Racial/Ethnic Variations in Children's Health: the Role of Social Capital

Objective: This study will examine the relationship between social capital and children's health for different racial/ethnic groups in the United States.

Using data from the 2003 National Survey of Children's Health, I investigate the role of social capital in explaining health outcomes among children in different racial/ethnic groups. I hypothesize that high levels of social capital among Hispanic families provides a protective effect for Latino children, improving their health outcomes relative to other racial/ethnic groups. I test whether African American children, in contrast, face "double jeopardy" because they not only lack the economic resources to maintain good health, but also the social networks that are needed to identify and treat health problems. This research is important because it could point to policy interventions, beyond socioeconomic risk factors, that could lead to improvements in children's health and reduce racial/ethnic disparities in child well-being.

Social capital and children's health

"Social capital" is a broad concept that has been measured in many different ways. In the broadest terms, social capital describes the social networks available to individuals, and the resources provided by these networks (see, for example, Coleman, 1988; Putnam, 2000). The World Bank (2002) defines social capital as the glue that holds societies together.

Most researchers would agree that social relationships and networks can have positive effects on health outcomes, but they have disagreed as to whether social capital should be conceptualized at the state, neighborhood, or individual level (Macinko and Starfield, 2001). At the state level, social capital has been linked to variations in health status (Kawachi, Kennedy, and Glass, 1999; Mellor and Milyo, 2005) and mortality (Kawachi, Kennedy, and Pothrow-Smith, 1997, Putnam 2000, Subramanian et al. 2000). Using aggregate data from the U.S. General Social Surveys and the National Center for Health Statistics, researchers have found that state-level variations in social capital may improve health through increased political participation, which in turn improves access to health care and services for poor families (Kawachi, Kennedy, and Pothrow-Smith, 1997).

At the neighborhood level, social capital is also cited as one of the key factors mediating the relationship between neighborhood poverty and children's health. Sampson, Morenoff, and Earls (1999) argue that concentrated poverty in neighborhoods affects child well-being by decreasing the "collective efficacy" of social networks. They argue that social capital improves health outcomes through the exchange of health information and services within and between families, and by increasing the likelihood that family members and others will intervene on behalf of children with health problems or needs.

These ecological approaches are appropriate for research on geographic variations in health outcomes, but there are also potential pitfalls to measuring social capital at the state or neighborhood level. Aggregate measures of social capital may or may not correspond to individuals' varied perceptions about neighborhood or community influences (Burton and Jarrett 2000, Roux 2001). In other words, within a given community, families may have different

perceptions about neighborhood quality or the availability of support networks. In this study, social capital is measured at the individual level in order to capture variations in perceived access to social resources across different racial and ethnic groups.

Prior research on the association between social capital and children's health has been mixed. Some researchers have found positive relationships between social capital and children's mental health (Caughy, O'Campo, and Muntaner, 2003), educational outcomes (Coleman 1988) and emotional and behavioral development (Runyan et al. 1998). The results of several studies have also suggested that social capital provides a protective effect for low-income families (e.g., Runyan et al. 1998, Mellor and Milyo 2005). But other studies have found no relationship between social capital and children's health after controlling for demographic and socioeconomic variables (Fields and Smith 1998, Saluja, Kotch, and Lee 2003). Since these studies varied in terms of their scope, methods, and populations under consideration, they do not necessarily contradict each other but rather point to the need for further research on social capital in the context of health outcomes.

Racial/ethnic differences in children's health

Socioeconomic status is one of the strongest and most well-known predictors of children's health outcomes. Children growing up in poor families have worse health, developmental, and behavioral outcomes than children living in more affluent families (Brooks Gunn, Duncan, and Aber 1997).

However, socioeconomic status cannot explain variations in children's health across different racial/ethnic groups. Despite having a poverty rate nearly as high as that of African American children, Hispanic children have substantially lower mortality rates and fewer health problems than black children (Federal Interagency Forum on Child and Family Statistics, 2007). In the adult population, researchers have also observed lower-than-expected rates of mortality and chronic illness among Latinos compared to other racial/ethnic groups. This phenomenon, often referred to as the "Hispanic paradox," has been linked to the health behaviors and diet of the Latino population, the selectivity of healthy migrants to the United States, and protective social factors in Hispanic communities that improve health behaviors, monitoring, and outcomes. (See Palloni and Arias, 2004 for a summary of this research).

