Community Development and Local Social Capital

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Abstract

While a substantial amount of research has been devoted to showing what social capital does, research explaining social capital itself lags behind. In this paper we examine whether local economic development can explain the variation in social capital across various geographical clusters in the state of Georgia. The findings show that even after accounting for various demographic and economic characteristics, the HDI explains the variation in a number of social capital levels (especially those measured by associational involvement) across various geographical clusters in the state of Georgia.

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1. Introduction

While a substantial amount of research has been devoted to showing what social capital does, research on explaining social capital itself lags behind. The literature has a long tradition of examining the effect of social capital on local economic growth and development. In this paper we examine whether local economic development can explain the variation in social capital across various geographical clusters in the state of Georgia.

We begin by devising a measurement tool, a Human Development Index (HDI). Patterned after work done at the United National Development Program, and modified by Estrada and Allen (2004), the HDI focuses on variables important to community development activities; including educational opportunity, economic opportunity (employment), and access to housing. Census data from 2000 were used to construct the county-level HDIs. The use of an HDI broadens the standard income measurements of economic well-being. Our social capital measures are obtained from the *Georgia Social Capital Survey*. We use a number of measures indicating involvement in various associational memberships, voluntary activities, and philanthropy.

2. Data

We use two data sources: the county-level data from 2000 Census compiled by the Office of Planning and Budget of the State of Georgia, and *Georgia Social Capital Survey*. The Georgia Social Capital Survey has two parts: the household survey, and the farm survey. We obtain all but the social capital variables from the census data. For the social capital variables we pool both the household and farm surveys that allow us to calculate social capital levels for each county.

However, even after pooling the two surveys, the number of observations per county is small. Therefore, we created 31 geographical clusters that aggregate the 159 counties in Georgia.

For the variables other than the social capital variables, we use weighted county data to arrive at the cluster-level values. County population has been used as the weight. For instance, in constructing the social capital variables we first calculated average social capital values by county and then used county population weights to arrive at the cluster levels.

The household survey was conducted by the University of Georgia Survey Research Center between June 13 and July 1, 2003. The design of the study called for conducting a total of 500 telephone interviews. Random digit dialing (RDD) probability sampling was used to ensure all residents of Georgia a near-equal probability of selection. To achieve 500 interviews, 1,238 phone contacts were made, representing a 40.4 percent response rate. The non-response numbers included business numbers, respondents who were unavailable, non-working numbers, answering machines, and no answer/busy, or strange noise. The 500 responses represent a statistically valid sample of the population of Georgia at the 95 percent confidence interval (with a sampling error of +/-4.3 percent). The survey was pretested by administering the instrument to 60 people outside of the Athens, Georgia, local area. Additional pretesting was conducted statewide with revisions. The pretesting resulted in 61 survey questions, including demographic information.

The farm survey was conducted by the Georgia Agricultural Statistics Service (NASS-USDA) in the winter of 2004. There were a total of 431 telephone interviews, representing a statistically significant sample of Georgia farmers at the 95% confidence interval. To achieve 431 interviews, 921 phone contacts were made, representing a 46.8% response rate. The non-

response rate included respondents who were unavailable, non-working numbers, answering machines, no answer/busy, or strange noise.

All respondents were also asked a number of questions about associational activities. The questions were selected from the Social Capital Benchmark Survey 2000 conducted by the Roper Center for Public Opinion Research. The Benchmark survey was designed to measure people's civic engagements. Associational activities included 18 categories including religious organizations, adult sports, youth groups, parent/school groups, senior clubs, art clubs, hobby clubs, self-help clubs, internet groups, veterans groups, neighborhood associations, social welfare groups, unions, professional/trade groups, service clubs, and civil rights and political action organizations. Eighty-five percent of respondents belonged to at least one group.

