AN ANALYSIS OF THE DETERMINANTS OF SOCIAL CAPITAL AS CONNECTEDNESS IN LENOIR COUNTY, NC

By
Margaret Madeline Brown

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Approved:

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Dr. James Ferguson

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Dr. Molly De Marco
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Abstract

Social connectedness is frequently defined as the extent to which people interact with one another, either individually or through groups. A person’s number of close friends and family members, the frequency and type of interactions a person has with her friends and family, the trust she has in her neighbors and others, and the extent to which she participates in volunteer activities or community events all directly correlate to a person’s well being – both in a personal and economic sense. In economic literature the focus has been on examining the importance of social capital for economic growth. Researchers have also examined the links between social connectedness and its impact on better health outcomes (mental and physical), welfare, political connectedness, and much more. But at this point in time, there is very little research examining what factors affect social connectedness itself. This paper will contribute to the body of research on social connectedness by attempting to determine what demographic factors have the potential to influence levels of social connectedness. Data from the Heart Healthy Lenoir Project were used in the framework of a logistic regression model to study the effect of demographic and economic variables of individuals such as age, gender, race, marital status, income, level of employment, level of education, and perceived standings within the community and the United States on social connectedness. Key findings indicate that education and “perceived standing within the community” are important factors that influence social connectedness.
I. Introduction

Social connectedness is frequently defined as the extent to which people interact with one another, either individually or through groups. A person’s number of close friends and family members, the frequency and type of interactions a person has with her friends and family, the trust she has in her neighbors and others, and the extent to which she participates in volunteer activities or community events all directly correlate to a person’s well being – both in a personal and economic sense. In economic literature, social connectedness is often referred to as social capital. Numerous studies have shown the importance of social capital for economic growth, and many have examined the links between social connectedness and its impact on better health outcomes (mental and physical), welfare, political connectedness, and much more. To my knowledge, there is very little research examining what factors affect social connectedness itself.

Following the 2007 financial crisis, the United States experienced an era of economic downturn now loosely called the Great Recession. Medications to treat mental health diseases such as anxiety and depression are being prescribed at an all time high (Ferlander, 2007). Participation in the political process and voter turnout is low (Timpone, 1998). At more than any other point in history, individuals report feeling isolated and distanced from their neighbors and community (Putnam, 2000). While research exists that identifies the significant
influence social connectedness has on all of these pressing policy issues, not much is known about what factors determine how socially connected an individual is. Determining what variables impact social connectedness, and then designing policy around encouraging high levels of social connectedness, has the potential to significantly and positively benefit the wide range of issues for which social connectedness is an important contributing factor.

With the above motivation in mind, the research undertaking will examine demographic information for 228 individuals living in Lenoir County, North Carolina – a county experiencing many of the ill effects of the pressing policy issues described above. The demographic information will be paired in a dataset with the same individuals’ responses to questions that were designed to ascertain their level of social connectedness. Logistic regression analyses will be conducted in an attempt to distinguish which key demographic and economic factors have the potential to elevate the levels of social connectedness for an individual.

The next section will review the literature. After that, an empirical model for the analysis will be presented. Data will be described in section four, followed by the discussion of results and policy implications.
II. Literature Review

A brief overview of existing literature linking social connectedness to the issues mentioned above (economic prosperity, better health outcomes, welfare, political connectedness, and more) is included below, in order to demonstrate the high significance of social connectedness to economic growth and other current issues in the United States and the world. This overview will also highlight the relatively limited amount of work that has been done towards determining factors that affect social connectedness.

While there is limited research on the determinants of social connectedness, there is a significant body of research dedicating to examining the importance of social capital for economic growth. Rupasingha et al. (2000) examine whether social capital affects economic growth by using linear regression analysis and county level data within the United States. The results from this study indicate that social capital has a statistically significant and positive effect on the growth rate of per-capita income. While social capital is defined as an independent variable leading to positive economic growth, there is still a lack of literature on independent variables that influence social connectedness. Understanding of these factors could lead to expanded knowledge on how economic growth could be encouraged by encouraging social connectedness.
Knack and Keefer (1997) also provide evidence that social capital matters for measurable economic performance. Using indicators of trust and civic norms from the World Values Surveys for a sample of 29 market economies, Knack and Keefer find that trust, civic norms, and social connectedness as a “safety net” where other, more traditional welfare programs lack an impact, directly lead to improved economic performance in market economies at the national level. Temple and Johnson (1998) follow up on this idea with their research using indexes of social development constructed in the early 1960s. Their results indicate the importance of social capital for economic growth that go beyond the reasons discussed by Knack and Keefer. Beugelsdijk et al. (2004) also follow up on Knack and Keefer, and find their results on the relationship between social capital and economic growth to be robust.

