Locating community social capital: a study of social networks and community action

Kerry Ann Agnitsch
Iowa State University

Follow this and additional works at: http://lib.dr.iastate.edu/rtd
Part of the Sociology of Culture Commons

Recommended Citation
http://lib.dr.iastate.edu/rtd/561

This Dissertation is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Locating community social capital: A study of social networks and community action

by

Kerry Ann Agnitsch

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Sociology

Program of Study Committee:
Vernon D. Ryan (Major Professor)
Terry L. Besser
Frederick O. Lorenz
Sharon R. Bird
Tom W. Rice

Iowa State University
Ames, Iowa
2003
Graduate College
Iowa State University

This is to certify that the doctoral dissertation of

Kerry Ann Agnitsch

has met the dissertation requirements of Iowa State University

Signature was redacted for privacy.

Major Professor

Signature was redacted for privacy.

For the Major Program
TABLE OF CONTENTS

ACKNOWLEDGEMENTS

CHAPTER 1  INTRODUCTION  1
CHAPTER 2  REVIEW OF LITERATURE  11
CHAPTER 3  RESEARCH DESIGN  53
CHAPTER 4  ANALYSIS AND FINDINGS  71
CHAPTER 5  SOCIAL CAPITAL AND NETWORK ANALYSIS  83
CHAPTER 6  CONCLUSION  125
APPENDIX A  RESIDENT SURVEY  139
APPENDIX B  CASE STUDY INSTRUMENT  153
APPENDIX C  DESCRIPTION OF COMMUNITY PROJECTS  165
REFERENCES  175
ACKNOWLEDGEMENTS

During the course of this adventure through graduate school, I have been one of the lucky ones. I’ve had the opportunity to work with and learn from great people who were willing to give me both the freedom and support necessary to develop as a student and scholar. It’s been a long and winding road—sometimes bumpy, but always exhilarating.

First and foremost, many thanks go to Vern Ryan, my major professor. His support and guidance throughout the process of writing this dissertation (and throughout my years as a student) were invaluable—thanks, Vern, for letting me take my time and encouraging me to do something a little different! Thanks also go out to my committee members—Terry Besser, Fred Lorenz, Sharon Bird, and Tom Rice—for their interest, suggestions, and very kind comments regarding my research.

I also want to thank the many graduate students with whom I had the opportunity to work and learn with. Gayle, Kyong Hee, Nathan, Stephen, Mike—you all made graduate school a memorable experience. From weekends studying for statistics exams, to commiserating about classes and prelims, to “Taco Tuesdays”—thanks for sharing the adventure with me. A special note of thanks goes out to Sine Anahita who so often provided much needed encouragement—it was great to have someone to share the writing process with!

Finally, many, many thanks go to my family for their love and patience throughout this process. To my boys, Jake and Brayden, who kept me aware of what really matters. And especially to my husband, Brian, for supporting this dream of mine and coming with me to Iowa. Your love, patience, encouragement, and support made this whole thing possible. Thanks for having faith in me—I could never have done it without you.
CHAPTER 1
INTRODUCTION

Nearly four decades ago, Charles Tilly posed the question, “Do Communities Act?” His answer: “some communities act some of the time” (1973, p. 212), the extent to which is influenced by a variety of local and societal factors, such as the community’s degree of mobilization, the power the community holds in relation to others in its region, and the extent of urbanization. Tilly argued that communities are most likely to act when they are mobilized (hold collective control over resources), have similar amounts of power relative to other power centers in the region or nation, and are in the beginning stages of urbanization. A plethora of studies based in a variety of theoretical traditions have since addressed the role of these and other factors that contribute to or hinder local community/collective action (e.g. Hunter and Staggenborn, 1986). A related body of literature addresses factors that influence local citizen’s choices to participate in local community action efforts, such as the community attachment, sense of community, and human capital variables (e.g. Sampson, 1988). Recently, much attention has been given to the social conditions under which citizen participation and/or community action is likely. This is in part seen in an explosion of interest in the idea that embedded social relationships among community residents are a valuable and even necessary resource for communities—these relationships constitute a community’s “social capital”.

Social capital is a term that refers to the resource potential of social relationships. The main premise behind social capital is that well-connected individuals or groups are better able to mobilize other resources to pursue desired outcomes. This rather amorphous premise
has been used to explain a variety of outcomes including educational achievement (Coleman, 1988), status attainment (Lin, 1999a; Forse, 1999; Dyk and Wilson, 1999), success for new and second generation immigrants (Portes and McLeod, 1999; Lauglo, 1999), career mobility (Burt, 1992), decreases in crime (Kawachi, Kennedy, and Wilkinson, 1999, and economic growth (Fedderke, et al., 1999). In terms of community action, a well-connected community (i.e. one with “community social capital”) should be better able to mobilize local and extra-local resources to effectively act, and indeed this finding has been empirically supported (Putnam, 1993; 2000). While a seemingly simple (and popular) notion, it has proven to be a complex research task generating as many questions as answers. Does community social capital exist? If so, can it be measured? How? Is it a property of an entire community or only accessible by individuals? Or, is it more likely to be found in various groups or “social fields” within the community? Is it “visible” (measurable) only in its outcomes (a tautological argument) or can (and should) the two be separated? Which is more important: levels of community social capital (high or low, present or not) or the form it takes (e.g. “bridging” or “bonding”) or do both matter?

Much of the early research on social capital focused on identifying levels of social capital present (for the individual, group, community, or even the nation), and identifying subsequent outcomes that are “better” or “worse” (see Portes and Landolt, 1996) for the unit of interest given the relative presence or absence of social connections (Bourdieu, 1986; Coleman, 1988; 1990; Putnam, 1993; 1996, and many others). Recently, discussion has shifted to considering different forms or locations of social capital, specifically bonding and bridging forms, that recognize different types of social relations and the importance of resources embedded within network connections. Bonding social capital, the close-knit ties
among similar individuals or groups, is said to be good for "getting by", where the bridging form, "weaker" ties among heterogeneous individuals or groups, connects one to new resources and is needed to "get ahead" (de Souza Briggs, 1998; Gittell and Vidal, 1998).

Regardless of whether level or form is of concern, an issue throughout has been the operationalization and measurement of social capital at different units of analysis leading to vigorous discussion in the literature (see Portes, 1998; Grooteart and van Bastelaer, 2001; Stone, 2001b). Most of the debate has centered on the correct way to operationally define social capital, particularly as it is applied to situations in such a wide range of disciplines (2001b). Difficulties in measuring social capital separately from its effects have also received significant attention. Portes contends that "separating the definition of the concept, theoretically and empirically, from its alleged effects" (p. 21) is necessary to maintain logical consistency of the concept.

A related issue is the lack of a precise definition of social capital and its dimensions. It is most often defined as social connections having specific qualities (such as trust, norms of reciprocity) (Paxton, 1999). Each of these are complex and difficult to operationalize, particularly when relying on secondary data or surveys as data sources (Stone, 2001b). For social connections, proxy indicators such as organizational membership (Putnam, 1993), a stable family structure (Coleman, 1988), or number of friends (Lazega and Pattison, 2001), are frequently used. Measures of trust and norms present even more complications. An alternative, but less frequently used, approach to identifying social connections is found in the application of network theories and methods of analysis whereby the actual structure of social connections and its properties are empirically addressed (see Burt, 1997; 2000).
Recently, attention has been placed on the nature of resources that are accessible by way of social capital. This discussion suggests that to achieve certain goals (e.g. status attainment, job advancement, etc.), the presence of social networks alone is not sufficient—those networks must also provide access to whatever resources are needed for goal attainment (Lin, 1999b).

In sum, the concept of social capital has become a complex bundle of theories and methodologies applied to a wide range of entities and issues while basically describing the simple notion that social connections matter. The goal of this dissertation is to carve out a small piece of that large bundle and address it with greater specificity. Much of the problem with the use and measurement of social capital stems from the tendency to use it as an explanatory variable without first embedding it within a broader theory (Castle, 2002). In other words, having social capital may matter a great deal, but theory is needed to explain where that social capital can be found in a social system and how it should matter. The key, then, to clearly specify what is being studied (e.g. educational achievement, status attainment, community action, etc.) and then to identify and measure the types of social capital that are believed (theoretically) to produce the defined outcome. For example, a stable family structure or the availability of youth activities may well be an important source of social capital that facilitates student achievement (Coleman, 1988), but neither is likely to directly facilitate community action.

My focus will be on theoretically defining, locating, and measuring different forms of community social capital as they relate to citizen participation and community action using data from a study of two rural Iowa communities. Community action is defined in the Tillian sense as the application of pooled resources toward the pursuit of common ends (Tilly,
1973). I will demonstrate that community social capital is an important resource to communities that takes different forms within a community. In order to explain the link between social capital and community action, two theories (social resources theory and regime theory) positing effects of these different forms will be presented.

This research agenda is grounded in a comprehensive research project designed to study the relationship between community social capital and community action. That project was based on the premise that variations in social capital would have differential effects on community action efforts—basically, where more social capital was present, community action would be more likely to occur. Communities with high and low levels of social capital were identified and then in-depth case studies of local action efforts were conducted to support the expected relationship. Interestingly, however, the case study findings did not completely support a positive relationship between social capital and action. Community action was found in both communities—almost more so in the low social capital community (with “more” defined as the number of community projects ongoing or completed). The question of “why?” remains, and in some sense, is the foundation upon which this dissertation is based.

I argue that these surprising findings are the result of focusing on only one form—bonding social capital—in the community. The initial measures upon which this project was based were aggregations of residents’ assessments of their connections to other residents, the trusting nature of the community, and the extent to which people in the community work together—all bonding measures.¹ Communities with high social capital had well-connected

¹A detailed discussion of these measures is found in chapter 3.
residents who trusted each other and were able to work together; low social capital communities had fewer of these qualities. And, when related to measures of citizen participation in community projects, it was found that citizens were more likely to participate in communities with high social capital (Ryan, Terry, and Besser, 1995). Thus, the initial study was based on the assumption that wide-scale citizen participation is necessary for community action, which may not necessarily be the case. Community action is apparently quite possible in the relative absence of community-wide (bonding) social capital and high levels of citizen participation.

What could provide guidance is the placement of social capital as a concept into a broader theoretical perspective about how communities act. Castle argues that there exists an "implicit assumption that the idea of social capital constitutes a social theory" but that really, "social capital is a concept that has meaning only in the context of economic or social theory" (2002, p. 338, italics added). In short, social capital is a concept that requires a theory to direct it to be of use in predicting various outcomes. For example, Lin’s discussion of social capital and status attainment is grounded in social resources theory² (Lin, 1990) whereby persons attain higher status by becoming connected with others who have social resources (wealth, power, status). Thus, to identify the social capital that leads to status attainment, very specific social connections need to be analyzed. A person’s kinship network may not be important for status attainment, but may be a very important form of social capital under theories of social support. Similarly, while the idea of social capital is often applied to the study of communities and community action, it alone lacks the specificity

² Lin’s social resources theory (1990) differs from the social resources theory (Wilson, 2000) that is used to explain voluntary citizen participation in this research. Both are based on a similar premise—that social relations are a resource—but each explains a different outcomes and examines social resources differently.
required to be a theory of citizen participation or of community action as it is sometimes professed to be (Midgley and Livermore, 1998; Miller, 2001).

Citizen participation is defined as the voluntary involvement of local residents in projects intended to produce a common good for the community. Community action involves the mobilization and application of pooled resources toward some locality-oriented goal (Tilly, 1973). Citizen participation is only one of many resources required for community action to occur. By itself, voluntary citizen participation may or may not result in community action, and it need not be wide-spread to do so. What is key is the ability to acquire, pool, and direct multiple resources toward a defined goal. Thus, to understand “how communities act” and how social capital is related to such action, it is important to examine the social conditions under which either (citizen participation and community action) or both occur. Social capital may or may not prove to be useful in facilitating either, but to find out requires a theory to predict how social capital may be useful and what form of it is important.

**Selected Theoretical Perspectives**

Two different theoretical perspectives will be used to identify the expected relationship between social capital and citizen participation and community action. *Social resources theory* discusses how social networks possessing certain qualities are a resource in inducing participation in collective action. When social connections that are characterized by trust and strong norms are present in a community (*i.e.* bonding social capital), persons are more likely to participate in collective acts. *Regime theory* emphasizes the importance of non-social resources, and posits that community action occurs when local individuals with access to separately held resources form enduring coalitions that merge those resources to pursue various goals. If present, a regime is an informal structural feature of the community
(as opposed to a formal structure such as government) that serves as the bridging form of social capital which facilitates the coordination and mobilization of diverse resources. These theoretical perspectives posit the effects of two different forms of community social capital—bonding and bridging—on a community's capacity for action. The theoretical perspectives also provide direction in determining why social capital should matter, and equally important—where to find it in the community.

**Research Objectives**

The purpose of this study is twofold: First, to examine the relationship between a community's social capital and its capacity to act, and to second, bring attention to network analysis as a tool in the identification and measurement of the structural features of social capital. Using a comparative case study of two rural communities, this research will seek to identify two forms of community social capital—bonding and bridging—and explain how they are related to community action. The “community” being studied here is the place-based community, and the community's capacity to act is examined in two ways: the amount of citizen participation in local public good projects and the extent to which successful public good projects are carried out in the community. To meet the first purpose, two research objectives have been formulated.

The first objective is to theoretically “locate” and empirically measure two different forms of community social capital—bonding and bridging. Two theories—social resources theory and regime theory—are used as a framework to direct the definition and measurement of the two forms.
The second is to determine whether or not those two forms result in community action. Community action efforts in two rural communities will be examined in relation to bonding and bridging social capital.

Related to the second, more methodological purpose, the third objective is to discuss network analysis as a tool for identifying structural qualities of social networks that may facilitate community action. Social capital is a network based concept (as are social resources theory and regime theory), yet network analysis remains an under-utilized methodological tool for examining its impact, particularly in community settings. In the second component of this research, community regime networks will be examined and potential impacts on community action will be discussed.

Finally, the implications of the research findings for future research on social capital, regimes, and community action will be discussed, as well as implications for community development policy.

**Need for this research**

While the question of “do communities act?” has long been of great interest to rural sociologists, the answer today is “they better”. With the continued devolution of power and resources from state- and federal-centered to locality-centered institutions, rural places are increasingly left to depend on their own resources to survive (Swanson, 2001). As such, the importance of a community’s ability to acquire and mobilize resources to accomplish various goals is of central importance. Flora and Flora note that:

“...if communities and community development professionals can mobilize and modify local organizations and institutions to take advantage of changing circumstances, rural communities can offer a viable option to Americans in terms of lifestyle and livelihood. But if communities and the individuals within them take a passive role or a reactionary stance of denial, rural
communities of the future will not only be much smaller and many fewer than the 1980's, but much poorer as well (1990, p. 197-198).

The survival of rural communities is at risk, and as Lacy notes: “without communities, ..., society can only atrophy. The restoration of local communities on the human scale is essential to renewal at all levels” (2000, p. 23). A central task, then, for community sociologists should be to develop an understanding of how successful communities do act in order to assist community development professionals and other communities in their community action efforts. This research will contribute to that agenda.

**Organization of the Dissertation Chapters**

This dissertation consists of six chapters containing two related, but separate components: one theoretical and one methodological. Chapters one through four contain the theoretical component. Chapter one provides an introduction to the study and statement of research objectives. The second chapter contains a review of literature associated with social capital, a discussion of two theories linking two forms of community social capital to citizen participation and community action, and hypotheses to be tested. The third chapter describes the procedures used to select the case study sites and respondents and the measures used to test hypotheses. In the fourth chapter, initial results are discussed. The fifth chapter contains the methodological component, and introduces network analysis as a tool for the study of community social capital. Finally, the sixth chapter provides a summary of the study, its theoretical and methodological contributions, implications for community development policy, and directions for future research.
CHAPTER 2

REVIEW OF LITERATURE

This chapter provides a review of the literature associated with social capital. An argument for grounding social capital in theory is presented. A case is made for the existence of community social capital, and two theories linking community social capital with citizen participation and community action are discussed ending with the generation of two general hypotheses to be tested. The chapter concludes with a discussion of the appropriateness of utilizing a network approach to examining community social capital, and some related research questions to be addressed.

Social Capital

Social capital has become a widely used concept in a variety of disciplines, including community sociology. The idea that social relationships constitute a valuable resource for individuals and groups is an appealing notion. However, its use has become the subject of considerable debate among scholars. Sharp (2001a) wrote that “social capital has proven to be an inspiring metaphor, but it is less effective as a theoretically grounded concept: scholars disagree over exactly what it is, its benefits, and how to measure it” (p. 137). I believe this confusion is due to the tendency to view social capital as a theory that predicts certain outcomes rather than as a concept needing to be embedded within a theory. This chapter will begin with a discussion of social capital, its definitions and forms, and why theory is needed to guide its use as an explanatory variable.
The Roots of Social Capital

Although the term has been around for decades (Hanafrin, 1916; Jacobs, 1961; Loury, 1977), the current scholarly interest in social capital can be attributed to the works of Bourdieu (1986), Coleman (1988; 1990) and Putnam (1993; 1995). Each was based on different research areas, but ended with a similar conclusion—social relations are an important resource. Bourdieu identified social capital as a key variable in determining social mobility and the continued reproduction of class 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 institutional relationships of mutual acquaintance and recognition...which provides each of its members with the backing of collectively-owned capital” (1986, p. 248). It is through social capital that individuals are able to access other forms of capital (economic and cultural) allowing them to move up in social class. Conversely, the lack of social capital among certain components of a population serves to maintain divisions among classes and disallow social mobility. Bourdieu (unlike others) argues that social capital is intentionally created for this purpose:

It is the product of endless effort...the network of relationships is the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are directly usable in the short or long term, i.e., at transforming contingent relations, such as those of neighborhood, the workplace, or even kinship, into relationships that are at once necessary and elective, implying durable obligations...or institutionally guaranteed (rights). (1986, p. 250).

Bourdieu’s conception of social capital as a key link to other forms of capital was a major force in establishing social capital as an important concept for study; yet, as Schuller, Baron,
and Field lament "it remains curiously undeveloped" (particularly empirically) in his work (2000, p. 5).

Coleman also addressed social capital and inequality issues, but in terms of educational achievement. Coleman identified social capital as a key variable in influencing educational achievement, which in turn, lessens social inequality. His empirical work began with a series of longitudinal studies comparing Catholic and public schools in the United States. He found much higher levels of achievement in the Catholic schools, and identified the higher expectations of teachers in Catholic schools and the greater stability of Catholic families as causes. From this observation, he made the argument that social capital (defined in an educational context as "the set of resources that inhere in family relations and in community social organization and that are useful for the cognitive or social development of a child or young person") has a major impact on educational attainment (1994, p. 300).

Coleman's major contribution was to theoretically conceptualize and empirically test the contribution of social capital to educational achievement. He defined social capital as "a particular kind of resource available to an actor" comprised of "a variety of entities with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure (1988, p. S98). Social relations could be considered a resource because of established obligations, expectations, and trust, the ability to provide and channel information, and the creation of norms and sanctions to guide behavior. Unlike Bourdieu, Coleman argued that social capital was an unintended outcome of other processes (e.g. involvement in organizations, workplaces, schools, etc.), and was more likely to be found in relatively closed social
networks where effective norms and trust (resulting from fewer external choices) could be

generated.

Coleman empirically tested his conception of social capital relating it to the “creation

of human capital” in the form of educational achievement. Family social capital was

operationalized as the presence or absence of both parents, the number of siblings in the

home, and the parents’ expectations for their child’s attendance in college. Community

social capital was found in the social relationships among parents in a school and the parents’

relation with community institutions (especially church). Result of his analysis indicated that

greater levels of family and community social capital led to lower dropout rates for students,
supporting his hypothesis that social capital impacts educational attainment.

Coleman’s work, although known as one of the seminal works on social capital, is not

without its critics. Portes contends that Coleman’s definition of social capital is too vague,

and has “opened the way for re-labeling a number of different and even contradictory

processes as social capital” (1998, p. 5). He also argues that Coleman overemphasizes dense

networks and strong ties to the exclusion of weak ties which may be equally important in

other ways. Portes further argues that Coleman (and many others) ignore the probable
downsides of dense, closed networks and strong norms and sanctions. Regardless,
Coleman’s work has been “both influential and significant” (Schuller, Baron, and Field,
2000, p. 8) largely in that he was the first to fully conceptualize and empirically test and

operationalize the social capital concept.

It was the work of Robert Putnam that brought the current state of popularity (and

perhaps notoriety) to the concept (1993; 1995; 1996; 2000). His initial work was a study of
government effectiveness in regions of Italy (1993). He found that regions with more social
capital, or "civic engagement" (operationalized as quality of associational life, newspaper readership, and voter turnout) had more effective governments. Putnam's work in the United States centers on examining the results of a decline in social capital (i.e. civic engagement) (1995; 1996). His most famous argument is that people are now "bowling alone" rather than in leagues as was once the norm. This trend, along with a plethora of others like it, indicates a decline in levels of social capital in the United States. People are no longer "joiners", which Putnam identifies as a key feature of civic life, and instead prefer to engage in solitary activities.

Since his study in Italy, Putnam had defined social capital as "features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives" (1995, p. 664), and has operationalized it accordingly. Partly in response to similar criticisms leveled at Coleman regarding ignoring negative consequences of social capital (see Portes and Landolt, 1996), Putnam has since emphasized the presence of different forms of social capital—notably, bonding and bridging—that lead to different outcomes. Bonding social capital is the links between similar people that builds strong ties (and sometimes strong walls). Bridging social capital—links between heterogenous individuals or groups—are weaker ties, but provide access to a wider variety of resources and are more likely to be inclusive. Putnam has also placed significant emphasis on the trust and generalized reciprocity components of social capital, arguing that "trust lubricates social life" by reinforcing norms of generalized reciprocity that lead to "mutual obligation and responsibility for action" (Putnam, 2000, p. 21). He contends that where trust and generalized reciprocity exist, "society is more efficient...for the same reason that money is
more efficient than barter. If we don’t have to balance every exchange instantly, we can get a lot more accomplished” (p. 21).

Putnam, like Coleman has his share of critics, mostly stemming from his initial study of Italian regional governments. Foley and Edwards, for example, argue that Putnam’s version of social capital lacks clarity and ignores issues of power and conflict in civic and political processes (1997). Portes contends that Putnam celebrates the virtues of social capital while ignoring many potentially negative consequences (1998). Maloney, Smith, and Stoker argue that the evidence used to back up Putnam’s thesis that social capital is declining overlooks a shift in the nature of organizations that people belong to (2000). They suggest that people still participate in organizational life, but that the type of organizations have shifted—a feature not adequately captured by the GSS survey upon which Putnam’s evidence is based—and conclude that social capital may not be declining after all. Putnam has since addressed many of these issues in more current work and remains a significant figure in the academic discourse surrounding social capital.

Social Capital Defined

While the subject of much debate among scholars, a precise (or at least agreed upon) definition of social capital has yet to be found. Social capital is a broad concept referring to the resource that “inheres in the structure of social relations between and among actors” (Coleman, 1988, p. S98). Like other forms of capital (financial, human, physical, etc.), social capital is valued for its ability to produce something—usually, some kind of collective action (for groups) or personal benefit, such as obtaining a better job (for individuals). However, unlike other forms of capital, social capital is unique in that it is relational and does not “belong” to a single individual. It can be a resource to an individual, but is not...
determined by that individual. It is a group property, and must be conceptualized and measured as such. Social capital is generally portrayed as a multidimensional concept, but there are two overall variations on what those dimensions are. The first, social capital as networks with subjective qualities, is based on conceptualization by Coleman (1988; 1990) and Putnam (1993; 2000) and the second, networks and the resources embedded within them, loosely follows Bourdieu (1986). As an illustration of these different perspectives, Table 2.1 contains a listing of several works\(^3\) and the various dimensions of social capital identified therein.

**Table 2.1. