Building on Social Capital to Improve Health: The Interactional Approach to Community Development

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Building on Social Capital to Improve Health: The Interactional Approach to Community Development

A Study of Social Capital and Health in McLean County, Illinois

Master’s Capstone

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Abstract

Since political scientist, Robert Putnam, (1995) brought the concept of social capital into popular discourse, there has been a surge in debate over its definition, causes, and consequences in a range of social science disciplines. While social capital has been found to support self-rated overall health at the state level (Kawachi et al, 1999), there is still a dearth of data and research on localities in different regions of the country. This study analyzes survey data collected in the United Way of McLean County’s 2014 Community Assessment to better understand the dynamic between social capital and health in one Central Illinois County. Health is measured using three dependent variables: self-rated overall, physical, and mental health. Ordinary Least Squares (OLS) multivariate regression analysis found that among social capital indicators, which includes organizational participation and volunteering, only volunteering has a statistically significant, positive impact on self-rated overall health while participation in faith-based organizations, political, and common interest groups appear unrelated to self-rated overall health. Unexpectedly, participation in local organizations was associated with statistically significant declines in self-rated physical health. Neither volunteering nor organizational participation was significantly related to self-rated mental health in either direction.
Introduction

From August, 2013 through May, 2014, I worked as an AmeriCorps volunteer and graduate assistant at the United Way of McLean County to carry out the 2014 Community Assessment. This position was arranged through the Stevenson Center at Illinois State University, where I was enrolled as a political science student specializing in applied community development. The Assessment was completed in response to requests from community stakeholders for a current gauge of needs and resources in the County’s health and human service system. Research undertaken as part of the Assessment included key informant interviews with professionals in the health and human service system, a community survey, and analysis of publicly available secondary data.

The Assessment revealed numerous threats to public health, including an overweight or obese rate of nearly one in three residents. In response to an open-ended Assessment Survey question, some respondents expressed concerns regarding the ability of the health and human service system to meet the needs of mentally ill residents, some of whom are being incarcerated for lack of treatment options. Others shared concerns related to the local economy; that there is a widening gap between the poor and the wealthy, and that more affluent residents are simply unaware of the level of poverty that exists in McLean County. Despite a decreasing County crime rate since 2008, 1 in 5 respondents expressed concerns about crime, drugs, and/or safety, indicating a certain level of distrust in the community.

In light of these and other community-level issues raised in the Assessment, I became interested in exploring new pathways of meeting the challenges facing McLean County; particularly, those related to public health. I read about social capital in my community development coursework at Illinois State University, and the potential for existing community
social norms and networks to be leveraged in order to meet community goals. It occurred to me that questions related to volunteering and community participation included in the Assessment Survey could be used as proxy indicators of social capital. There were also questions intended to gauge the health status of survey respondents. I became fascinated by one question in particular, which could be analyzed by taking a closer look at the data: do individuals with greater social capital (i.e. who volunteer and/or indicate participation in local organizations) experience better self-rated health on average?

In this study, it is my hope to contribute to the intense, ongoing academic debate about the utility of social capital, and shed light on its potential to enhance public health outcomes in McLean County. It begins with a multidisciplinary review of social capital and health literature. Social capital is conceptualized as a community-level attribute, following Putnam and the social cohesion school of thought. Using Ordinary Least Squares (OLS) regression analysis of the Assessment Survey, I evaluate the relationship between self-rated health and social capital indicators (i.e. volunteering and participation in local organizations). I end with a discussion of the findings, and elaborate on some conclusions.
Literature Review

What is Social Capital?

Social capital is a concept that has been used in recent years to explain different outcomes in government, the economy, and public health. However, despite the range of literature on the topic, there is much disagreement surrounding its definition, causes, and the specific outcomes it produces. In reviewing the present literature, three basic components of social capital can be found throughout competing definitions. These include “a network; a cluster of norms, values and expectancies that are shared by group members; and sanctions – punishments and rewards – that help to maintain the norms and network (Halpern, 2005, 10).”

David Halpern (2005) illustrates each component within the context of a typical neighborhood. The first component, the network, consists of the relationships between neighbors in the neighborhood. These relationships may range in intensity from the occasional greeter or passerby, to intimate friendships characterized by emotional and economic support and exchange. The neighborhood may or may not be formally defined geographically. The network can also be described by its density, or the ratio of people who know one another, and closure, the extent of connectedness within the community, as well as between the community and the outside world. One prominent theorist refers to the network aspect of social capital as information potential, which describes the rate at which information passes through the network, facilitating action (Coleman, 1994).

The second component, social norms, “are the rules, values and expectancies that characterize the community (or network) members (Halpern, 2005, 10).” In the neighborhood context, these norms are often unwritten rules. They could include codes of behavior, such as...
keeping noise down after dark, maintaining one’s property in a good condition, or picking up trash on the sidewalk. They could also characterize feelings towards one’s community, such as feeling supportive of and invested in the neighborhood. Norms may also describe behaviors of reciprocity, such as keeping an eye on neighborhood children, sharing tools, donating food, or lending money. Norms inhibiting crime make it safe for people to walk freely through their neighborhoods at night. Similarly, norms rewarding strong academic performance make for better schools (Coleman, 1994). Norms supporting physical exercise and eating healthy food result in healthier communities.

The final component of social capital, sanctions, describes the punishments and rewards groups use to maintain social norms. Again, this component can be seen in the neighborhood context; specifically, in the way residents respond to their neighbors’ actions. Actions that contradict neighborhood norms, such as neglecting to maintain one’s property, engaging in criminal activity, or having a neighbor’s car towed, are sanctioned when neighbors express their disapproval in various ways. Sometimes neighbors confront the norm breaker directly, but more commonly the sanction occurs behind the norm breakers’ back, when neighbors discuss the norm breakers actions. Sanctions, however, are not always negative. They can be positive too. Examples of positive sanctions include compliments for maintaining one’s property in a good condition, gratitude or a material gift for assisting a neighbor, or a friendly greeting and conversation on the sidewalk (Halpern, 2005).

The basic components of social capital can operate at the individual level, through family, friends, and acquaintances, as well as at the community level. At the individual level, norms of generosity may lead to personal favors, increased social support, financial loans or valuable advice. At the community-level, tighter networks can result in more interaction between
citizens and elected officials, increasing trust in local government, and support for government services. Social capital may also be leveraged to increase interaction between different ethnic groups in the community by uniting them around a common cause. A weekly farmer’s market, for example, brings together residents from different neighborhoods in the larger community, increasing ties between these groups, and tightening community social cohesion (Green & Haines, 2012).

In utilizing the concept of social capital at the community level to analyze civic life and levels of functionality across governments, Robert Putnam coined one of the most widely quoted definitions of social capital: “features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives” (Putnam, 1995, 664-665). Putnam’s definition includes norms and networks, two of the three basic social capital components previously mentioned. His emphasis on trust in place of sanctions puts a narrower focus on the level of social cohesion in communities.

Putnam’s definition is associated with the social cohesion school, which views social capital as the resources, such as norms and sanctions, available to group members as a result of their membership in the group. In this school, groups can refer to voluntary associations, work places, neighborhoods, or many other similar forms. That social capital is thought of as an attribute, or property, of the group is the defining feature of the social cohesion school. Individual characteristics are de-emphasized in favor of analyzing group, contextual characteristics, such as a neighborhood or workplace (Kawachi et al, 2008). Putnam draws on Alexis De Tocqueville’s focus on associations and civic life in Democracy in America to argue that these voluntary associations, built on mutual trust, are the source for generating social capital. Therefore, participation in voluntary associations, the extent of trust between citizens,
and perceptions of community reciprocity all count as indicators of social capital (Kawachi, Kennedy, Lochner, 1999).

In *Making Democracy Work*, a study of local governments in different regions in Italy, Putnam concludes that the level of performance of different local governments is powerfully influenced by trust between strangers, associational life, and citizen participation in the different localities; in other words, by the level of social capital. Putnam finds that social capital positively influenced the efficiency and public perception of the government. The most efficient, favorably viewed regional governments, generally located in the north, had higher levels of social capital, which was measured by participation in voluntary associations, and reported levels of trust between strangers. Putnam argues that deep cultural and political traditions were the source of social capital in these regions. The less effective governments, generally in the south, had more distrust between strangers. In the south, people tended to rely more on families for support and trust, and membership in voluntary associations was lower. Social organization in the regions with lower performing governments tended to be more hierarchical, and the source of this social makeup was deeply rooted in cultural traditions (Halpern, 2005).