Piazza-Georgi (2002) reviews the body of literature on social capital, and comes to the conclusion that social capital is a significant factor leading to economic growth. She also makes the case that given the recognized importance of social capital to economic growth on the individual, community, and national level, one new area of focus should be empirical study of factors determining social capital. My research contributes to the literature by investigating the factors that influence social connectedness.

Many economists have long been aware that social networks may have a significant role to play in explaining economic outcomes. An interesting research
undertaking by Babcock (2008) uses estimates concerning the effect of connectedness (as measured by friendship ties in middle and secondary school) on educational attainment and thus later economic success, using data from the National Longitudinal Survey of Adolescent Health (Add Health). This study is unique in that it uses micro-level measures of connectedness or social interaction (the kind that this research undertaking will seek to explain using independent factors related to demographic information) that are sufficiently subtle to test nontrivial hypotheses. Some of the findings include that being part of a more connected cohort within a given secondary or middle school as a part of the local community is associated with significantly higher probability of having attended college seven years later, and thus later leading to more economic success (Babcock, 2008). To my knowledge, the current literature on the subject is limited and my research undertaking can be viewed as a small step taken to further understanding of social connectedness itself, and in this way contribute to the body of literature aimed at improving social connectedness among individuals with the end goal of economic growth and progress in the issues mentioned above.

In related research, Ferlander (2007) provides an overview of the concept of social capital and distinguishes its different forms, with the purpose of elaborating on the potential for social connectedness to dramatically impact health. The article is a substantial literary resource on the development of the
concept of social capital over time. Ferlander discusses Putnam’s (1995, 2000) claim that the core idea of social capital is that social networks have value directly in how they (through health and other factors) affect the economic productivity of individuals and groups.

Research by Cornwell, et al. (2008) and by De Marco and De Marco (2008) elaborate on the relationships between social connectedness and health outcomes. Cornwell, et al. use data from the National Social Life, Health, and Aging Project – a population based study of non-institutionalized older Americans ages 57 to 85. This paper is particularly relevant to this research undertaking as the mean age of the sample used later on in the paper is 56, and as Cornwell, et al. (2008) findings demonstrated that high levels of social connectedness result in better health and happiness outcomes. De Marco and De Marco used data from the Welfare, Children, and Families: A Three-City Study longitudinal dataset comprised of low-income neighborhoods in Boston, San Antonio, and Chicago to examine the impact of social connectedness and neighborhood characteristics on the use of nutrition, health, and welfare programs in local communities. Using hierarchical linear models, the results indicated that both individual (education, employment, and marriage) and perceived neighborhood disorder factors were related to social service use. Both of these works used empirical research to link social connectedness to more positive health outcomes.
On the other hand, Persell, et al.’s (2001) work links the importance of social connectedness to social tolerance and economic prosperity in local communities. Persell, et al. use a multivariate analysis of pooled General Social Survey data from 1972 to 1994 to suggest that social connectedness can over time lead to increased social tolerance of different racial groups and groups with varied sexual preferences along with greater economic development and prosperity.

One of the biggest ways increased social connectedness can contribute to the positive progress of issues mentioned in the introduction section is through greater political awareness and involvement. Several studies, including Staton, et al. (2007), Timpone (1998), Kwak, et al. (2004) all point to the significance of social connectedness in increasing political participation and voter turnout in local communities. Greater involvement in the political process translates to policy initiatives that more accurately reflect the needs and concerns of individuals living within a local community, and improving social connectedness is often an important first step in increasing political connectedness as well.

Social connectedness has the potential to dramatically improve a range of economic, health, welfare, and political issues. And yet there is very little research dedicated to examining the determinants of social connectedness itself. This research undertaking will contribute to the body of literature in this way, by using data from individuals participating in the Heart Healthy Lenoir Project in North
Carolina to test the effect of demographic and economic variables on social connectedness.