Associational activities can be divided into those groups that are personal in nature: religious organizations, adult sports, youth groups, parent/school groups, senior clubs, art clubs, hobby clubs, self-help clubs, and Internet groups. Associations that are more public in nature included veterans groups, neighborhood associations, social welfare groups, unions, professional/trade groups, service clubs, and civil rights and political action organizations. Also, six different types of volunteer activities were identified, including volunteering at place of worship, in health care programs, school or youth programs, in organizations for poor or elderly, in arts and cultural organizations, and in neighborhood or civic groups.

In terms of individual groups, participation with charitable or social welfare groups was noted by 42 percent of the respondents. For all other groups, involvement ranged from 4 percent (online groups) to 35 percent (parent organizations at schools). When contributing to a religious group, 57 percent of the respondents reported giving more than $500 a year while only 30 percent reported giving that amount to other groups. Volunteer work followed a different

pattern, where 44 percent of the respondents did some volunteering at their place of worship, 58 percent volunteered for activities other than those at the church.

Table 1 describes the dependent variables used for the analysis. These variables are derived from the basic information obtained from the surveys about the associational involvements of the individuals.

3. Constructing a Human Development Index for Georgia's Counties

When measuring the impact of community development activities baseline data is required. Further, to understand how communities prosper it is necessary to look at the difference in development across a state or region. We construct a Human Development Index (HDI) for each of Georgia's 159 counties. Patterned after work done at the United National Development Programme, and modified by Estrada and Allen (2004), the HDI will focus on variables important to community development activities, including educational opportunity, economic opportunity (employment) and access to housing. Census data from 2000 in Georgia were used to construct the county-level HDIs.

Human Development Index (HDI)

In 1990, the United National Development Programme compiled its first Human Development Report (UNDP, 2001) that proposed a new way to view human development that went beyond simply Gross Domestic Product. The UNDP report focused on three dimensions, longevity (life expectancy), knowledge (educational attainment), and decent living standards (income). An index of these measurements was created and nations were ranked with values from zero to one with higher values representing higher levels of development. Following the UNDP work, others have constructed HDIs at the sub-national level including Agostini and

Richardson (1997), Hanham, Berhanu, and Leveridge (2000), Corrie (1994), and Estrada and Allen (2004).

One of the goals of this paper is to contribute a measurement tool to be used in studying community development activities. In their study of the impact of rural empowerment zones in Texas, Estrada and Allen (2004) proposed a method to modify the UNDP index to better focus on the community development goals of education, employment, and housing. While the UNDP index includes data on life expectancy, such county-level information is not available. Instead, the index developed here included characteristics of housing and residential locations. Rather than using income levels alone as a proxy for standards of living, an employment index, including median income, poverty data and unemployment rates was used. Similar to the UNDP effort, educational variables were included in this study.

Constructing the Georgia HDI

The source of information for the construction of the HDI is the 2000 Census data compiled by the State of Georgia, Office of Planning and Budget. The county level values for each of the three components – education, employment, and housing – were identified for each of the counties. Each of the components has three subcomponents. These values were indexed against the fixed minimum and maximum values for each variable in the state. Thus, for county i, the (k, j)-th component of the HDI is expressed as:

$$(1) \qquad I_{k,j}^{i} = \frac{x_{k,j}^{i} - \max(x_{k,j})}{\max(x_{k,j}) - \min(x_{k,j})},$$

where,

$x_{k,j}^{i}$ = county i's value of the (k, j)-th component,

$\min(x_{k,j})$ = The lowest observed value among all counties of the (k, j)-th component,

$\max(x_{k,j})$ = The highest observed value among all counties of the (k, j)-th component.

The j sub-components of k components are of the Human Development Index (HDI) are given below.

If, k = Education,

j = {Percent of population (age $\geq$ 25) with a high school degree (including equivalencies),

Percent of population over 25 with a Bachelor's degree or higher,

Percent of total population enrolled in elementary through high school},

if, k = Employment,

j = {Median household income (for 1999),

Percent of families living below the poverty level (1999),

Unemployment rate for those over 16},

if, k = Housing,

j = {Total number of housing units,

Number of owner-occupied housing units,

Median value of owner-occupied housing units}.