Following Putnam’s conceptualization of social capital, Fukuyama (1995) claims that societies with higher social capital experience lower economic costs. Like Putnam, Fukuyama claims that social capital derives from the level of trust in a society, and that it is affected by cultural factors such as tradition, religious values or historical aspects. Fukuyama defines trust as “the expectation that arises within a community of regular, honest, and cooperative behavior” (Fukuyama, 1995, 26). In agreement with Putnam, he explains that a lack of trust in a society creates economic costs that high-trust societies do not need to pay. For example, societies that are high in trust are able to organize workers more efficiently, on a group-level basis, delegating
responsibility. Societies lower in trust require more rules that constrict and isolate workers. He argues that neoclassical economists have missed the full picture when they reduce humanity to simple, self-interested, utility maximizing beings. A more accurate picture of economic activity includes culture, and those societies which have cultures that foster greater generalized trust, and hence, higher levels of social capital, have economic advantages over those with lower social capital. Fukuyama argues that economists must factor in levels of social capital, along with physical capital and resources, when studying comparative advantage between states.

There is disagreement, however, regarding the treatment of social capital as an aspect of culture, and its effects on civic and economic life. Jackman & Miller (1998) argue that Putnam and Fukuyama are incorrect in placing social capital under the umbrella of culture, and that doing so contradicts the work of foundational social capital theorists, James Coleman (1994) and Mark Granovetter (1974). Where Coleman and Granovetter discuss social capital as something that can be invested in, created and destroyed, Putnam and Fukuyama treat it as an obdurate, exogenous aspect of culture, impervious to change except for over centuries. In Making Democracy Work, for example, Putnam traces the poor or exceptional performance of regional governments to cultural norms dating back to the Middle Ages that support or inhibit social capital. Oddly, as Jackman and Miller point out, Putnam’s treatment of social capital in Making Democracy Work, as something that is fairly impervious to change over long periods, contradicts his argument in Bowling Alone, which states that social capital has experienced a drastic decline within two generations in the United States of America. Additionally, they find problems with Putnam’s statistical analysis in the Italian data used to craft his argument in Making Democracy Work. When the authors break down Putnam’s composite measure of institutional performance into its individual components, they find that the effects are much less robust than Putnam
claims. “In all, we find very little indication from the Italian data to suggest that institutional performance depends in any appreciable manner on cultural traditions . . . these data provide no warrant for linking cultural values to political performance (Jackman, Miller, 1996, 644-645),” they conclude.

**Bonding Versus Bridging Social Capital**

There is consensus in the literature on the need to distinguish between two types of social capital: bonding versus bridging. Bonding social capital refers to the advantages or resources that can be accessed based on the strength of social connections within groups sharing a common identity, such as race or class. In contrast, bridging social capital describes the resources individuals or groups access through more informal relationships spanning social class, race or other boundaries. In short, bridging refers to the breadth of one’s social connections; while bonding refers to the depth. Bridging capital connects people of various groups and identities across the social terrain. Bonding capital is the intensity of connections within identity groups (Kawachi et al, 2008). In his breakthrough study of contacts and careers, Mark Granovetter (1974) finds bridging capital, or “weak ties,” acquaintances and informal friendships characterized by less intimate interactions, are advantageous for finding and securing employment and getting ahead.

A dearth of weak ties at the neighborhood level can have negative consequences for the neighborhood population. In the last few decades in the United States, those with fewer weak ties have become concentrated in certain neighborhoods in urban areas. Inner city neighborhoods, for example, typically suffer from social isolation, or a lack of bridging social capital (ie weak ties).
that prevents people living in these areas from finding steady, reliable employment. Wilson (2012) suggests that a neighborhood including a blend of low, middle, and high income earners would be characterized by greater safety and stability, due to the more frequent interaction of people from different economic and employment backgrounds. Those who are regularly employed would set a standard, and provide bridging capital by assisting those seeking regular employment. Wilson’s example also shows how bonding capital can be negative. As those in low-income, inner city neighborhoods become increasingly isolated, there forms an intense bond of shared struggle that can create an “us versus them” mentality, functioning to keep them cut off from the rest of society (Wilson, 2012).

*Social Capital and the Interactional Approach to Community Development*

The interactional, asset-building community development approach maintains that the benefits of social capital can be unlocked through studying the skills and capacities of individuals, neighborhoods, and associations in communities, rather than the needs. Asset-building requires social interaction and network building between members of communities to reach community goals. When people participate in local organizations and associations, networks of social relationships are strengthened and trust is formed. These are two essential conditions for community mobilization (Green & Haines, 2012). One technique for asset-building is asset mapping, an exercise in which one maps available resources in given communities. Such a study might include the creation of a resource inventory in which the skills of community residents could be surveyed to identify economic opportunities or new providers for needed services. Green and Haines identify social capital as one of only seven forms of capital that can be invested in and used to enhance quality of life for members of the community.
Building on social capital resources in communities can be expected to enhance other forms of community capital, such as human, financial, physical, political, environmental and cultural.

Sociologist Kenneth P. Wilkinson provides the theoretical basis for the asset-based community development approach. Wilkinson defines community development “as a process of developing the community field.” The community field “represents the capacity of local residents to work together for their own well-being, and community development builds that capacity (Wilkinson, 1991, 81).” He elaborates further that the community field is a “process of social interaction (Wilkinson, 1991, 82).” Thus, communities with higher social capital, characterized by greater trust, social cohesion, and participation in local organizations, would be more responsive to development efforts. These communities would be in a better position to join together to solve community problems, including those related to public health.

Wilkinson’s interactional definition of community serves well for the purposes of a community-level study of social capital. In Wilkinson’s framework, the dynamics of social interaction give definition to community. “Social interaction delineates a territory as the community locale; it provides the associations that comprise the local society; it gives structure and direction to processes of collective action; and it is the source of community identity” (Wilkinson, 1991, 11). In forming his definition of community, Wilkinson borrows from the work of scholars George Herbert Mead (1934) and Ferdinand Toennies (1957), who theorized that community arises from individuals engaging in social interactional processes. Wilkinson writes that the community functions to connect individuals and society. It is through the locus of local communities, interacting with community others, that individuals form impressions of themselves and the society in which they live. It is where one becomes conscious of one’s role and position in the larger community structure.
Though interaction functions as the primary element of Wilkinson’s definition of community, he also includes “territory” or “place” as being fundamental to a definition of community. And he argues that territories themselves are actually products of social interaction. “While characteristics of local ecology certainly can influence interaction, it is the social interaction that first delineates and then maintains the local ecology as a unit” (Wilkinson, 1991, 20). Here, Wilkinson explains that features of the physical environment, such as roads, houses, and shops, are determined through social interaction, and are subject to change based on future interactions. Of course, this process can also work in the reverse, he acknowledges, where features of the physical environment shape social interactions. It is only through these interactions that places attain a social significance and meaning.

Additionally, communities are defined by having a “local society.” This term refers to the “organization of social institutions and associations in the social life of the local population” (Wilkinson, 1991, 24). It is where social contacts produce the structure of the population. More complete local societies offer opportunities for all the activities people do on a regular basis, such as work, shopping, and leisure. Having a local society does not preclude individuals from engaging in these activities elsewhere. It is simply an important feature for the emergence of community.

In *The Community in Rural America*, Wilkinson discusses the implications of living in rural America on social interaction and the emergence of community. Referring to Mark Granovetter’s concept of strong and weak ties, Wilkinson argues that because people in rural areas are dispersed over greater distances, it is probable that they will have just as many strong ties, but fewer weak ties than individuals living in urban areas. In other words, individuals are just as likely to have bonding social capital, but more likely to have deficits of bridging social
capital, which have shown to be important for getting ahead. Again, strong ties are characterized by repeated, intimate contacts with the same individual, involving greater investments of time and energy. Weak ties are more acquaintance-like relationships. They involve less frequent, less personal contact. Granovetter (1974) argues that it is important to have both strong and weak ties for social health and community stability. Thus, Wilkinson explains, by limiting the number of weak ties and reinforcing strong ties, living in a rural area could be a source of community problems.

In Wilkinson’s interactional definition of community, the emergence of community contributes positively to well-being at the individual, social, and ecological levels. Social well-being, individual well-being, and ecological well-being all affect and depend upon one another. Thus, he explains, individual well-being is necessary for social well-being, and information about individual well-being is indicative of the social well-being of a community. Wilkinson utilizes the self-actualization theory of Gordon Allport and Abraham Maslow, which states in short, that individual well-being follows from persons first being able to meet their most basic needs for food, water, shelter, and then moving on to more human, social interactional needs. Self-actualization is achieved once basic and social needs are met. In Wilkinson’s view, the social, interactional qualities of individuals are the most characteristically human. It is through social, interactional processes that individuals attain their self-image. This image is subject to change or gain new meaning through these same processes. Furthermore, social conditions can foster individual well-being by ensuring that basic needs are met, and social interactional processes are not disrupted.

