



*Notes from the Dismal Science:*

## DOES SOCIAL CAPITAL MAKE PEOPLE HEALTHIER?

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*by Sherm Folland*

The book by Robert Putnam, called *Bowling Alone*, greatly worked to popularize an idea attributed earlier to the sociologist James Coleman, one that perhaps goes back to the 1920s if not even to the Greeks. The idea is that the socialability and community mindedness of one's social milieu may have a beneficial impact on community outcomes. By simply showing scatter grams with comparisons of his Social Capital Index and U.S. state outcomes, Putnam could show that the more social capital a state has the better will be its level of child welfare, education outcomes, safety of neighborhoods, level of social tolerance, its health status, and more. It will even register less tax evasion.

My research field, health economics, is just beginning to take notice of this budding research area. During October 25–28 I attended the first Social Capital Global Network Workshop, which was focused on the health economics of social capital and health and was held at UC-Berkeley. In contrast, epidemiology and public health fields have already developed a large body of related work, which as a general rule shows that community health measures are related (in a beneficial direction) to community sociability and community mindedness. The task for health economists has been to see if these relationships

hold up in a statistical context where other, possibly confounding, economic variables are included, and at least as importantly is to try to see better whether the relations are causal.

Regarding the first task, the papers at Berkeley, including mine, generally showed that challenging the social capital and health hypothesis seemed only to make it stronger. To make a long story short, social capital variables of many sorts are (beneficially) related to community health not just in Putnam's study year (1994) and research setting (comparing states) but in years going back to 1976 in the U.S., in statistical contexts including many economic and other variables, and in a variety of research frameworks.

The second task, addressing the question of causality, is more difficult. An obvious possible false step in any research is to confuse correlation with causality, and even more so, to merely assume that causality runs in the direction you wish it to. For example, why couldn't it be the case instead that communities that by chance have become healthier get more interested in social activities and community projects? The correlations would still look the same but gone would be the hope that by investing in social capital we can expect to improve our health. Some Berkeley participants suggested pessimism whether this research problem could be solved. In contrast, however, a paper by Lorenzo Rocco of Padua, Italy, applied what looked to be a robust version of a standard technique in economics for assessing causality and found that the social capital hypothesis met this challenge.

My own research in progress approaches the causality issue by attempting what are called natural experiments. My data follow individuals through time, frequently recording their smoking habits. I propose to find out if people who smoke are more than normally likely to quit smoking if they have moved to a higher social capital city. Henry Saffer, who is well known to health economists as an expert on the economics of smoking and alcohol, advised a tighter approach. He suggested that I study the smoking behavior of individuals who move to a worse social capital city, then both the temporary

loss of social contacts caused by moving and the lower social level of the new city make the impact on social capital clearer.

I will close by giving you a taste of the findings on social capital and people’s behaviors toward health risks, particularly smoking, drugs, AIDs, and alcohol. These data come from a paper I recently published in *Health Economics* (Feb 2006) in which social capital is defined to include not only the Putnam community level index but also the more personal relationships of spouse and children. For those more curious about the Putnam Social Capital Index, I have reported the variables used in that index in the Appendix to this article. The table below can be read as follows. If the Social Capital Index, which ranges from -1.43 to 1.71, were to increase by one unit, the associated number in the table would tell you the change in the rate of cigarette smoking (and other health risky variables, reading across the row). If the percentage rate of marriage, which ranged from 49.8 to 62.0, increased by one percentage point, then the associated number in the table indicates the impact on the health risky behavior. Finally, if the average number of children per family, which ranged from 2.9 to 3.7, were to increase by one child, then the associated number in the table would indicate the impact on the health risky behavior. A caution: These statistical results do not include the causality tests that were mentioned above and are the subject of my current research.

**Table 1. Rates of Health Risky Behaviors As Affected by Various Measures of Social Capital, State Data for 1994**

Variable	Cocaine	Cirrhosis	AIDS	Cigarettes	Inactivity
Soccap (Putnam)	-0.31*	-0.79*	-6.55*	-2.04*	-5.92*
Married Percent	-0.04*	-0.01*	-4.27*	0.15	—
Average family size	0.10	-0.43	22.75	-10.85*	-5.84*
Range of dependent variable e.g. Cocaine	0.6 to 2.6	3.7 to 12.8	4.2 to 133.9	19.0 to 31.4	NA

\*This estimate is statistically significant at the 5% level or better.

In the table, each of the health risky categories is measured as per capita rates. Inactivity was measured for married elderly couples only. Finally, the asterisk indicates that the specific result is statistically significant at the 5 % level or better. The preponderance of negative numbers suggests that having a social community, being married and having a somewhat larger family is associated with people more often choosing to avoid clear and well known risks to health. These are the kind of tantalizing numbers that stimulate many researchers to join social capital and health studies.

My wish is that social capital will prove to be a significant cause of good health and that it will prove practicable to invest in a community's social capital. Getting somewhat ahead of the research community, there are many people now attempting to improve their community's social capital, and the World Bank already promotes this approach as a means to achieve world development. Yet, in social and economic areas, people often move ahead of the research community, and such efforts often provide a rich information source through trial and error. As a research issue, I remain skeptical because the causality question has not been answered and because we don't yet know how to improve a community's social capital. Nevertheless I am stimulated to join this budding area of research because—and I believe this view applies to many others—it seems likely to prove true that sociability benefits quality of life in important ways and because I think that American life is unnecessarily harsh for too many people. We certainly have both rich and poor in money, but it is intriguing that we may also have rich and poor in terms of social ties.

### **Appendix. The Elements of Putnam's Social Capital Index**

Robert Putnam devised his Social Capital Index through a factor analysis of a large set of variables describing the 48 contiguous states. Factor analysis is a statistical process whereby it may be possible to find that a subset of variables are measuring, or at least pointing to, the same underlying concept. Put-

nam found that these 14 items, from surveys conducted by U.S. marketing firms, were associated by factor analysis, and saw them all to be related to concept of social capital. His index is the weighted sum of these 14 items, the weights being provided as a by-product of the factor analysis.

Variable name                      Extended variable definition

Served on committee	Served on committee of local organization in the past year (percent)
Served as officer	Served as officer of some club or organization in last year (percent)
Organizations per capita	Civic and social organizations per 1,000 population
Mean club meetings	Mean number of club meetings attended in last year
Mean group memberships	Mean number of group memberships
Turnout	Turnout in presidential elections, 1988 and 1992
Attended public meetings	Attended public meetings on town or school affairs in last year (pct)
Number of nonprofits	Number of nonprofit (501c3) organizations per 1,000 population
Mean community proj.	Mean number of times worked on community project in last year
Volunteered	Mean number of times did volunteer work in last year
Visited friends	Agree that "I spend a lot of time visiting friends"
Entertained	Mean number of times entertained at home in last year
People can be trusted	Agree that "Most people can be trusted"
People are honest	Agree that "Most people are honest"

Source: Robert Putnam, *Bowling Alone*, 2000, p. 291.