With each of the components given equal weight, the HDI for county i is,

$$(2) \qquad \mathrm{HDI}^i = \sum_k \left(\frac{\sum_j I^i_{k,j}}{3} \right) \Big/ 3 = \frac{\sum_k \sum_j I^i_{k,j}}{9}.$$

The Georgia HDI, as with the UNDP effort, is designed to measure the relative attainments of counties beyond simply ranking by per capita income. Values for the HDI can range from a low of 0 to a high of 1.

The range of county-level HDI's for Georgia's 159 counties was from a high of 0.76 (Fulton County) to a low of 0.23 in Chattooga county, with a mean of 0.32. For the 69 counties

included in a Metropolitan Statistical Area the range was from 0.24 to 0.76 with a mean of 0.36. For the 90 non-MSA counties, the mean was 0.29 with a range of 0.23 to 0.39. The U.S. Census has also created a new measure, the Micropolitan Statistical Area. A micropolis is an area that includes a core area containing a substantial nucleus together with adjacent communities having a high degree of economic and social integration with that core. It is made up of one area with at least 10,000 people but less than 50,000 (when it becomes a Metropolitan Statistical Area). For the 30 counties in Georgia in a Micropolitan Statistical Area the mean HDI was .31 with a range from 0.23 to 0.61. Eight of the 30 Micropolitan counties had HDI's above the .32 statewide mean.

Of Georgia's 159 counties, the HDI for 56 was above the statewide mean (.32). Seven counties had HDI's above 0.47, or two standard deviations from the mean, 11 counties were between 0.40 and 0.46, or between one and two standard deviations, 38 counties were between 0.32 and 0.45, or one standard deviation from the mean. For those counties below the mean, 24 were between the mean and the median (0.299), 75 were between the mean and one standard deviation (0.244 to 0.298) and four were two standard deviations for the mean 0.23 to 0.241. The distribution of counties is skewed only slightly to the high end from a normal distribution (seven counties above 2STD and 4 below).

It is clear that there is a distinction between economic activity in urban and rural counties. The top 23 counties by HDI ranking are in MSAs with 27 of the top 30 are part of an urban area. Nearly two-thirds of Georgia counties have HDIs below the mean of 0.32.

Looking at the impact of each component index, the education and housing variables contribute significantly to the ranking, while the employment index appears much less correlated to the overall HDI. Ranked by the education index, nine of the top 10 counties are also in the top

10 by HDI. Only Chattahoochee County (24 in HDI, nine in education) was the exception. Chatham County, ranked number 10 by HDI was number 19 in the education index. In the housing index, nine of the top 11 by HDI are in the top 11 in housing. Only Clayton County (HDI, 19) and Hall County (HDI 28) are in the top 10 in housing. Columbia County (HDI, 8) is ranked 17 in housing. On the other hand, employment ranking, which includes income, unemployment and poverty rates, does not appear as related to HDI ranking. For example, Taliaferro County, ranked 117 in HDI is ninth in employment. The top county by employment index (Hancock) is 31st by HDI. Only Fulton County, at number eight in employment, is one of the top 10 HDI counties in the employment index.

4. Explanatory Variables: Discussion

To measure the impact of the HDI on local social capital levels we control for the following variables: average family size, total net migration, net international migration, natural (non-immigration) population increase due to birth, natural (non-immigration) population decrease due to death, proportion of population in rural, proportion of population in urban, proportion of black population, and average age of the population.

Social capital is a lifecycle phenomenon. As proxies to these lifecycle features we include the family size and average age of the cluster population. Larger families with a number of young children may be encouraged to join parents and school groups whereas families without children (young couples or older couples who longer have children living with them) may not join such groups. At the same time, the position of the individual on the lifecycle influences her social capital investment behavior (Munasib, 2005). During working age (18 through 65) people have less time for activities that takes time away from work.