Once the needs for safety, food, and shelter are met, Wilkinson argues, development efforts should be focused toward ensuring social well-being. In Wilkinson’s view, emphasizing
the material, sustenance needs beyond what is necessary is actually damaging to ecological and social well-being. “Economic growth can become obsessive hoarding. Proliferation of services and amenities becomes an unnecessary drain on resources, and this fuels divisive competition for symbols of luxury and superiority” (Wilkinson, 1991, 65), he writes. In Wilkinson’s view, social and individual well-being can only be met in ways that also enhance ecological well-being. Healthy individuals, Wilkinson theorizes, will recognize the interdependence between humans and the natural environment.

Considering the connection between the community and social well-being, Wilkinson identifies three ways in which the community matters for the social well-being of the individual. First, the community is where the individual becomes acquainted with society. Thus, the diversity of contacts the individual may encounter in his or her community, hints to the level of social interaction that may occur, and the diversity of views and ways of being the individual will be introduced to. These contacts are important to producing social well-being. Second, the community supplies the interactions through which the self is realized. The self can only arise through repeated contacts with others in the community; and the nature of these contacts informs one’s self-perception. Third, the community is where the individual chooses to associate or band together with others for collective action. Wilkinson notes that association is primary to social well-being. “It is a truism that the well-being of people generally depends more than anything else on contacts with other human beings” (Wilkinson, 1991, 71), he maintains. Echoing Durkheim (1897), Wilkinson states that participation in collective action also positively affects the well-being of those who engage in it by affirming a sense of responsibility to community and self-esteem. Hence, Wilkinson concludes that community involvement and collective action is
vital to social well-being by providing individuals with opportunities for social interaction in a range of common interest groups.

In line with Wilkinson’s theory of community development, New Urbanists argue that the level of social interaction in a community is affected by the design of the built, physical environment. Social interactions are encouraged in community spaces. Thus, community buildings such as schools, churches, and libraries are crucial to developing community. In *The New Urbanism: Toward an Architecture of Community*, Peter Katz describes how historical changes in the physical design of cities over the last century has functioned to disrupt and fragment community life. Katz is particularly critical of the socially isolating effects of modern suburbia, a pattern of housing development made possible by the automobile, which began in earnest after WWII.

“The costs of suburban sprawl are all around us– they’re visible in the creeping deterioration of once proud neighborhoods, the increasing alienation of large segments of society, a constantly rising crime rate and widespread environmental degradation (Katz, Kindle Locations 115-117).”

New Urbanists call for designing communities in ways that promote social interaction. They call for mixed-use residential and commercial buildings, the building of porches and patios, public spaces that promote social interaction, as well as grid-pattern neighborhoods that encourage walking and cycling as opposed to driving. Incorporating sustainable transportation options, such as walking or cycling, into the design of the neighborhood encourages these health-promoting behaviors. Katz states that new urbanism “borrows heavily from traditional city planning concepts- particularly those of the years 1900-1920” (Katz, 1994, Kindle Location 134). New Urbanists also point to the human, economic, and environmental benefits of time and money saved by reducing travel distances between home and work.
Does Social Capital Have a Downside?

Some have argued that the negative aspects of social capital are too often ignored in favor of the positive aspects (Benassi, Garguiulo, 1999; Portes, 1998; Waldinger, 1995). In a breakthrough article, Portes (1998) describes several negative effects of social capital. First, the exclusion of outsiders effect, which states that the strong ties that give benefits to the members of a group also often allow that group to keep others from accessing them. This effect is rooted in Pierre Bourdieu’s conception of social capital, where there is an emphasis on the context of existing power relations. For Bourdieu, social capital is “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition - or in other words, to membership in a group” (Bourdieu, 1986, 88). Considering social capital in this light puts the focus on network-based resources utilized to mobilize people for action. Bourdieu’s definition acknowledges the vast inequalities between individuals and groups in relation to who is in their social networks, and the implications this has in terms of uneven access to various resources (Carpiano, 2008, 84).

As evidence of the exclusion of outsiders effect, Portes cites Waldinger, who observed strong control of the construction, police and fire unions in New York by descendants of primarily European ethnic groups. Thus, some groups, not necessarily ethnic, may gain greater economic advantages, and once they are secured, bar others from sharing in them.

The second negative effect is excess claims on group members. This occurs when everyone in a tight-knit group seeks to claim a portion of the resources generated by the more successful members. Thus, if one group member starts a business, the less enterprising members may attempt to free-ride off of the owner of that business, rather than attempt to strike out on an
initiative of their own. This creates excessive claims on the more enterprising group members, who are constantly burdened by the free-riders (Portes, 1998).

A third negative effect describes the restrictions social capital can place on individual freedoms, observing that social control increases in a positive direction with community participation. Thus, there is typically a higher degree of conformity in small populations, and those who think differently, or deviate from community social norms, tend to leave for more free-thinking places. The push and pull of the community’s expectations versus the individual’s liberty is a zero-sum game. Portes traces the tension between community solidarity and individual liberty to Simmel’s essay *The Metropolis and Mental Life*, in which Simmel comes down on the side of individual freedom. Currently, Portes notes, many commentators on social capital are arguing for greater community solidarity to enable more social control. While this may help achieve desired community democratic, economic, and health outcomes, the negative impact on personal freedom should also be given consideration, he states.

The fourth negative outcome, known as downward leveling norms, functions to keep disadvantaged groups in the circumstances they are in. This occurs in “situations where group solidarity is cemented by a common experience of adversity and opposition to mainstream society” (Portes, 1998, 17). This could also be described as an example of bonding social capital. When a member belonging to such a group is able to succeed in the mainstream society, group cohesion is undermined because the individual’s success runs contrary to the group narrative. Those who remain, yet still wish to overcome the adversity of their situation are faced with the decision to leave the group. In some cases, downward leveling norms lead to organized crime, demonstrating that being embedded in social structures can easily lead to socially undesirable outcomes, depending on the context.
Collective Efficacy, Social Support, and Informal Social Control: the Mechanisms through which Social Capital May Improve Self-Rated Overall, Physical, and Mental Health

It is largely accepted that there is a powerful relationship between the extent and nature of one’s social relationships and mental and physical health (Berkman, Glass, Brissette, & Seeman, 2000). Since Durkheim (1897), the impact of social context on health has become a growing body of research in psychiatry (McKenzie, Weich, Whitley, 2002). Durkheim transformed the way people perceive suicide, from simply being the result of individual struggles, to a phenomenon embedded within and affected by social and community forces. With a large empirical analysis of suicide rates in Europe, Durkheim illustrated that suicide is better explained by social, rather than individual causes. He showed that societies exhibiting “loose social bonds” and characterized by “social dislocation” experienced suicide more commonly than societies with higher “levels of social cohesion and solidarity.” The societies with lower levels of social cohesion and solidarity were less effective at protecting their residents from suicide, especially what Durkheim called “egotistical” suicide, which “results from excessive individualism.” Durkheim argues for a re-balancing between “individual initiative” and “community solidarity,” since groups that have achieved relative equilibrium between these experience the lowest suicide rates (Halpern, 2005, 5).

Durkheim’s ideas about the impact of social cohesion and community solidarity are evident in more recently developed concepts, collective efficacy and informal social control, two of the mechanisms through which social capital is posited to affect health at the community level (Kawachi et al, 2008). Collective efficacy is defined as “social cohesion among neighbors combined with their willingness to intervene on behalf of the common good” (Sampson,
Neighborhood collective efficacy has been theorized to affect health in a number of ways, including the social control of health-damaging behaviors, psychosocial processes, access to health services, and the regulation of community physical hazards.

Collective efficacy has been found to be effective in reducing neighborhood violence (Sampson, Raudenbush, & Earls, 1997). Sampson, Raudenbush, & Earls (1997) contend that neighborhood violence stems from an inability of neighborhoods to implement effective informal social controls; which refers to the ability of a group to manage its members in accordance with desired principles and collective, group goals. Although a common group goal is to live in a safe neighborhood, absent of violent crime, social controls may extend beyond the regulation of neighborhood violence to include other behaviors such as substance abuse and safe sexual habits, with positive impacts on health.

In addition, there are other ways collective efficacy is thought to improve health outcomes. For example, neighborhoods with greater collective efficacy may be more effective at attracting municipal investment and responding when public services, such as police, fire, and garbage collection, are cut. The ability to secure more resources from outside the neighborhood via bridging capital connections improves conditions for those living in the neighborhood. Lastly, high collective efficacy may result in a trusting neighborhood environment, reducing fear and anxiety among residents, improving health and wellbeing (Browning, Cagney, 2002).