III. Empirical Model

The empirical model will attempt to estimate the impact of various demographic and economic variables on social connectedness. The dependent variable, social connectedness \((SC)\), is a yes/no indicator variable for an individual who is considered (according to his mean scale social connectedness score from the Six-Month Follow-Up form) to have high levels of social connectedness or not. Based on the empirical models used by Rupasingha et al. (2000) and Babcock (2008), age, gender, race, marital status, income, education level, and level of employment were used as explanatory variables. My research will make use of two other variables that were unique to the dataset I used: “perceived level of standing within the community” and “perceived level of standing within the United States as a whole.” Of the nine independent variables, age is continuous. Gender is a yes/no indicator variable for being male, race is yes/no indicator variable for being white, marital status is a yes/no indicator variable for living with a partner, income is a yes/no indicator variable for being above median income, and perceived levels of standing within the community and the United States are yes/no indicator variables for being in the top level of the community. Level of education is a categorical variable with five options: no high
school completion, graduation of high school, some college completion, graduation of college, and advanced degree work. Employment was coded with three options: unemployed, employed part time, and employed full time. The specific empirical model that will be used for estimation is defined in the following equation:

\[ SC_t = \beta_0 + \beta_i Z_i + \varepsilon_t \]  (1)

where \( SC_t \) represents social connectedness, \( Z_i \) is a vector of variables that will likely affect \( SC_t \), \( \beta_i \) are the coefficients of \( Z_i \), and \( \varepsilon_t \) is errors resulting from unobservable factors. In my estimation \( SC_t \) will be defined as a binary variable. The logistic regression will be the appropriate estimation method.

V. Data

Data from the Heart Healthy Lenoir Project were used for this study. The Heart Healthy Lenoir Project is a community-based research project designed to develop and test better ways to reduce heart disease in Lenoir County, from prevention to treatment. The Heart-Healthy Lenoir Project is a collaborative project between several Lenoir County agencies and community members, the University of North Carolina at Chapel Hill, and East Carolina University Departments of Family Medicine and Public Health. Lenoir County in particular was chosen for the study as it is a lower income, more rural county within the state with citizens who have high levels of self-awareness regarding the health
and financial challenges members of the community face (UNC Center for HPDP, 2014).

The dataset used in this research undertaking was taken from two individual surveys of individuals participating in the Heart Healthy Lenoir Project, and the data are connected via generic IDs of the respondents. The first survey was the Heart Healthy Lenoir Project Enrollment Form. The demographic information from which the independent factors were collected comes from Section B of this form (which is attached in the appendix). The second survey was from the Heart Healthy Lenoir Project Six-Month Follow-Up. The individual responses to Section H: “Questions About Your Community” (also in the appendix) of this form generate the data that were used to create the social connectedness variable that is serving as the independent variable.

In total, there were 228 generic IDs with complete responses that were contained in the dataset and used for the regression analysis. The first independent factor was age. Age was a continuous variable ranging from 26 to 89, with a mean of 56. Gender was second, coded as a binary variable with 0 representing female and 1 representing male. Females accounted for 79% of the population and males 21%. Race was also coded with a binary variable with 0 representing black and 1 representing white. 32% of the population was reported as black and 68% as white. Marital status was initially a categorical variable with six options: married, living with partner, widowed, divorced, separated, and never married. It was
recoded as a binary variable with 0 representing widowed, divorced, separated, and never married, and 1 representing married and living with partner. This was done as the point of the independent variable in this analysis was to examine the impact of living with or without a significant other in the household and the potential subsequent effect on social connectedness. 53% of the population was represented as single and 47% as living with a significant other.

Household income was initially collected in intervals with fifteen options ranging from less than $5,000 to greater than $100,000. It was recoded as a binary variable with 0 representing individuals living in households below median income (roughly $45,000 for North Carolina and the United States) and 1 representing individuals living in households above median income. This was done in order to understand the possible effects of living in a better or worse-off financial situation in a simpler analysis. Roughly 71% of the respondents lived below median income and 29% above it. Employment was recoded from eight initial options to three, with 0 representing currently unemployed (unemployed or laid off, looking for work, student, keeping house or raising children full-time, do not work due to health reasons, and retired), 1 representing working part time, and 2 representing working full time. This was recoded with the purpose of analyzing the possible effects of the kind of networks an individual would have through work on social connectedness. 48% of the population was currently unemployed, 14% working part time, and 38% working full time.
Education was initially collected with twenty-one levels, representing last grade completed and ranging from one to over twenty-one (indicating advanced degrees). It was recoded with five categories: 0 representing no high school completion, 1 - graduation of high school, 2 - some college coursework completion, 3 - graduation of college, and 4 - advanced degree coursework. This was done in order to allow a broader insight into the types of networks of individuals with distinctly different educational qualifications. Roughly 15% of the population did not complete high school, 38% completed high school but no college coursework, 22% completed some college work, 16% graduated from a four year college, and 8% completed coursework for advanced degrees.