We also control for proportion of population residing in urban and rural areas (with the reference category being areas that are neither urban nor rural). Subramanian, Lochner and Kawachi (2002), using trust perception as the social capital variable, show that there is significant variation of social capital across neighborhoods. Residents of big cities and individuals who live in apartment buildings are more likely to socialize with their neighbors and go out to dinner (Glaeser and Sacerdote, 1999). This finding indicates the importance of physical proximity on social connectedness. The critique of urban sprawl also emphasizes this point. Urban sprawl is an overexpansion that drives spatial growth away from the optimum level of residential concentration. One of the negative effects of this is likely to be a decline in social interactions.

Our final control is an indicator variable for clusters that are in the Atlanta Metropolitan Statistical Area (MSA). The Atlanta MSA accounts for 51 percent of the Georgia population. Table 2 demonstrates that the clusters that belong to the Atlanta MSA are quite different in almost all the observed characteristics that we used as controls. It is, therefore, quite likely that these clusters are also different in some unobserved characteristics. The 'Atlanta dummy' will likely account for that.

5. Results and Discussion

The OLS results are given in Table 3. The first observation that we make is that the R^2 values are high across-the-board, but particularly high (greater than 0.5) for the following regressions: above average membership (regression (4)), total membership (regression (5)), volunteering (regressions (6), (7), and (8)), above average and total personal groups (regressions (14) and (15)), and above average and total public groups (regressions (17) and (18)).

We find that whenever the human development index has a statistically significant effect, this effect is positive on the social capital variables. For instance, in regression (4), a one point increase in the HDI accounts for approximately 2 percent of the population increasing its associational memberships to an above average level. Regression (5) shows that a one point increase in the HDI leads to six more associational memberships per capita. The HDI also matters in above average and total voluntary activities, non-religious donation (of any amount), and in above average and total public groups. The results indicate that the aggregate effects on associational memberships come not from the personal groups but from the public groups. This suggests that as community development increases, people become more involved in public groups that contribute to sociopolitical and neighborhood related activities.

The control variables explain the other determinants of the social capital variables. An increase in average family size encourages associational involvement (regression (3)), and increases high religious donations. Total net migration, as well as net international migration, increases public group involvements. An increase in population due to increased births lowers public group involvement and, thereby, lowers total memberships. This is so because the percentage of population that is not capable of associational activities (namely, newborns) increases in the cluster. On the other hand, a fall in the population due to increased deaths leads to a decrease in voluntary activities but an increase in public group involvements (and, thereby, and increase in total memberships). The probable explanation for this is that the elderly and the retired volunteer more while younger and the middle-aged people are more involved in associational activities. Both rural and urban populations have positive effects on volunteering. However, the proportion of rural population only matters for above average volunteering while

proportion of urban population affects all the three volunteering variables. Proportion of black population decreases high amounts of religious donations.

The age effect needs some qualifications. The average cluster age has a negative effect on total membership, volunteering, and involvement in personal groups. Since the variable represents the mean age of the cluster, it does not capture the entire lifecycle aspects. The range of the variable is from 37 to 62 and, therefore, what we see is the variation over this range only. It, however, is consistent with the findings of Munasib (2005), which shows that during the period between late 30s and early 60s, the individual decreases her social capital investment because that is the period of increasing opportunity cost of time of the individual's lifecycle.

6. Concluding Remarks

The first part of this paper constructs a human development index account for community development in a comprehensive manner. It is clear that there is a geographic difference in measures of well being in Georgia, whether in this study or in other studies on poverty in the state (Carl Vinson Institute of Government, 2003). Attention to education and housing variables appears to be the place where development strategies are most needed. An educated population with access to decent housing can be the basis of economic and human development.

Using this broad-based measure of community development, a specific question that we ask in this paper is; does community development affect social capital formation? We find that community development, in general, has a positive effect on local social capital measured by associational memberships. In particular, the aggregate effects on associational memberships come not from the personal groups but from the public groups. This suggests that as community development increases, people become more involved in public groups that contribute to sociopolitical and neighborhood related activities. This is an important finding because, first, it

contributes to the rare literature on social capital formation, and, secondly, it establishes a benefit of community development that deserves increased attention from policymakers both at local and federal levels.