Sampson, Raudenbush, & Earls (1997) liken collective efficacy to the concept of self-efficacy. Neighborhoods, like individuals, vary in their ability to undertake effective actions for the completion of desired goals. There are many factors influencing collective efficacy. One major factor is the length of tenure of neighborhood residents, since social ties require time to
form. Thus, high residential mobility weakens informal social control, especially in depopulating neighborhoods. Rapid population changes disrupt the social life of a neighborhood, inhibiting the ability of residents to act collectively. An additional important factor is financial investment. Homeowners have an economic interest in supporting neighborhood wellbeing and social vibrancy. Thus, residential tenure and homeownership also promote informal social control.

Collective efficacy exists within the larger political, socioeconomic power structure, and is influenced by historical patterns of racial segregation and resource distribution in the United States. In recent decades, low-income residents, minorities and female-headed households have become more geographically concentrated in particular neighborhoods as central cities have de-industrialized, and middle class residents have moved to suburbs, and the periphery of urban core areas. Indeed, as Sampson, Raudenbush, & Earls, explain:

“The greater the race and class segregation in a metropolitan area, the smaller the number of neighborhoods absorbing economic shocks and the more severe the resulting concentration of poverty will be. Economic stratification by race and place thus fuels the neighborhood concentration of cumulative forms of disadvantage, intensifying the social isolation of lower-income, minority, and single-parent residents from key resources supporting collective social control” (Sampson, Raudenbush, & Earls, 1997, 919).

Sampson, Raudenbush, & Earls (1997) found that “concentrated disadvantage and immigrant concentration were significantly negatively associated with collective efficacy, whereas residential stability was significantly positively associated with collective efficacy” (Sampson, Raudenbush, & Earls, 1997, 921). Furthermore, collective efficacy “was strongly negatively associated with violence” (Sampson, Raudenbush, & Earls, 1997, 922). The authors conclude that collective efficacy is effective for mediating violence. However, they caution that demonstrating the utility of collective efficacy for addressing violence does not dispense with the need to address socioeconomic disparities at the neighborhood level.
Collective efficacy has also been found to play an important role in improving self-rated physical health. Browning and Cagney (2002) measured collective efficacy through survey questions designed to indicate levels of neighborhood social cohesion and social control across different neighborhoods in Chicago. Physical health was measured through a survey question asking respondents to report how many days in the past 30 their physical health was fair or poor. The authors utilized a wealth of survey data to control for demographic factors as well as individual health background. Browning and Cagney analyzed the data by building a multilevel linear response model. The authors found that individuals living in neighborhoods with higher levels of collective efficacy reported better overall physical health. “Taken together,” they conclude, “the analyses indicate that collective efficacy exerts a significant effect on self-rated physical health, even after controlling for individual demographic and health background characteristics and relevant neighborhood level processes (Browning, Cagney, 2002, 394).” Their conclusion leads to the first hypothesis:

*Hypothesis 1: Respondents who indicate volunteering or participation in a local group or organization will experience better self-rated physical health*

Social capital widens an individual’s awareness of the various ways in which his or her fate is linked to fate of others in the community, extending tolerance and empathy. In the presence of others, individuals are able to voice and receive feedback about their views. When individuals are isolated, they are more likely to be convinced by negative or anti-social opinions (Putnam, 2000). Further studies attest to the negative impact of social isolation on self-rated overall health. Kawachi, Kennedy, & Glass (1999) find that “individuals who lack social
connections have 2 to 3 times the risk of dying from all causes compared with well-connected individuals” (Kawachi, Kennedy, & Glass, 1999, 1187). The authors analyze levels of social capital and health outcomes across 39 US states. The authors operationalize health using the self-rated overall health question in the national BRFSS survey, in which respondents self-rated their overall health on a scale from poor to excellent. The survey also allowed the authors to control for factors like race and household income. The authors used proxy questions about trust and reciprocity from the General Social Survey to measure social capital. The results were that respondents who were most likely to say their health was “poor” or “fair” lived in the same states with low levels of social capital, operationalized by reported levels of distrust. In seeking to explain this finding theoretically, Kawachi, Kennedy, & Glass (1999) argue that collective efficacy and social control are two of the mechanisms through which social capital boosts self-rated overall health. Their theory and findings lead to the second hypothesis:

**Hypothesis 2: Respondents who indicate volunteering or participation in a local group or organization will experience better self-rated overall health**

The third hypothesis concerns self-rated mental health. Generally, most researchers agree that social ties are supportive of improved mental health outcomes. Symptoms of depression have been connected to smaller social networks, a lack of close relationships, and perceived inadequate social support. Despite these findings, it tends to be more challenging to establish causation between social ties and mental health than for other kinds of health outcomes (Berkman & Kawachi, 2001).

The main effect and the stress-buffering models explain the pathways in which social relationships affect mental health outcomes (Cohen & Wils, 1985). The stress buffering model
states that social support is relevant only for individuals experiencing stress, while the main effect model proposes that social relationships are beneficial regardless of whether or not individuals are stressed. The main effect model posits mental health benefits deriving from the stability associated with regular, positive experiences with other persons in their social network. In agreement with Durkheim’s argument, these experiences are supportive of overall well-being by affirming an individual’s sense of self-worth. The stress-buffering model posits health benefits from social support intervening to make an individual feel more able to cope with situations that cause stress.

Cohen and Wills (1985) describe four social support mechanisms that operate as stress buffers. The first is esteem support; information communicated by others in one’s social network that they are valued for who they are. The second mechanism, informational support, describes the help one receives in understanding and resolving problematic or stressful events. The third stress buffer, social companionship, is the leisure time one spends with others and the fulfillment and joy this often brings. Lastly, instrumental support comes from the physical, financial, and professional resources accessed through others. The main effect and stress-buffering models of social support are not mutually exclusive. Both can occur simultaneously or separately at different times. These models of social support lend credence to the third hypothesis:

**Hypothesis 3: Respondents who indicate volunteering or participation in a local group or organization will experience better self-rated mental health**

In reviewing the literature on social support, health, and how it relates to theory on social networks and integration, House, Umberson, & Landis (1988) find that social relationships are beneficial for health through the mechanisms of social support and social control. The authors
make an important distinction between the how social support and social control affect health. Social support involves providing resources to other individuals such as advice, information, or emotional solace, and appears to be important for reducing stress. Social control, on the other hand, is about constraining individual behavior. An individual who is integrated into a community is less likely to engage in activities that community frowns upon. Both support and control may function to promote better health.

The quantity and quality of social relationships are consequential determinants of health and longevity. House, Umberson, & Landis (1988) cite four community-level studies on the connection between health and social relationships to support this conclusion. The first of these studies is Berkman & Syme (1979), who found that “marriage, contacts with extended family and friends, church membership, and other formal and informal group affiliations . . . predicted the rate of mortality” (House, Umberson, & Landis, 1988, 297). Berkman and Syme (1979) controlled for potential confounding variables including “physical health status, socioeconomic status, cigarette smoking, alcohol consumption, level of physical activity, obesity, race, life satisfaction, and use of preventive health services” (House, Umberson, & Landis, 1988, 297). The dynamic of more extensive social relationships and support reducing mortality was found in House et al (1982), Blazer (1982), Schoenbach et al (1986), Tibblin et al (1986), Welin et al (1985), and Orth-Gomer et al (1986). The dependent variable for these studies is “mortality from all causes” (House, Umberson, Landis, 1988, 299). In their literature review, House, Umberson, & Landis (1988) found that social integration and support tended to be higher in smaller communities than large, urban areas. The authors speculate that this may be why social integration measures are not as strong indicators of mortality in these smaller communities.
Data and Methodology

Survey

Development of the Assessment Survey began in January, 2013 amongst United Way of McLean County staff and consultants. In August, 2013, the survey was mailed to 16,000 randomly selected McLean County households. Survey respondents age 18 or older answered questions related to the following topics: physical, mental, and oral health, access to healthcare, services for seniors, services for people with disabilities, youth issues, civic engagement, employment, transportation, income, housing, satisfaction with health and human services, and perceptions of local needs and resources. Respondents also provided basic demographic information including age, race, ethnicity, educational attainment, income, and household size. The survey ended with two open-ended questions regarding what respondents liked most about McLean County, and what most concerned them about McLean County.

The United Way of McLean County employed Survey Sampling, Inc., to create a strategy for improving representativeness of the survey sample. Seven census tracts in McLean County qualifying for the Low Income Housing Tax Credit or having a Median Household Income of less than $35,000 per year, while also not being in or adjacent to a college or university, were chosen for oversampling. One fourth of the households selected for the survey were in low income census tracts.