The final two independent variables were self-reported perceived socioeconomic standings within the individual’s local community and the United States. The respondents were shown an image of a ladder with ten rungs and instructed to select the rung that was appropriate to their standing. Both of these variables were recoded as binary variables with 0 representing a self-reported standing in the bottom half of the community or the United States and 1 representing the top half. This was done in order to analyze a more simple case of whether the individuals thought they were better or worse off than average. For the community variable, 77% of the respondents placed themselves below average and 23% above average, while in an interesting switch for the United
States variable, 25% of the respondents places themselves below average and 75% above average.

The dependent variable “social connectedness” was represented in the dataset by a previously created variable z_socialcapital. In Section H of the Six-Month Follow-Up form, respondents were presented with a series of questions about their community and given a scale to answer of five options: disagree strongly (1), disagree (2), neutral (3), agree (4), and agree strongly (5). A mean scale score was calculated based on the individual’s responses. The scores for the different items on the questionnaire were totaled and then divided by the number of items in the scale to get a mean scale score for each respondent. This maintained the range of the scores on the new scale as they were initially reported (1 through 5), though this led to the variable z_socialcapital becoming a variable with thirteen options from 1 to 5 (1, ~1.33, ~1.67, 2, etc.). In order to allow for estimation with meaning in such a small sample size, this z_socialcapital variable was recoded as a binary variable. This process was done twice. For the first new dummy variable, 0 represented mean scale scores from 1 to ~2.67, while 1 represented mean scale scores from 3 to 5. Thus, 0 indicated low levels of social connectedness and 1 indicated higher levels of social connectedness. For the second dummy variable, 0 represented mean scale scores from 1 to 3, while 1 represented mean scale scores from ~3.33 to 5. The decision was made to create these two dummy variables so that two analyses could be conducted. This was an
attempt to account for, or at least recognize, the somewhat arbitrariness of making a mean scale score of 3 for the z_socialcapital variable the boundary between low and high levels of social connectedness. It also allowed for two slightly different estimations, and thus different analyses and interpretations, of the empirical model given the small dataset.

V. Results

A. Descriptive Statistics

Table 1 summarizes the nine independent variables used in the estimation analysis. As discussed before, the independent variables (age, gender, race, marital status, income, level of employment, level of education, and self reported perceived standings in the community and the United States) were variables from the Heart Healthy Lenoir Project enrollment form, most of which were recoded (gender, race, marital status, income, and standings as binary variables, levels of employment and education as categorical variables).

Table 2 is the correlation matrix for these nine explanatory factors. This analysis was conducted to check for possible existence of collinearity between the independent variables. As can be seen, with the exception of income/marital status, none of the independent variables have a correlation coefficient greater than 0.5 indicating that multicollinearity is not a
significant problem. Income and marital status are correlated at the 0.5010 level. But this value is not high enough to pose a serious issue.

B. Estimations

To estimate the possible impact of key demographic information on social connectedness, two different logit regressions were estimated. In the first, the social connectedness variable in which high levels of social connectedness included mean scale scores ranging from 3 to 5 was used as the binary dependent variable against the independent variables representing demographic information and economic variables. In the second, the social connectedness variable in which high levels of social connectedness included mean scale scores ranging from ~3.33 to 5 was used. The social connectedness variable originally had thirteen values. For this analysis social connectedness is defined as a binary variable. The two variables that were created account for making the distinction at the sixth and seventh values of the original variables.

Table 3 displays the marginal effects of the estimation using the first binary social connectedness variable in a logit regression to investigate the probability of influence for the dependent factors. In this estimation, gender, level of education, and perceived self reported standing in the community were all significant at the p<.1 level.
The marginal effects analysis shows that being male significantly increases the probability that an individual will have higher levels of social connectedness by about 14%. There are several possible explanations as for why this may be the case, and for why the magnitude of this effect is important to note. Assuming all other things to be equal, men are more likely to spend time outside of the house (and thus interacting more with other members of the community) than women. Women are still traditionally more involved in the child-rearing process and in managing the activities and operations of a household. This means that more of their time and energy is diverted away from the outside community and more towards the internal affairs of a household. In contrast, in rural Lenoir County men are more likely to spend time at outside the home at work, bars, and on community sports teams than women, and this likely leads to greater levels of social connectedness with an individual’s community.

The analysis also indicated that higher levels of education increase the probability that an individual will have higher levels of social connectedness by about 5%. While accounting for less of an effect than gender, the magnitude of the marginal effect of higher education is significant. The majority (60%) of the sample in the dataset had education levels falling between graduation of high school and some college.
coursework completed. Fifteen percent of the population did not complete high school while 24% completed college or other advanced degrees. In this way, higher levels of education in this sample are not necessarily representative of what we traditionally think of as higher education (graduation of college and advanced degree work), but instead, of indicating that an individual completed high school and some college work, most likely very local to the community. Higher levels of education thus roughly translate into attending (and completing) high school, and it is easy to understand how attending a local high school with other individuals of a similar age could lead an individual to be more connected to the community as a whole — particularly if an individual has lived most of his life in the same community (as is the case for many Lenoir County residents).

The marginal effects analysis shows that perceived self reported standing in the top half of the community significantly decreases the probability that an individual will have higher levels of social connectedness by about 18%. This factor has the largest magnitude of the statistically significant independent variables, yet is relatively straightforward to understand. Individuals who view themselves as better off than average within the community are likely to be less socially connected for a variety of reasons. They are less likely to utilize social
services provided for worse off members of the community, and are thus less likely to interact with others at these community centers. Better off households are more likely to live in nicer houses on plots of land that are further away from neighbors (imagine the difference between suburban plots and subsidized tenant housing). This increased distance would make individuals less likely to interact as neighbors, in the strictly social sense and in terms of reliance – an individual is less likely to ask a neighbor for help watching the kids, to borrow a cup of flour, etc. when the neighbor is say an acre away as opposed to ten feet. And it may also simply be true that individuals who view themselves as better off than others within the community feel less of a desire to get to know other community members from a more self-focused standpoint.

In the second specification of the logit regression, the social connectedness variable in which high levels of social connectedness included mean scale scores ranging from ~3.33 to 5 was used as the binary dependent variable against the independent variables representing demographic information. Table 4 displays the marginal effects of the estimation using the second binary social connectedness variable in a logit regression to investigate the probability of influence for the dependent factors. In this estimation, level of education, perceived self reported
standing in the community, and perceived self reported standing in the United States were all significant at the 10% level.

Similar to the first logit regression, this analysis also indicated that higher levels of education increase the probability that an individual will have higher levels of social connectedness. The magnitude was slightly higher this time, with the probability increasing by about 6% as opposed to 5% the first time. Also similar to the first logit regression, this analysis showed perceived self reported standing in the top half of the community significantly decreases the probability that an individual will have higher levels of social connectedness – this time by about 19% as opposed to the 18% seen earlier.

The surprising aspect of this second analysis was the significance of the perceived standing in the United States variable. Self reported perception of an individual as better off than average in the United States increased the probability that an individual would have higher levels of social connectedness by roughly 18%. It may be the case that the community and United States variables naturally counteract each other, or the apparent opposite effects of these two variables may have more to do with the underlying data itself. In the dataset, for the community variable 77% of the respondents placed themselves below average and 23% above average, while in an interesting switch for the United States variable 25%
of the respondents places themselves below average and 75% above average. This switch could account for the interesting opposite effects of what appear on the surface to be two similar independent variables (though it is important to note that these were not correlated when checked earlier).

C. Concerns

As always with this type of investigative research, there are some concerns and room for improvement in the methodology of the research and analysis. The dataset itself was small, with a sample population of 228 complete responses. If there were more time, it would be useful to collect more responses from individuals. There is also always the potential for inherent bias in self reported surveys, whether that comes from individuals not being fully aware of their entire situation or resulting from an inherent bias in the types of individuals drawn to participate in the study.

Another cause for concern may be the grouping of many of the independent variables into the binary variables that were used in the regression analysis. Earlier, it was explained how and why each independent variable was coded the way it was, but of course different researchers may feel that other groupings and formats are more
appropriate. And finally, the possibility of endogeneity is always a cause for concern.

VI. Conclusion

Broadly, this research demonstrates several important results about the impact of certain demographic information on an individual’s social connectedness to the community he lives in. In both of the analyses conducted, education and perceived standing with the community significantly affected the probability of an individual having higher levels of social connectedness. In the first specification of the model, gender was also significant at the 10% level, indicating that being male increased the probability of higher levels of social connectedness. In both specifications of my model, it was found that education increased the probability of social connectedness being higher at the 10% significance level, while higher perceived standing within the community decreased the probability of higher social connectedness at the 1% significance level. As discussed in the results section, this is likely due to the fact that in rural communities such as Lenoir County individuals with higher perceived socioeconomic status within the community are less likely to interact with their neighbors and rely on them as a safety net. The impact of other demographic information at this point in the research process is inconclusive, but perhaps with
a larger dataset and variety of responses more nuances of the independent factors affecting social connectedness could be understood.