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Tables

Table 1. Derived Social Capital Variables at the Cluster Level

Variable	Type	Label	Mean	Std
chrchmem	Binary	Proportion of population (PP) member of a church	0.77	0.08
volchrch	Binary	PP volunteering in church	0.44	0.14
anymem	Binary	PP member in any organization other than church	0.85	0.08
anyvol	Binary	PP in any volunteering other than church	0.58	0.12
personalgr	Binary	PP member in any personal organization	0.75	0.14
publicgr	Binary	PP member in any public organization	0.70	0.10
anyrd	Binary	PP done religious donation of $100 or less	0.75	0.09
highrd	Binary	PP done religious donation of $500 or more	0.57	0.11
anynrd	Binary	PP done non-religious donation of $100 or less	0.54	0.12
highnrd	Binary	PP done non-religious donation of $500 or more	0.30	0.14
tmem	Continuous	Per capita total number of memberships (in any organization)	3.41	0.64
tvol	Continuous	Per capital total number of volunteering	1.34	0.33
tpersonalgr	Continuous	Per capita total number of memberships in personal organizations	1.93	0.42
tpublicgr	Continuous	Per capita total number of memberships in public organizations	1.48	0.33
amem	Binary	PP with number of total membership ≥ average number of total memberships	0.41	0.13
avol	Binary	PP with number of voluntary activities ≥ average number of voluntary activities	0.39	0.13
apersonalgr	Binary	PP with number of memberships in a personal group ≥ average number of memberships in personal groups	0.51	0.14
apublicgr	Binary	PP with number of memberships in a public group ≥ average number of memberships in public groups	0.42	0.12

Note: We have kept church membership and church voluntary activities separate. ‘Membership in an organization’ includes organizations other than church.

Table 2: Differences in Observed Characteristics in Atlanta and non-Atlanta Clusters

	Atlanta Cluster	Non-Atlanta Cluster
No of clusters	10	21
Human Development Index	0.46	0.35
Average family size	3.17	3.10
Total net migration (10,000)	-0.05	0.11
Net international migration (10,000)	0.21	0.04
Natural population increase (10,000)	0.43	0.13
Natural population decrease (10,000)	0.17	0.05
Proportion of population in rural areas	0.26	0.44
Proportion of population in urban areas	0.66	0.44
Proportion of black population	0.27	0.25
Average age	48.80	50.21