There were 1,606 responses to the mailed survey. Total household income of the survey respondents came very close to the household income of the county as a whole. Ultimately, 84 percent of the survey respondents lived in four Bloomington-Normal zip codes: 61761, 61701, 61704, and 61705. The remaining 16 percent live in outlying McLean County communities. Comparatively, 23.6 percent of McLean County residents live outside Bloomington-Normal.
Survey respondents were highly educated, disproportionately female, and typically older compared to the county population as a whole. The University of Illinois Center for Prevention Research and Development formatted the final survey and created a database of the results (2014 Community Assessment).

Dependent Variables: Self Rated Overall, Physical, and Mental Health

This analysis measures three dependent variables using survey questions (H-12), (H-13), and (H-14), which pertain to self-rated overall, physical, and mental health, respectively. Question (H-12), covering overall health, asks, “Would you say that in general your health is:” and then prompts respondents to rate their health on a 1 to 5 scale ranging from “Poor,” “Fair,” “Good,” “Very Good,” to “Excellent.” Respondents also had the option of selecting “Don’t Know,” but those who selected this option were removed from the analysis. Using self-rated health is a common practice to measure individual health status. This is the method used in the national BRFSS.

There are 1,599 observations of the dependent variable, self-rated overall health, after removing the “Don’t Know” responses. The most frequent response to question (H-12) is Very Good, with 606 (37.9%) survey respondents selecting this option. The median value of the dependent variable is 4, those who said their health is “Very Good.” The mean value is 3.4.

<table>
<thead>
<tr>
<th>Table 1.0: “Would you say that in general your health is”:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses (in percent)</td>
</tr>
<tr>
<td>Excellent</td>
</tr>
<tr>
<td>12.8%</td>
</tr>
</tbody>
</table>
Questions (H-13) and (H-14) ask respondents to rate their physical and mental health on a 3-point scale. Question (H-13) prompts respondents to choose the number of days in the last 30 when their physical health was “not good.” Respondents then chose “None,” “1-7 days,” or “8 or more days.” Those who responded “Don’t Know” were removed from the analysis. Question (H-14) is similar to Question (H-13), but pertains to mental, rather than physical health. Respondents were asked to think about their mental health, and decide approximately how many days in the last thirty their mental health was “not good.” Respondents could choose “None,” “1-7 days,” or “8 or more days.” Again, those who chose “Don’t Know” were removed from the analysis.

There were 1,524 responses to Question (H-13) after removing the “Don’t Know” respondents. More than half of the respondents, or 864, indicated having no days in the last 30 when their physical health was “not good.” More than one-fourth indicated experiencing 1 to 7 days in the last 30 when their physical health was “not good.” The remaining respondents said they experienced “8 or more days.”

<p>| Table 1.1: “Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 was your physical health not good?” |
|---------------------------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Responses (in percent)</th>
<th>None</th>
<th>1-7 days</th>
<th>8 or more days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56.7%</td>
<td>29.6%</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

There were 1,532 responses to Question (H-14) after removing the “Don’t Know” responses. A vast majority of respondents reported experiencing no days in the last thirty when their mental health was not good. More than 1 in 5 said they experienced 1 to 7 mentally
unhealthy days in the last thirty. There were 166 respondents who said they experienced “8 or more days” in the last thirty when their mental health was not good.

Table 1.2: “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”

<table>
<thead>
<tr>
<th>Responses (in percent)</th>
<th>None</th>
<th>1-7 days</th>
<th>8 or more days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses (in percent)</td>
<td>66.9%</td>
<td>22.3%</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Independent Variables: Volunteering and Organizational Participation

The most frequently used indicators of social capital in studies of health outcomes are perceptions of trust and rates of participation in voluntary associations (McKenzie, Weich, Whitley, 2002). This analysis includes two independent variables for social capital, volunteering and organizational participation, measured using two proxy questions from the survey. First, in question (Y-1) respondents were asked, “With which types of organizations do you participate?” They were then asked to indicate all organizations that apply from a list including: “Faith-based or religious organization,” “Community service agency,” “Geographic-based group (e.g., neighborhood association, crime watch),” “Political group/party,” “Group based on common interest (e.g., gardening group, book club),” and/or “Other.” If they selected “Other,” they were then prompted to describe the organization.

More than half of respondents reported participating with a “Faith-based or religious organization.” More than one-fourth said they participated in a “Group based on common interest (e.g. gardening group, book club).” About one in five indicated participating with a
“Community service agency.” A lower percentage (11.6%) said they participated in a “Geographic-based group (e.g., neighborhood association, crime watch). Political group/party had the lowest rate of participation.

Table 1.3: “With which types of organizations do you participate?”

<table>
<thead>
<tr>
<th></th>
<th>Common Interest</th>
<th>Geographic Based Group</th>
<th>Political Party Group</th>
<th>Community Service Agency</th>
<th>Faith Based Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses (in percent)</td>
<td>29%</td>
<td>11.6%</td>
<td>10.4%</td>
<td>20.7%</td>
<td>54.8%</td>
</tr>
</tbody>
</table>

Additionally, respondents were asked whether or not they volunteer, and the frequency of volunteering in the last year. Question (Y-2) asks, “In the past year, approximately how many times did you volunteer or work for no pay?” Respondents then had the option of selecting “None (1),” “1-5 times (2),” “6-30 times (3),” “31-50 times (4),” “51 or more times (5).” There were 1,573 responses to this question. Roughly one-third of respondents indicated they did not volunteer or work for no pay in the previous year, while slightly more than half (50.9%) indicated volunteering between 1 and 30 times. The remaining 16 percent indicated volunteering 31 times or more.

Table 1.4: “In the past year, approximately how many times did you volunteer or work for no pay?”

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>1-5 times</th>
<th>6-30 times</th>
<th>31-50 times</th>
<th>51 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses (in percent)</td>
<td>33.1%</td>
<td>29.3%</td>
<td>21.6%</td>
<td>7.9%</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

*Control Variables*
By using additional survey questions, the analysis controls for the effects of the following potentially confounding variables: not being a homeowner (E-10), being nonwhite (D-6 & D-7), gender (D-4), age (D-5), income (D-2), and educational attainment (D-3).

Question (E-10) regards homeownership, a factor affecting the ability of residents to enforce informal social controls (Sampson, Raudenbush, & Earls, 1997). Of the 1,590 responses, 1,305 (82.1%) indicated owning their housing, and 285 (18%) indicated not owning their housing. This is a higher ratio of homeownership than in McLean County as a whole, where 66 percent of housing is owner-occupied, and 34 percent is renter occupied (2014 Community Assessment, 2014). With this variable, we were able to assess the self-rated health impact of not being a homeowner.

Educational attainment is also included in the analysis. Low educational attainment has been shown to increase the risk of being in poverty later in life, and poverty has been shown to have detrimental health effects in McLean County (Michel, Weinzimmer 2013). According to the 2014 Community Assessment:

“The U.S. Census Bureau’s 2012 American Community Survey data show for the population 25 years and over, 42.4 percent of those in poverty did not have a high school diploma, while only 3.2 percent of those in poverty had a Bachelor’s degree or higher…Notably, the poverty rate is much higher for non-high school graduates in McLean County than at the state and national levels. With nearly one in three people in McLean County holding a Bachelor’s Degree, non-high school graduates likely have a harder time securing employment that covers expenses (2014 Community Assessment, 62).”

The survey sample is well educated; 57 percent of respondents indicated holding a Bachelor’s Degree or higher. 40 percent indicated they had graduated high school, attended some college, or held an Associate’s Degree, and only 3 percent said they had not completed high school.
Income is also included as a control variable. More than 60 percent of survey respondents reported a before tax income of between $35,000 and $149,999 in 2012. Of the 1,474 responses to the question, 252 (17%) selected an income between $50,000 and $74,999. Only 58 (3.9%) respondents indicated an income of $200,000 or more, and 159 (10.8%) reported an income of $14,999 or less. Interestingly, the authors of the 2014 Community Assessment calculated the average income of respondents by how they rated their health status. They found that the average income of those reporting “Poor” health is $48,442, while the average income of those reporting “Very Good” health is $90,108. Considering this, it is clear that income needs to be included in any analysis of factors relating to self-reported health.

Reviewing the age variable, the survey sample is skewed toward individuals 51 years of age or older compared to McLean County as a whole. Approximately 66 percent of respondents reported being 51 years of age or older on their last birthday, while only 7.5 percent of respondents indicated they were 30 years or younger. In relation to health, younger individuals tend to have fewer health problems. Additionally, according to key informants and focus group participants in the 2014 Community Assessment, seniors in McLean County are at a higher risk of being socially isolated. Thus, differences in age need to be controlled for.

A majority of the 1,574 respondents who indicated their sex reported being female (940 or 59.7%). This question was used to look at the health effect of being male, since women tend to live longer than men (Austad, 2006; Johnston & Waldron, 1976; Perls, Fretts, 1998).

Being non-white is included as a control variable in consideration of differences in income and health outcomes across race in McLean County. Black and Hispanic residents experience poverty at a higher rate than White residents. According to the 2014 Community Assessment:
“Out of a total estimated population of 12,475, approximately 5,410 Black residents (43.4 percent of the Black population) had an income below the poverty level. The Hispanic population experienced the second highest rate of poverty at 22.8 percent. An estimated 1,743 of 7,642 Hispanic individuals in McLean County were in poverty in 2012. The White population had the third highest rate of poverty in 2012. About 19,885 of 138,263 White residents were in poverty (14.4%) (2014 Community Assessment, 50).”

In terms of race, 92.6 percent of survey respondents indicated being White, 4.2 percent indicated Black or African American, 1.1 percent Asian, and the remaining 2.1 percent indicated “Two or more races,” “Some other race” or “American Indian or Alaska Native.” Additionally, 2.1 percent of respondents indicated an ethnicity of Hispanic, Latino or Spanish origin.

Comparatively, Whites comprised 84.5 percent of the McLean County population in 2012, Blacks were 7.7 percent, and 4.5 percent were Asian. Hispanics and Latinos made up 4.6 percent of the county population (2014 Community Assessment).
Analysis

OLS multivariate regressions are run of the three dependent health variables (self-rated overall, physical, and mental health) on the two independent social capital variables (volunteering and participation in local organizations). An OLS regression analysis allows one to see the effect of the independent, social capital variables on the dependent health variables, while controlling for the effect of other variables. In short, the multivariate analysis reduces bias. OLS regressions are typically preferred when the dependent variable is continuous. Although the dependent health variables are coded as categorical in the survey, they are treated as continuous in the analysis. In this study, OLS was chosen for parsimony and ease of interpretation. Following from the literature review, it is posited that there is a positive relationship between volunteering, involvement in group, associational activities, (i.e. possessing greater social capital) and self-rated overall, physical, and mental health. This hypothesis is tested in three OLS regressions shown in Table 1.5 below:
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Interest</td>
<td>-0.018 (.057)</td>
<td>-0.115* (.047)</td>
<td>0.015 (.046)</td>
</tr>
<tr>
<td>Geographic Based Group</td>
<td>-0.022 (.080)</td>
<td>-0.178** (.066)</td>
<td>-0.044 (.064)</td>
</tr>
<tr>
<td>Political Party Group</td>
<td>-0.032 (.082)</td>
<td>-0.035 (.068)</td>
<td>-0.025 (.066)</td>
</tr>
<tr>
<td>Faith Based Organization</td>
<td>0.001 (.052)</td>
<td>0.017 (.043)</td>
<td>0.017 (.042)</td>
</tr>
<tr>
<td>Community Service Agency</td>
<td>-0.036 (.066)</td>
<td>-0.115* (.054)</td>
<td>-0.084 (.053)</td>
</tr>
<tr>
<td>Volunteering</td>
<td>0.261** (.090)</td>
<td>0.070 (.075)</td>
<td>0.010 (.072)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Home Owner</td>
<td>-0.162* (.072)</td>
<td>-0.155* (.061)</td>
<td>-0.071 (.059)</td>
</tr>
<tr>
<td>Male</td>
<td>-0.115* (.050)</td>
<td>-0.017 (.042)</td>
<td>0.069 (.041)</td>
</tr>
<tr>
<td>Non-white</td>
<td>-0.415*** (.097)</td>
<td>-0.100 (.083)</td>
<td>-0.064 (.080)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.760*** (.120)</td>
<td>-0.028 (.101)</td>
<td>0.670*** (.098)</td>
</tr>
<tr>
<td>Income</td>
<td>1.25*** (.123)</td>
<td>0.799*** (.103)</td>
<td>0.647*** (.099)</td>
</tr>
<tr>
<td>Education</td>
<td>0.440*** (.108)</td>
<td>0.047 (.090)</td>
<td>0.038 (.087)</td>
</tr>
<tr>
<td>N</td>
<td>1208</td>
<td>1156</td>
<td>1161</td>
</tr>
</tbody>
</table>

R-Squared: 0.273, 0.12, 0.1056

Note: The Variable Overall Health is coded as continuous on a 1 to 5 scale (1 being Poor health, and 5 being Excellent health). The Mental Health and Physical Health variables were coded on a 1 to 3 scale (1 being 8 or more “not good” physical or mental health days, 3 being None).

Note: Independent Variables coded from 0-1

*=p<0.05; **=p<0.01; ***=p<0.001
The OLS regression for overall health reveals a number of findings. Only one social capital indicator, volunteering, remained statistically significant when demographic control variables were included in the regression. Among all variables, income had by far the largest, positive impact on self-rated overall health, with a coefficient of 1.25, and a p-value of 0. Moving from an income of less than $10,000 to $200,000 or more increases one’s health by 1.25 points on the 5 point scale. Educational attainment had the next largest, positive impact on self-rated health. Moving from a less than 9th grade education to a graduate or professional degree increases one’s self-rated health by .44 points on the 5 point scale. Among all variables, volunteering had the third largest, positive impact on health. The effect of going from not volunteering, to volunteering 51 or more times in last year, increases self-rated health by .26 on the 5 point scale.

Age had the largest, negative, statistically significant impact on self-rated overall health. The effect was such that moving from an age of 20 years or younger to 91 years or older diminished self-rated health by -.76 points on the 5-point scale. The effect of being non-white was also statistically significant and negative. Being non-white dropped one’s self-rated overall health by -.42 points on the 5-point scale. Not owning one’s home and being male were also associated with statistically significant declines in self-rated overall health, to the effect of -.16 and -.12, respectively.

Mental health was measured on a 3-point scale. None of the social capital indicators, and only two of the demographic indicators, were found to have a statistically significant impact on self-rated mental health. The number of mentally unhealthy days negatively correlates with age and income. In other words, those who are older and/or have a higher income reported fewer days when their mental health was “not good” on average.
Physical health, on the other hand, does appear to be affected by some of the social capital indicators. However, contrary to the first hypothesis, the effect is to diminish, rather than support self-rated physical health. Those who indicated being a member of a common interest group, a geographic based group and/or a community service agency, all experienced more days in the past 30 when their physical health was “not good.” Consistent with mental health, and self-rated overall health, income had the largest, positive effect on physical health.
Discussion

In studying social capital at the community level, this analysis follows Putnam, and the social cohesion school, which maintains that rates of participation in community, associational life, are valid proxies indicating community social capital. It also follows Putnam, and researchers in sociology and public health (Sampson Raudenbush & Earls, (1997); Kawachi et al, (1999); Browning, Cagney (2002); House, Umberson, Landis (1988)) who find that social capital, collective efficacy, and social ties bring about improvements for individual health. It follows Wilkinson (1991), arguing that community develops through processes of social interaction; that individuals form their own identities through interactions with their community, and that individual health is threatened when the social vibrancy of the community is impaired.

All of the above theories support the hypothesis that greater social capital enhances individual health. However, the findings of this study are inconclusive relating to the health influence of social capital. What is undeniable, though, is that there is a relationship. The analysis shows that, on the one hand, volunteering has a positive, statistically significant impact on self-rated overall health. On the other, organizational participation has a negative, statistically significant impact on self-rated physical health. In trying to explain this discrepancy, it appears there is something unique about volunteering, as opposed to other kinds of community participation, which makes it especially rewarding for health. It could simply be the positive feelings one achieves from different acts of “giving back” to the community, that are characteristically different from other forms of participation such as attending church, political party meetings, or being part of a common interest group.
Perhaps volunteering offers more opportunities for bridging social ties than bonding ones. And those unfamiliar connections with people of a different class or race are richer than the familiar bonding ties found in organizations based on a common identity. Many volunteer opportunities in McLean County, such as those through Habitat for Humanity or Home Sweet Home Ministries, involve interactions with people who are in need. Putnam discusses how interactions in the community lead to a greater awareness of the connection of one’s fate to others in their community. One can easily imagine how this truism is reinforced in the act of constructing a home for a needy family, or volunteering time at a homeless shelter.

In the case of organizational participation, bonding ties can be negative when they result in excess claims on certain members of the group, or restrictions on individual freedom (Portes, 1998). These dynamics could be playing out in organizations in the community, leading to the glaring absence of positive health effects resulting from indications of organizational participation in the survey data. In some cases, individuals may be feeling burdensome demands on their time or energy, resulting in the observed diminished self-rated physical health outcome. The age of the survey population, skewed towards individuals 51 years or older, could also be contributing to this outcome. Those who are older and participating in organizations would tend to have more physical ailments than young people participating in organizations.

Other findings, however, are more conclusive. Income had the largest, positive, statistically significant impact on self-rated overall, mental, and physical health. This finding is fairly straightforward when one considers the necessity of income for accessing basic goods and services. When a low-income threatens one’s ability to access these resources, their health is also put at risk. As demonstrated in the analysis, those with lower incomes are experiencing diminished health outcomes. Thus, the most effective policies McLean County citizens can
support to improve health are those that boost income, especially for low-income populations in particular. Given the observed dynamic between income and health, the increase in poverty in recent years in McLean County is concerning. According to the 2014 Community Assessment:

“The U.S. Census Bureau’s Small Area Income and Poverty Estimates show the number of McLean County residents living in poverty has more than doubled from 11,492 to 23,938 between 2001 and 2012. Approximately one in seven McLean County residents is living in poverty today (2014 Community Assessment, 57).”

In addition, the self-rated overall health impact of being nonwhite is statistically significant and negative, indicating a need for McLean County to re-focus on nonwhite populations with new kinds of health interventions. This finding indicates that McLean County has not been immune to larger, historical patterns of race-based economic and social disadvantage. As Wilson (2012) maintains, the cumulative outcome of multiple forms of disadvantage can be intense bonding capital, and social isolation, where standard community norms of behavior are cast aside. One type of intervention, following from the literature, could be to introduce more bridging capital to majority nonwhite neighborhoods.

Finally, education had the second largest, positive, statistically significant impact on self-rated overall health, indicating that education is also a major public health priority in McLean County. There are many potential pathways through which education affects health. School is one of the first places where individuals are socialized and introduced to the society at large. It is where one interacts with his or her peers, and begins to form a self-image. It is also where one discovers his or her interests, and receives important information related to health and wellbeing. The level of educational attainment one achieves is also tied to the income one earns later in life, such that the lower one’s educational attainment, the lower the income they earn,
and vice-versa. Indeed, as noted in the Assessment, 42 percent of people age 25 and older in McLean County who do not hold a high school diploma live in poverty. These, and many other factors, contribute to education as an important factor for health. It is concerning, then, to consider McLean County’s high school graduation rate for low-income students for the 2012-2013 academic year, which was at 65.6 percent (2014 Community Assessment).
Conclusions

This study set out to answer the question: do individuals with greater social capital (i.e. who volunteer and/or indicate participation in local organizations) experience better self-rated health on average? Health was broken down into three dependent variables: self-rated overall, mental, and physical health. The main finding of the OLS regression analysis in support of the hypothesis that those indicating social capital would experience better health on average, was the positive, statistically significant impact of volunteering on self-rated overall health. The main finding contrary to the hypothesis was the negative, statistically significant impact of organizational participation on self-rated physical health. In the case of self-rated mental health, none of the social capital indicators were statistically significant in either direction. A satisfactory answer to the research question, then, seems to require more investigation.

Social capital is a vibrant concept for research and debate. If we accept that, in the words of Wilkinson, “it is a truism that the well-being of people generally depends more than anything else on contacts with other human beings” (Wilkinson, 1991, 71), then researchers must seek to better understand the frequency, nature, and consequences of these contacts in the context of the diverse communities where people live. Researchers need to investigate how the built environment affects the level of social interaction in communities, as well as behavioral norms related to health and safety. This study was limited in using a community survey designed for analyzing the health and human service system of McLean County as a proxy for conducting a study of community social capital. A more comprehensive study could go into greater depth to better understand the existing social capital dynamics in McLean County and how they affect community outcomes. Questions indicating how much residents trust their neighbors, for
example, would have been informative for this study, as trust is a key part of collective efficacy, as well as Putnam’s conception of social capital.

Additionally, there was no controlling for the effect of health behaviors, such as exercise, or other indicators of health status, such as obesity, which is prevalent in McLean County. A future social capital and public health survey of McLean County should be designed to better understand the norms surrounding health-related behaviors, such as eating vegetables daily, walking outside or riding a bicycle, or exercising regularly. Whether the individual is conscious of it or not, the decision to engage in or refrain from these behaviors reflects community norms, is influenced by the social networks the individual is embedded in, and anticipates the resulting sanctions. The overall health of a community comes down to these individual decisions; occurring everyday within an existing social, political, and economic context.

As previously mentioned, survey respondents were more educated, disproportionately female, and older compared to the population of McLean County overall. Future studies should always strive to be as representative of the actual population as possible. While this study was focused on the geographic community of McLean County, Illinois, an interesting new direction for research could be to consider social capital dynamics in online social networks and communities.
Bibliography


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I am further indebted to my siblings, close friends, fellow students in the Stevenson Center, and fellow volunteers in Peace Corps Senegal, many of whom proofread this project, and all of whom provided me with the social support I needed during this effort.
Appendix: Assessment Survey

Community Assessment 2014
Help your neighbors, help yourself

Por favor participe en La Evaluación de la Comunidad 2014. La versión en español está disponible en https://www.surveymonkey.com/s/MZ5VJK2. Si usted necesita ayuda en completar la encuesta, por favor llame (309) 829-4807.

July X, 2013

Dear McLean County Neighbor,

You have been chosen at random to participate in the McLean County Community Assessment 2014 by completing this survey. This project will look at human service and health needs of McLean County residents and the County’s ability to meet those needs. Your response is voluntary and may help improve the quality of life for all of us.

Others in your household can help complete the survey which may take 15 or more minutes of your time. Your household includes anyone living with you—people in your family and not in your family. We only ask that someone age 18 or older participate in completing the survey.

Your participation is important to be sure that all communities in McLean County are represented. Benefits to you may include the opportunity to express your opinions and contribute to a County-wide assessment that will impact health and human services in the years to come. Any risks to you for taking the survey are minimal. There is some potential for your discomfort from questions where you may have strong feelings or experiences. If you chose not to take the survey or to respond to particular questions, there is no penalty to you.

By completing and returning this survey you are consenting to your survey information being combined with other surveys and summarized in Assessment reports. Your responses will be kept confidential and anonymous throughout the Assessment and reporting. You will not be identified in reporting or to anyone advising on the project.

We encourage you to fill out the survey and ask that you return it by August X, 2013. Surveys can be completed online at https://www.surveymonkey.com/s/M5D2XY5 or returned in the attached business reply envelope. Please see the other side for instructions on completing the survey.

The United Way of McLean County is directing this project. More information can be found at www.uwaymc.org/2014-community-assessment/. You may contact me, Ashley Long, at (309) 828-7383 or by email at along@uwaymc.org. Thank you for participating in Community Assessment 2014!

Sincerely,
Ashley Long
Director of Community Impact
United Way of McLean County

If you have any questions about your rights as a participant in this Assessment, or if you feel you have been placed at
Completing this survey includes three easy steps:

1. **Mark**
   We want to hear from you! Please mark the survey in a way your answers can be read.

   ![Correct and Incorrect Marks]

   Please use a PENCIL or BLUE or BLACK ink to complete this survey. NO GEL PENS PLEASE!

   If you make a mistake using a pencil, please erase the incorrect response completely. If you make a mistake using a pen, please place an X through the incorrect response.

2. **Stuff**
   Please use the self-addressed envelope included in your survey packet to return your survey.

3. **Send**
   The postage has already been paid. Simply drop the completed survey and envelope in the mail by August X, 2013. Your answers will help community practitioners plan for the County's future needs!

   **Complete the survey online!**

   Visit [https://www.surveymonkey.com/s/M5D2XY5](https://www.surveymonkey.com/s/M5D2XY5) for more details.
Community Assessment Survey

The results of this survey will help the McLean County community plan for the future. Please answer each question as it relates to you and your household.

Health

The following section asks you about your experiences and perceptions of health and health services in McLean County.

