Abstract

Social Capital has been defined many ways (Portes, 2000); for this study, we define it as one’s social network, through which one gains information and numerous other benefits. Social scientists from a variety of disciplines have long been interested in social capital, both in deciphering what builds social capital and understanding the benefits of having social capital. This study is an attempt to better understand how public spaces impact the level of social capital, both on an individual and neighborhood level. Using data from a community survey conducted in Greenville County, South Carolina, GIS data, spatial relationships were calculated in order to examine the impact of parks, schools, and other survey data on social capital. This result shows that proximity to a school and social capital for those that have small children. The nearest to the park or school had no significant impact on social capital for others, therefore further neighborhood traits, such as commercial development, are positively correlated with social capital. Further research is recommended such as examining the impact of density and neighborhood design on social capital.

Background Research and Data Collection

There are two main concepts of social capital: aggregate social capital and individual social capital (Portes, 2000). Aggregate social capital measures the social capital of a community while individual relates to one’s personal social capital. Both the idea of one’s personal social network and the network within a community have been linked to both community and individual benefits. Building social capital requires a certain amount of investment, which one expects many benefit returns (Portes, 2000). Many alternative measures of social capital have been correlated with higher incomes (Rupasinghe & Goetz, 2007), greater neighborhood stability (Bothwell, Ginztr & Lang, 1998), lower crime (Butts & Carter, 2002), greater life satisfaction (Bhuiyan, 1997). One main reason that families invest in social capital is to “facilitate children’s access to education” (Portes, 2000). It is clear why various types of social capital by visiting with neighbors, attending events, and joining organizations.

Other studies have shown what may create social capital. The neighborhood and community environment can have an important impact. This study, illustrated by this report on the increase in social capital once New Urbanist designs were put in place in a low-income housing development (Bothwell, Ginztr & Lang, 1998), have linked high social capital with the quality of the public realm. Having walkable sidewalks, maintained parks, and community gathering spots can significantly improve the social networking opportunities of a neighborhood. Many municipalities have made significant investments for just this reason.

The focus of this project is to identify the impact of nearby public spaces on both individual and community social capital. The study utilizes data from a social capital survey conducted in 2004-2005 by the Economics and Sociology Department of Furman University. The data was collected over the phone and internet from a randomly generated sample, producing approximately 1,100 responses. This data was geo-coded and aggregated over census block groups for this project to examine the spatial relationships between social capital and the public school and park system.

Method

Models

Three models were estimated for this project: (1) A logistical model to explain individual social capital, including a variable for the aggregate social capital in the neighborhood; (2) A logistical model to explain individual social capital without the neighborhood social capital variable; and (3) an OLS model to explain aggregate social capital within block groups. The first model only utilizes observations that are in a block group with at least 10 survey respondents. The estimator for social capital is a dummy variable (averaged to get percent for model 3), that indicates whether or not the individual has asked for help in the last year. This variable was chosen because it is indicative of past behavior (not speculation) and whether or not one’s social network is sufficient enough to ask a neighbor for help (thus receiving some of the benefits from one’s investment in social capital). Instead, in all models are variables to estimate the proximity to parks and schools. For the first two models, DistancePark and DistanceSchool are the straight-line distance between the center of the block group and the nearest point of interest. For the third model, these variables are the distance between the center of the block group and the nearest park or school. The center was used in order to take into account parks within an interaction variable. Each model includes a variable for neighborhood Social Capital, measuring the interaction between the distance to the nearest school and whether or not one has kids (dummy variable for models 2 and 3, percentage for model 3).

References and Acknowledgements

Conclusions and Further Research

Several variables were found to have coefficients that were statistically different from zero (highlighted above). The second model proved very interesting, with a significant negative coefficient on YoungChild*School, as expected. This coefficient indicates that for those with children, other variables being equal in a school-age school is associated with higher social capital. This result supports Bourdieu’s view that a family’s investment in social capital is largely to increase one’s children’s access to education and cultural capital (Portes, 2000). The logistical regression did not control for school quality, nor can self-selection be ruled out. Those with children and those with children’s day care choices live near schools. GIS could help in this area, as parks can be mapped as residential and certain features calculated. Additionally, the inclusion of a variable to control for school quality might generate very different results.

The aggregate model also had some significant variables. AvgBuiltComm is the average number of commercial establishments that people in the block group reported in the survey. As expected, the variable had a positive coefficient indicating that more commercial space, other variables equal, is correlated with higher social capital. Additional research in this area would be very timely, as planners grapple with the New Urbanist idea of mixed use development. GIS could be utilized to map the locations and interpolate the densities of specific types of commercial development (e.g. box development, restaurants, coffee shops) and used to estimate the impact of these types of development on social capital.