Table 3: OLS Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	chrchmem	**volchurch**	**anymem**	**amem**	**tmem**	**anyvol**	**avol**	**tvol**	**anyrd**
Human Development Index	-0.41	1.014	0.1971	1.6929	6.3455	0.8126	0.935	2.6403	-0.3106
	(1.01)	(1.49)	(0.53)	(3.47)***	(2.69)**	(1.61)	(1.73)*	(1.88)*	(0.64)
Average family size	0.09	0.49	0.57	0.03	0.28	0.01	(0.49)	(0.41)	0.11
	(0.33)	(1.12)	(2.39)**	(0.08)	(0.18)	(0.04)	(1.39)	(0.45)	(0.36)
Total net migration	(0.05)	(0.20)	(0.06)	0.04	0.77	(0.17)	(0.16)	(0.37)	0.01
	(0.63)	(1.51)	(0.80)	(0.36)	(1.64)	(1.67)	(1.46)	(1.31)	(0.15)
Net international migration	-0.398	-0.8019	-0.2934	0.5288	2.3513	-0.2588	-0.118	-0.206	-0.6628
	(1.11)	(1.34)	(0.90)	(1.23)	(1.13)	(0.58)	(0.25)	(0.17)	(1.54)
Natural population increase	0.469	0.8621	0.0212	-0.8024	-5.7041	0.5398	0.675	1.1246	0.398
	(1.09)	(1.19)	(0.05)	(1.54)	(2.27)**	(1.00)	(1.17)	(0.75)	(0.76)
Natural population decrease	-0.598	-1.8607	0.2421	0.4168	8.0604	-1.5399	-2.171	-4.4064	0.1754
	(0.80)	(1.48)	(0.35)	(0.46)	(1.84)*	(1.65)	(2.16)**	(1.69)	(0.19)
Population proportion rural	-0.139	0.0646	0.1335	0.3472	0.9541	0.4404	0.653	1.2186	0.0655
	(0.63)	(0.18)	(0.66)	(1.31)	(0.75)	(1.61)	(2.23)**	(1.60)	(0.25)
Population proportion urban	-0.126	-0.2079	0.132	0.2301	0.8586	0.3598	0.393	0.9476	0.0238
	(0.89)	(0.88)	(1.02)	(1.35)	(1.04)	(2.05)*	(2.08)*	(1.93)*	(0.14)
Population proportion black	-0.1	-0.3477	-0.086	-0.1069	-0.1478	-0.2323	-0.078	-0.3027	-0.0375
	(0.77)	(1.59)	(0.72)	(0.68)	(0.19)	(1.43)	(0.45)	(0.67)	(0.24)
Average age	-0.0002	-0.0022	0.001	-0.007	-0.0461	-0.0058	-0.011	-0.0197	0.0024
	(0.05)	(0.34)	(0.27)	(1.50)	(2.05)*	(1.22)	(2.13)**	(1.47)	(0.51)
Whether in Atlanta MSA	0.066	0.0318	-0.0526	-0.0271	-0.1011	-0.0292	0.029	-0.0405	-0.0264
	(1.59)	(0.45)	(1.38)	(0.54)	(0.42)	(0.56)	(0.53)	(0.28)	(0.52)
Constant	0.782	-1.1517	-1.1334	-0.0952	1.9404	0.2907	1.713	1.9076	0.3398
	(0.83)	(0.73)	(1.31)	(0.08)	(0.35)	(0.25)	(1.36)	(0.58)	(0.30)
Observations	31	31	31	31	31	31	31	31	31
R-squared	0.35	0.39	0.43	0.62	0.65	0.54	0.54	0.54	0.26

Notes: (a) Significant at 10%; ** significant at 5%; *** significant at 1%. (b) t-statistic in parentheses.
(c) chrchmem = Proportion of population (PP) member of a church, volchrch = PP volunteering in church, anymem = PP member in any organization other than church, anyvol = PP in any volunteering other than church, personalgr = PP member in any personal organization, publicgr = PP member in any public organization, anyrd = PP done religious donation of $100 or less, highrd = PP done religious donation of $500 or more, anynrd = PP done non-religious donation of $100 or less, highnrd = PP done non-religious donation of $500 or more, tmem = Per capita total number of memberships (in any organization), tvol = Per capital total number of volunteering, tpersonalgr = Per capita total number of memberships in personal organizations, tpublicgr = Per capita total number of memberships in public organizations, amem = PP with number of total membership ≥ average number of total memberships, avol = PP with number of voluntary activities≥ average number of voluntary activities, apersonalgr = PP with number of memberships in a personal group ≥ average number of memberships in personal groups, apublicgr = PP with number of memberships in a public group ≥ average number of memberships in public groups.