H-1. Do you have any kind of dental insurance that pays for some or all of your dental care, including dental insurance, prepaid plans such as HMOs or government plans such as Medicaid?
   ○ Yes ○ No ○ Don't know

H-2. Have you used dental services in the last 12 months (e.g., dentist, oral surgeon)?
   ○ Yes (if YES, please skip to question H-4) ○ No

H-3. What prevented you from doing so? (Mark all that apply)
   ○ Cost ○ Fear of dental work ○ Lack of time ○ No need for dental care
   ○ Other (please describe):

H-4. Do you have any kind of vision insurance that pays for some or all of your eye care, including vision insurance, prepaid plans such as HMOs or government plans such as Medicaid?
   ○ Yes ○ No ○ Don't know

H-5. Have you received eye care in the last 12 months?
   ○ Yes (if YES, please skip to question H-7) ○ No

H-6. What prevented you from doing so? (Mark all that apply)
   ○ Cost ○ Insurance will not pay for service ○ Lack of time ○ No need for eye care
   ○ Other (please describe):

H-7. Do you have any kind of prescription drug insurance that pays for some or all of your prescription drugs, such as prescription coverage, prepaid plans such as HMOs or government plans such as Medicaid?
   ○ Yes ○ No ○ Don't know

H-8. In the last 12 months, did cost prevent you from filling any prescriptions?
   ○ Yes ○ No (if NO, please skip to question H-10)

H-9. Have you had to make a decision regarding which prescriptions to fill because of cost?
   ○ Yes ○ No

H-10. Do you have any kind of health care insurance that pays for some or all of your health care including group insurance, individual insurance, HMO, or government plans such as Medicaid or Medicare?
   ○ Yes ○ No (if NO, please skip to question H-12)

H-11. Please check the statement that best applies to you:
   ○ I have employer provided health care insurance ○ I have Medicaid or Medicare
   ○ I have some combination of the above

H-12. Would you say that in general your health is:
   ○ Excellent ○ Very good ○ Good ○ Fair ○ Poor ○ Don't know

H-13. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 was your physical health not good?
   ○ None ○ 1-7 days ○ 8 or more days ○ Don't know / not sure

PLEASE DO NOT PHOTOCOPY THIS SURVEY
H-14. How thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?
○ None ○ 1-7 days ○ 8 or more days ○ Don't know / not sure

H-15. Have you sought mental health services in the last 12 months?
○ Yes ○ No (If NO, please skip to question H-18)

H-16. Did you receive mental health services in the last 12 months?
○ Yes (If YES, please skip to question H-18) ○ No

H-17. What prevented you from getting services? (Mark all that apply)
○ Work ○ Do not qualify for services
○ Insurance does not pay for service ○ Can't get an appointment
○ Other (please describe) ____________________________

H-18. Do you have a regular doctor? ○ Yes ○ No

H-19. How often do you visit the doctor for preventive services (e.g., annual check-ups or physicals, mammograms, or other exams to detect and prevent disease)?
○ At least once a year ○ Every 1-5 years ○ More than every 5 years ○ Never

H-20. In the last year, how many times in total did you go to an emergency room for treatment?
○ None ○ 1-2 times ○ 3-4 times ○ 5 or more times

S-1. Does anyone in your household have a chronic condition, disability, disease, or the frailties of old age?
○ Yes ○ No

S-2. Are you a primary caregiver of a person with a chronic condition, disability, disease, or the frailties of old age?
○ Yes ○ No

S-3. This is a two-part question about your USE of and SATISFACTION with McLean County services. In the last 12 months, have you or someone in your household used the following services? If you answered YES to any service, how satisfied or dissatisfied are you with the service?

<table>
<thead>
<tr>
<th>Service</th>
<th>Use</th>
<th>Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult day services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmental disability screenings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-delivered meals (e.g., Meals on Wheels)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior social group or wellness program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior subsidized housing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supportive services for caregivers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment support for people with disabilities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S-4. In the last 12 months, did you or a household member need a senior or disability service but not receive it?
○ Yes ○ No (If NO, please skip to question S-6)
5. What were the barriers to accessing this service? (Mark all that apply)
   ○ Didn’t know service was available ○ Didn’t qualify for a service
   ○ Couldn’t afford service ○ Services available did not fit the need

5-1. General Perceptions
   In your opinion, do we have a need for additional services for the following people in McLean County?
   Seniors (over 60)
   ○ ○ ○ ○
   People with intellectual/developmental disabilities
   ○ ○ ○ ○
   People with mental illness
   ○ ○ ○ ○
   People experiencing homelessness
   ○ ○ ○ ○
   People experiencing hunger
   ○ ○ ○ ○
   People needing assisted living/supported housing
   ○ ○ ○ ○

5-2. Youth Issues and Services / Civic Engagement
   The following section asks you about your experiences and perceptions of community participation and youth services in McLean County.

Y-1. With which types of organizations do you participate? (Mark all that apply)
   ○ Faith-based or religious organization
   ○ Community service agency
   ○ Geographic-based group (e.g., neighborhood association, crime watch)
   ○ Political group/party
   ○ Group based on common interest (e.g., gardening group, book club)
   ○ Other (please describe):

Y-2. In the past year, approximately how many times did you volunteer or work for no pay?
   ○ None ○ 1-5 times ○ 6-30 times ○ 31-50 times ○ 51 or more times

Y-3. In the last 12 months, have you or someone in your household used the following services? If you answer YES to any service, how satisfied or unsatisfied are you with the service?
   ○ Completely satisfied ○ Neutral ○ Satisfied ○ Very satisfied
   Used service:
   Academic help for children or youth at a community agency
   ○ ○ ○ ○
   Youth program based on common interest (e.g., Boy Scouts)
   ○ ○ ○ ○
   Parks and Recreation programs for children or youth
   ○ ○ ○ ○
   Youth leadership development programs at a community agency
   ○ ○ ○ ○

Y-4. General Perceptions
   In your opinion, do we have a need for the following types of additional services or programs for children and youth in McLean County?
   ○ Academic help outside of school
   ○ Leadership development
   ○ Sports, fitness and recreation programs
   ○ Career development and training

For office use only: 
Home Economics
The following sections ask you about your experiences and perceptions of work, housing, and economic conditions in McLean County.

E-1. During the last four weeks, have you actively looked for work?
- Yes  ○ No  ○  

E-2. In 2012, what was your individual annual income before taxes?
- Less than $10,000  ○ $10,000-$34,999  ○ $35,000-$49,999  ○ $50,000-$69,999  ○ $70,000-$99,999  ○ $100,000-$129,999  ○ $130,000-$149,999  ○ $150,000-$199,999  ○ $200,000 or more  ○ Other (please describe):  

E-3. Do you currently work for pay?
- Yes  ○ No  ○ (NO, please skip to question E-9).

E-4. Last week, how many hours did you work for pay?
- 0 hours  ○ 10-20 hours  ○ 21-30 hours  ○ 31-40 hours  ○ 41-50 hours  ○ 51 or more hours  ○ Other (please describe):  

E-5. Which shift do you MOST OFTEN work?
- First shift  ○ Second shift  ○ Third shift  ○ Other (please describe):  

E-6. How do you MOST OFTEN get to work?
- Vehicle owned by someone in household  ○ Taxi  ○ Vehicle of someone outside the household  ○ Work / Bike  ○ Commuter / Normal public transit  ○ Work from home  ○ Other (please describe):  

E-7. If you have difficulty obtaining reliable transportation for work, how would you describe that difficulty?
- Do not have difficulty  ○ Do not have a valid license  ○ Do not have a vehicle  ○ Due to lack of money: need to walk or bike  ○ Have a vehicle but can't afford transportation or maintenance  ○ Other (please describe):  

E-8. If you work less than 40 hours per week, would you want full-time work?
- Yes  ○ No  ○ (NO, please skip to question E-9).

E-9. What are your barriers to full-time employment (or any employment if not employed)?
- Place too far to commute  ○ I am a caregiver (child, senior, spouse, etc.)  ○ Jobs not available  ○ Transportation issues  ○ Health issues  ○ Other (please describe):  

E-10. Regarding your housing, do you currently?
- Rent  ○ Own  ○ Other (please describe):  

E-11. How much do you spend on housing each month (Mortgage payment or rent)?
- None  ○ $500 - $999  ○ $1000 - $1499  ○ $1500 - $1999  ○ $2000 or more  ○ Other (please describe):  

E-12. In the last 12 months have you applied for each of the following types of loans? If yes, were you approved?
- Yes  ○ No  ○ Approved  ○ 

E-13. In the last 12 months, which of the following services have you used from a mainstream financial institution (e.g., bank, credit union)?
- Checking account  ○ Savings account  ○ 

E-14. Do you have money to cover all of your necessary monthly expenses?
- Yes  ○ No  ○ 

E-15. In the last 12 months, have you or anyone in your household used the following services? If you answer YES to any service, how unsatisfied or satisfied are you with the service?

- Yes  ○ No  ○ Completely satisfied  ○ Satisfied  ○ Unsatisfied  ○ Completely unsatisfied  ○ 

E-16. General Perceptions
In your opinion, do you have a need for additional services for the following people in McLean County?
- Yes  ○ No  ○