.95)		56	81	24.85	29.93***
814 1.87 (0.95)	stics				
		7 (0.95)	333	2.07 (1.13)	2.86**
Number of adults 814 2.17 (1.08)		7 (1.08)	333	1.55 (0.77)	-10.95***

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	Owne	Owner ( <i>N</i> =815)	Rente	Renter ( <i>N</i> =333)	$x^2/t$
	и	%/M (s.d.)	u	%/M (s.d.)	
Number of vehicles					
None	15	1.85	09	18.07	100.82
1 or more	794	98.15	272	81.93	100.82
Credit card ownership	578	71.71	94	28.48	181.07***
Annual household income					
Less than \$10,000	21	2.58	62	19.02	93.32***
\$10,000-\$19,999	92	9.33	94	28.83	***06.69
\$20,000-\$29,999	165	20.25	70	21.47	0.21
\$30,000-\$39,999	188	23.07	51	15.64	7.75**
\$40,000-\$49,999	134	16.44	25	7.67	14.94***
\$50,000-\$80,000	231	28.34	24	7.36	59.07

p < 0.05.\*\* p < 0.01.\*\*\* p < 0.001.

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Table 3

Description of parental attitude and behavior outcomes

	Owner (	Owner ( <i>N</i> =815)		Renter ( <i>N</i> =333)	$x^2$
	и	%	u	n %	
Parental educational expectation					
High-school grad. and less	79	9.72	41	41 14.14	4.31*
College grad. and more	734	90.28	249	85.86	
Supervision					
Mostly know child companions, where child is, and when child will be home	643	87.96	253	85.68	5.12*
Rarely or sometimes know	88	12.04	53	17.32	
Volunteering at school					
Yes	367	45.65	113	34.45	11.96***
No	437	54.35		215 65.55	

p < 0.05.

\*\* p < 0.01.

\*\*\* p < 0.01.

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 Table 4

 Logistic regressions results for parental attitude and behavior outcomes

Variables	Expectation			Supervision	ā		Volunteering	<u>50</u>	
	В	S.E.	O.R.	В	S.E.	O.R.	В	S.E.	O.R.
Intercept	3.156***	806.0		3.559***	0.847		1.721**	0.591	
Tenure	0.194	0.291	1.214	0.342	0.256	1.408	0.153	0.185	1.166
Characteristics of child									
Child gender (boy)	-1.129***	0.232	0.323	-0.274	0.195	0.761	-0.211	0.134	0.810
Child age	-0.122***	0.034	0.885	-0.001	0.031	0.999	-0.179***	0.022	0.836
Characteristics of respondent									
Male	-0.175	0.260	0.839	-0.247	0.237	0.781	-0.179	0.167	0.836
Age	-0.009	0.016	0.991	-0.033*	0.014	0.967	-0.002	0.010	0.998
Race/ethnicity									
(White)									
Black	0.876**	0.274	2.402	*809.0-	0.254	0.545	-0.103	0.169	0.902
Hispanic	1.634***	0.367	5.124	-0.752**	0.287	0.471	-0.409*	0.201	0.665
Others	14.329	450.7	< 666	-1.289**	0.399	0.275	0.057	0.334	1.058
Education									
(Less high-school grad.)									
High-school grad.	0.682*	0.320	1.979	-0.467	0.315	0.627	0.099	0.244	1.104
Some college	1.170***	0.330	3.222	-0.115	0.322	0.891	0.654**	0.237	1.924
College and more	1.903 ***	0.525	6.709	0.103	0.408	1.109	1.004	0.282	2.730
Married									
(Married)									
Living with partner	-0.601	0.421	0.548	-0.157	0.393	0.855	-0.364	0.304	0.695
Divorced/separated/widowed	-0.157	0.297	0.855	0.209	0.286	1.233	0.145	0.195	1.156
Never married	-0.446	0.384	0.640	0.105	0.351	1.110	-0.243	0.242	0.785
Employed	0.094	0.305	1.098	-0.121	0.295	0.886	-0.051	0.213	0.951
Characteristics of household									
Number of children	-0.146	0.104	0.865	-0.043	0.098	0.958	-0.103	0.071	0.903

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Variables	Expectation			Supervision	ue		Volunteering	gu	
	В	S.E.	O.R.	В	S.E.	O.R.	В	S.E.	O.R.
Number of adults	-0.311**	0.108	0.732	-0.115	0.096	0.891	0.027	0.076	1.027
Car ownership									
(None)									
1 or more	0.270	0.408	1.310	0.168	0.375	0.182	-0.085	0.303	0.780
Credit card ownership	0.293	0.241	1.341	0.154	0.226	1.166	0.027	0.157	0.863
Household income									
(Less than \$10,000)									
\$10,000-\$19,999	0.485	0.433	1.625	0.778	0.408	2.178	-0.380	0.310	0.684
\$20,000-\$29,999	0.324	0.436	1.383	0.103	0.391	1.109	-0.279	0.312	0.756
\$30,000-\$39,999	0.706	0.469	2.027	0.712	0.427	2.038	-0.018	0.320	0.982
\$40,000-\$49,999	0.160	0.495	1.173	0.436	0.455	1.547	-0.233	0.343	0.792
\$50,000-\$80,000	0.514	0.503	1.673	0.203	0.443	1.226	0.212	0.338	1.236
N	1058			266			1086		
$-2 \log L$	608.292			732.007			1312.189		
Likelihood ratio (df)	123.344 (24)	* * *		54.969 (24)***	***(1		171.415 (24)***	***(1	

p < 0.05.

\*\* p < 0.01.

\*\*\* p < 0.001.

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