Differential access to social networks may play a role in these racial/ethnic differences. In California, strong kinship ties in the Mexican-American community are linked to higher birthweights among Hispanic babies (Braveman and Abrams, 2001) and fewer Hispanic adolescent births (Denner, Kirby, Coyle and Brindis, 2001). Other researchers have found a link between social capital and the mental health status of African American children (Caughy, O'Campo, and Muntaner, 2003).

Although these studies confirm that social capital can affect racial/ethnic differences in children's health, they were conducted on relatively small subgroups of the population. The National Survey of Children's Health is the first survey that allows researchers to link social capital with health outcomes for children on a national scale.

Hypotheses

In this study, I ask three main questions. First, is social capital positively associated with children's health, after controlling for socioeconomic status? Second, does social capital matter more for low-income children than for children in more affluent families? I hypothesize that high levels of social capital should provide a protective effect for low-income children, or conversely, that low-levels of social capital puts poor children at double jeopardy for health problems. Third, because of its protective effects, I hypothesize that social capital is one of the factors contributing to better health outcomes among Latino children, compared to African American and white children, particularly among low-income families.

Methods

I will use multivariate logistic regression models that control for family-level socioeconomic factors to determine the independent association between social capital and children's health. A series of nested models will be included that control for key social, demographic, and economic variables, as well as parental health status. I will also include interaction terms to test whether social capital has a stronger association with health among low-income families, compared to higher-income families. Odds ratios will be converted into predicted probabilities to simplify the interpretation and presentation of the results.

Key variables

There are two dependent variables in this study. The first variable, children with special health care needs, identifies children under age 18 who require special health services for a chronic physical, developmental, behavioral, or emotional condition. The second variable, children in good, fair, or poor health, is based on parental perceptions of children's health. The first measure is an objective indicator of children's health care needs, while the second is more sensitive to cultural or socioeconomic variations in health perceptions.

The key independent variable, social capital, is derived from parents' answers to a series of questions about neighborhood supportiveness:

1. People in this neighborhood help each other out.
2. We watch out for each other's children in this neighborhood.
3. There are people I can count on in this neighborhood.
4. If my child were outside playing and got hurt or scared, there are adults nearby who I trust to help my child.

Additional questions relate to parents' perceptions about their children's safety at home, in the neighborhood, and at school. These safety measures will also be tested for their potential relationship to children's health status.

Results

Preliminary results indicate that there are wide variations in the health status of children in different racial/ethnic groups (see Table 1). Latino children are much less likely to have special health care needs compared with African American and white children. Yet parents of Hispanic children are much more likely than parents of black or white children to report that their children are in good, fair, or poor health (as opposed to very good or excellent health).

Table 1
Percent of children with health problems

	Black	Hispanic	White
Percent of children with special health care needs	19	11	19
Percent of children in good, fair, or poor health	21	36	9

Source: 2003 National Survey of Children's Health

Results also show that there are important differences in levels of financial and social capital across the different racial/ethnic groups. Nearly a quarter of African American children live in low-income families that lack neighborhood support. In contrast, Latino children are disproportionately represented in low-income families with relatively high levels of social capital. And over half of non-Hispanic white children live in higher-income families with high levels of neighborhood support (see Table 2).

Table 2
Distribution of children by family income and neighborhood supportiveness

	Black (%)	Hispanic (%)	White (%)
Total	100	100	100
Low-income, low support	**24**	20	6
Low-income, high support	38	**52**	22
Higher-income, low support	9	6	7
Higher-income, high support	30	22	**65**

Source: 2003 National Survey of Children's Health

Policy implications

In order to reduce health inequalities, we first need to understand the pathways through which social and economic factors affect children's health. Most health models are still focused on modifying risk factors related to individual behaviors and characteristics. But policymakers need to pay attention to other interventions—including improving the effectiveness of social networks—that could reduce racial/ethnic disparities in health outcomes.

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