Social connectedness has been linked in previous research to better health outcomes (mental and physical), welfare, political connectedness, economic prosperity, and more. While there is a significant amount of research dedicated to understanding how social connectedness is related to these factors, there is very little research into the underlying factors affecting social connectedness itself. For an aspect of an individual with such large potential impacts on other aspects of the individual’s life, this seems incongruous. More research and understand into what affects social connectedness could lead to better policy promoting social connectedness, and this has the potential for positive ripple effects in many other aspects of an individual’s life.
VII. Appendix

Table 1. Summary Statistics

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<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<td>10.979</td>
<td>26.478</td>
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<td>0.434</td>
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Table 2. Correlation Matrix

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</tbody>
</table>
Table 3. Logit Estimates of Probability of First Social Connectedness Variable (Marginal Effects)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Marginal Effect</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>0.031</td>
<td>(0.071)</td>
</tr>
<tr>
<td>Age</td>
<td>0.001</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Gender</td>
<td>0.144*</td>
<td>(0.082)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>0.024</td>
<td>(0.069)</td>
</tr>
<tr>
<td>Income</td>
<td>0.095</td>
<td>(0.089)</td>
</tr>
<tr>
<td>Employment</td>
<td>-0.041</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Education</td>
<td>0.050*</td>
<td>(0.029)</td>
</tr>
<tr>
<td>Community</td>
<td>-0.184***</td>
<td>(0.067)</td>
</tr>
<tr>
<td>United States</td>
<td>0.062</td>
<td>(0.067)</td>
</tr>
</tbody>
</table>

Notes:
Standard errors are given in parentheses.
***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>0.004</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Age</td>
<td>0.061</td>
<td>(0.081)</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.014</td>
<td>(0.075)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>0.101</td>
<td>(0.072)</td>
</tr>
<tr>
<td>Income</td>
<td>0.008</td>
<td>(0.092)</td>
</tr>
<tr>
<td>Employment</td>
<td>-0.020</td>
<td>(0.038)</td>
</tr>
<tr>
<td>Education</td>
<td>0.056*</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Community</td>
<td>-0.188**</td>
<td>(0.075)</td>
</tr>
<tr>
<td>United States</td>
<td>0.179***</td>
<td>(0.068)</td>
</tr>
</tbody>
</table>

Notes:
Standard errors are given in parentheses.
***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.
Survey 1. Heart Healthy Lenoir Project Enrollment Form, Section B: Demographic Information

<table>
<thead>
<tr>
<th>Section B: Demographic Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your date of birth?</td>
</tr>
<tr>
<td>2. What is your sex?</td>
</tr>
<tr>
<td>3. Are you of Hispanic, Latin, or Spanish origin?</td>
</tr>
<tr>
<td>4. What is your race?</td>
</tr>
<tr>
<td>5. What is the highest grade or year of regular school you have completed?</td>
</tr>
<tr>
<td>6. Are you now? (choose one)</td>
</tr>
</tbody>
</table>

---

**B1**

- Month
- Day
- Year

**B2**

- Male
- Female

**B3a**

- Yes, mark all that apply to you:
  - Argentinian
  - Cuban
  - Dominican
  - El Salvadorian
  - Mexican American
  - Mexican

**B3b**

- Asian American, Native Hawaiian, other Pacific Islander

**B3c**

- American Indian or Alaska Native

**B3d**

- Some other race

**B4**

- White
- Black, African American, or Negro

**B5**

- Never attended school
- Grade

**B6**

- Married
- Widowed
- Never married
- Separated
- Divorced
- Living with partner
7. Have you smoked at least 100 cigarettes in your entire life?

☐ yes  ☐ no

8. Do you smoke cigarettes now?

☐ every day

☐ some days

☐ not at all

8a. If every day or some days, on average, how many packs of cigarettes do you now smoke a day?

packs per day

9. In a usual week, do you or anyone who lives with you, smoke cigarettes, cigars, or pipes anywhere inside your home?

☐ yes  ☐ no

9a. If yes, in a usual week, how many people who live with you including yourself, smoke cigarettes, cigars, or pipes anywhere inside your home? [Write number in box below.]

number of people

9b. Usually about how many days per week do people who live with you smoke anywhere inside your home?

☐ never

☐ rarely or less than 1 day/week

☐ 1 day/week

☐ 2 days/week

☐ 3 days/week

☐ 4 days/week

☐ 5 days/week

☐ 6 days/week

☐ 7 days/week

10. Do you currently have health insurance?

☐ yes  ☐ no
11. During the past 12 months, was there any time when you had no health insurance at all?

| B11 | yes | no |

11a. For how many months of the past 12 months did you have no health insurance?

<table>
<thead>
<tr>
<th>B11a</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>07</td>
<td>08</td>
<td>09</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

11b. What is the **one main** reason why you did not have any health insurance?

<table>
<thead>
<tr>
<th>B11b</th>
<th>can't afford/too expensive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not eligible due to working status/changed employer/lost job</td>
</tr>
<tr>
<td></td>
<td>not eligible due to citizenship/immigration status</td>
</tr>
<tr>
<td></td>
<td>family situation changed</td>
</tr>
<tr>
<td></td>
<td>can get health care for free/pay for own care</td>
</tr>
<tr>
<td></td>
<td>not eligible due to health or other problems</td>
</tr>
<tr>
<td></td>
<td>don't believe in insurance</td>
</tr>
<tr>
<td></td>
<td>switched insurance companies, delay between jobs</td>
</tr>
</tbody>
</table>

| B11b | other |

12. Which of the following best describes your current main daily activities and/or responsibilities? (Choose one.)

<table>
<thead>
<tr>
<th>B13</th>
<th>working full time (30 or more hours/week)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>working part time (less than 30 hours/week)</td>
</tr>
<tr>
<td></td>
<td>unemployed or laid off</td>
</tr>
<tr>
<td></td>
<td>looking for work</td>
</tr>
<tr>
<td></td>
<td>student</td>
</tr>
<tr>
<td></td>
<td>keeping house or raising children full-time</td>
</tr>
<tr>
<td></td>
<td>do not work due to health reasons</td>
</tr>
<tr>
<td></td>
<td>retired</td>
</tr>
</tbody>
</table>
13. What type of work do/did you do in your current or most recent job? [Choose one.]

B13  ○ management, business, and financial (chief executives, financial managers, etc.)
 ○ professional and related (engineer, architect, dentist, etc.)
 ○ service (waitress, cook, maintenance, house or hotel cleaner, etc.)
 ○ sales (cashier, counter clerk, telemarketing, etc.)
 ○ administrative support, clerical (file clerk, answering service, hotel clerk, etc.)
 ○ construction (carpentry, electrician, painter, plumber, etc.)
 ○ installation, maintenance and repair (auto mechanic, building maintenance, electronic installation & repair, etc.)
 ○ production (assembly line, meat packing, printing, farming, etc.)
 ○ transportation & material moving (bus or truck driver, railroad, service station or parking lot attendant, garbage or recycling collector, etc.)
 ○ other ▶ specify

B13 other

The next questions are important to help us understand your economic situation. Please answer as accurately as possible. The information will not be reported in any way that allow you to be personally identified.

14. What was the total combined income of your household in the past year including income from all sources such as wages, salaries, Social Security, or retirement benefits, help from relatives and so forth? Please tell us the total income before taxes.

B14  ○ less than $5,000  ○ $30,000 to $39,999  ○ $80,000 to $89,999
 ○ $5,000 to $9,999  ○ $40,000 to $49,999  ○ $90,000 to $99,999
 ○ $10,000 to $14,999  ○ $50,000 to $59,999  ○ $100,000 or more
 ○ $15,000 to $19,999  ○ $60,000 to $69,999  ○ don't know
 ○ $20,000 to $29,999  ○ $70,000 to $79,999  ○ refused to answer

15. How many people live in your household, including you? ▶ number of people

16. Of the persons living in your household (including you), how many are 18 years and older? ▶ number of people

17. Of the persons living in your household how many are under 18 years of age? ▶ number of people
18. Think of this ladder as representing where people stand in their communities.

People define community in different ways. Please define it in whatever way is most meaningful to you. At the top of the ladder are the people who have the highest standing in their community. At the bottom are the people who have the lowest standing in their community.

Where would you place yourself on this ladder?

Fill in the bubble beside the rung where you think you would stand at this time in your life, relative to other people in your community.
19. Think of this ladder as representing where people stand in the United States.

At the top of the ladder are the people who are the best off—those who have the most money, the most education and the most respected jobs. At the bottom are the people who are the worst off—who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are the closer you are to the people at the very bottom.

Where would you place yourself on this ladder?

Fill in the bubble beside the rung where you think you would stand at this time in your life, relative to other people in the United States.
## Section H: Questions About Your Community

This section is about the neighborhood or the community in which you live. For the statements listed below, please indicate the degree to which you agree or disagree with each statement. Your choices are strongly disagree, disagree, neutral, agree, or strongly agree.

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can count on adults in my neighborhood or community to watch out that children are safe and don’t get in trouble.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. When I am away from home, I know that my neighbors will keep their eyes open for possible trouble at my place.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. In my neighborhood/community, people mostly go their own way.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. People in my neighborhood/community do not share the same values.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. If I were sick, I could count on my neighbors to shop for groceries for me.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. People in this neighborhood/community can be trusted.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Parents in this neighborhood/community know their children’s friends.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Children around here have no place to play but the street.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Adults in my neighborhood/community know who the local children are.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The equipment and buildings are well kept in the park or playground that is closest to where I live.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. The park or playground that is closest to where I live is safe during the day.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. The park or playground that is closest to where I live is safe at night.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. People in this neighborhood/community generally know each other.</td>
<td>disagree strongly</td>
<td>disagree</td>
<td>neutral</td>
<td>agree</td>
<td>agree strongly</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. I know the first name of most of the people who live in my community/neighborhood.  
   disagree strongly  |  disagree  |  neutral  |  agree  |  agree strongly  
   H14: o  |  o  |  o  |  o  |  o  

15. If I had to borrow $30 in an emergency, I could borrow it from someone.  
   disagree strongly  |  disagree  |  neutral  |  agree  |  agree strongly  
   H15: o  |  o  |  o  |  o  |  o  

16. If you had to borrow $30 in an emergency, who would you borrow it from?  
   [Mark all that apply. If you don't know someone you could borrow from, mark "no one." ]  
   H16a: o church member  |  H16b: o neighbor  |  H16c: o co-worker  |  H16d: o someone at school  
   H16e: o family member  |  H16f: o other specif  |  H16g: o other  |  H16h: o no one  

17. How long have you lived in this neighborhood/community?  
   [Answer in either months or years, depending on how long you have lived there.]  
   number of months, if less than 12 months:  
   H17 months:  |  H17 month(s):  
   number of years, if 1 year or more:  
   H17 years:  |  H17 year(s):  

18. Where did you live before?  
   [Write in previous address or zip code.]  
   H18:  

19. If you had to take your best guess, how long do you think you'll be living in this neighborhood/community?  
   [You may choose to answer in either months or years.]  
   number of months, if less than 12 months:  
   H19 months:  |  H19 month(s):  
   number of years, if 1 year or more:  
   H19 years:  |  H19 year(s):  

Developed by the Data Capture Services Unit in the UNC-CH Center for Health Promotion & Disease Prevention  
www.unc.edu/serv/el/ser/}

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These next questions ask about your involvement in your community.

20. Are you currently registered to vote?
   
   [ ] yes  [ ] no  [ ] don't know

21. Did you vote in the most recent election?
   
   [ ] yes  [ ] no  [ ] don't know

22. Did you vote in the 2008 presidential election?
   
   [ ] yes  [ ] no  [ ] don't know

23. Are you a member of a formal or informal organization in your community? [This includes things like local government, Rotary, glee club groups, Parent Teacher Association (PTA), recovery or support groups, and/or sports teams. Do not include churches.]
   
   [ ] yes  [ ] no  [ ] don't know

   23a. If yes, list the organizations of which you are a member.

   [ ] don't know

24. How often, if ever, do you go to church, synagogue, or some other place of worship?

   [ ] more than once a week
   [ ] weekly
   [ ] 1-2 times/month
   [ ] several times a year
   [ ] occasionally
   [ ] never
25. If you were invited to a picnic, say at a church or with a group of neighbors, and they asked you to bring something to share, what would you be most likely to bring?

26. If you were invited to a picnic, say at a church or with a group of neighbors, what food would you think would be at the picnic?

These next questions ask about your friends and family.

Considering the people to whom you are related, either by birth or marriage . . .

27. How many relatives do you see or hear from at least once a month?

○ none  ○ 1  ○ 2  ○ 3-4  ○ 5-8  ○ 9 or more

28. How many relatives do you feel close to such that you would call on them for help?

○ none  ○ 1  ○ 2  ○ 3-4  ○ 5-8  ○ 9 or more

29. How many relatives do you feel at ease enough with to talk with about private matters?

○ none  ○ 1  ○ 2  ○ 3-4  ○ 5-8  ○ 9 or more

Considering all of your friends, including those who live in your neighborhood/community . . .

30. How many of your friends do you see or hear from at least once a month?

○ none  ○ 1  ○ 2  ○ 3-4  ○ 5-8  ○ 9 or more

31. How many friends do you feel close to such that you would call on them for help?

○ none  ○ 1  ○ 2  ○ 3-4  ○ 5-8  ○ 9 or more
32. How many friends do you feel at ease enough with to talk with about private matters?

   - None
   - 1
   - 2
   - 3-4
   - 5-8
   - 9 or more

33. If you had a very personal and serious problem, are there any people with whom you could discuss it?

   - Yes
   - No
References