Table 3 (continued . . .): OLS Regression Results

	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	highrd	**anynrd**	**highnrd**	**personalgr**	**apersonalgr**	**tpersonalgr**	**publicgr**	**apublicgr**	**tpublicgr**
Human Development Index	-0.2188	0.957	0.7156	0.429	0.4102	2.7166	0.3425	1.2541	3.6289
	(0.42)	(1.79)*	(1.09)	(0.68)	(0.67)	(1.62)	(0.72)	(2.69)**	(2.65)**
Average family size	0.61	(0.13)	0.15	0.55	(0.18)	(0.69)	0.46	0.32	0.97
	(1.84)*	(0.37)	(0.35)	(1.34)	(0.45)	(0.64)	(1.49)	(1.06)	(1.10)
Total net migration	(0.15)	(0.03)	0.09	(0.08)	0.13	(0.00)	0.01	0.26	0.78
	(1.46)	(0.31)	(0.73)	(0.63)	(1.03)	(0.01)	(0.12)	(2.76)**	(2.84)**
Net international migration	-0.3631	0.0292	0.4379	-0.073	0.8044	0.3069	-0.4041	1.1467	2.0444
	(0.80)	(0.06)	(0.76)	(0.13)	(1.48)	(0.21)	(0.96)	(2.78)**	(1.69)
Natural population increase	0.4843	-0.379	-0.9085	-0.129	-1.0693	-0.7625	-0.0702	-1.9256	-4.9416
	(0.88)	(0.66)	(1.30)	(0.19)	(1.62)	(0.42)	(0.14)	(3.86)***	(3.38)***
Natural population decrease	-0.437	0.6024	1.6393	0.157	1.4937	-0.1279	0.6744	2.8975	8.1884
	(0.46)	(0.61)	(1.35)	(0.13)	(1.31)	(0.04)	(0.77)	(3.34)***	(3.22)***
Population proportion rural	0.0132	-0.1995	-0.1827	0.377	0.2514	0.641	0.1127	0.1259	0.3131
	(0.05)	(0.69)	(0.51)	(1.09)	(0.75)	(0.70)	(0.44)	(0.50)	(0.42)
Population proportion urban	-0.0206	-0.0832	-0.0024	0.346	0.285	0.7797	0.0771	0.0269	0.0789
	(0.11)	(0.45)	(0.01)	(1.56)	(1.32)	(1.33)	(0.47)	(0.16)	(0.16)
Population proportion black	-0.461	-0.2555	-0.2256	-0.206	-0.0501	-0.3221	0.0084	-0.1668	0.1743
	(2.77)**	(1.48)	(1.07)	(1.00)	(0.25)	(0.59)	(0.06)	(1.11)	(0.39)
Average age	0.0068	-0.0027	0.0058	-0.006	-0.0126	-0.0336	-0.0014	-0.0066	-0.0125
	(1.38)	(0.53)	(0.93)	(0.98)	(2.14)**	(2.09)*	(0.31)	(1.47)	(0.95)
Whether in Atlanta MSA	-0.0942	-0.0659	-0.1041	-0.075	-0.042	-0.0171	-0.0659	-0.066	-0.084
	(1.77)*	(1.20)	(1.54)	(1.14)	(0.66)	(0.10)	(1.35)	(1.37)	(0.59)
Constant	-1.4731	0.9443	-0.5608	-1.057	1.3347	4.3176	-0.8615	-0.6863	-2.3772
	(1.23)	(0.76)	(0.37)	(0.72)	(0.93)	(1.10)	(0.78)	(0.63)	(0.75)
Observations	31	31	31	31	31	31	31	31	31
R-squared	0.47	0.47	0.4	0.43	0.51	0.58	0.37	0.6	0.56

Notes: (a) Significant at 10%; ** significant at 5%; *** significant at 1%. (b) t-statistic in parentheses.

(c) chrchmem = Proportion of population (PP) member of a church, volchrch = PP volunteering in church, anymem = PP member in any organization other than church, anyvol = PP in any volunteering other than church, personalgr = PP member in any personal organization, publicgr = PP member in any public organization, anyrd = PP done religious donation of $100 or less, highrd = PP done religious donation of $500 or more, anynrd = PP done non-religious donation of $100 or less, highnrd = PP done non-religious donation of $500 or more, tmem = Per capita total number of memberships (in any organization), tvol = Per capital total number of volunteering, tpersonalgr = Per capita total number of memberships in personal organizations, tpublicgr = Per capita total number of memberships in public organizations, amem = PP with number of total membership ≥ average number of total memberships, avol = PP with number of voluntary activities≥ average number of voluntary activities, apersonalgr = PP with number of memberships in a personal group ≥ average number of memberships in personal groups, apublicgr = PP with number of memberships in a public group ≥ average number of memberships in public groups.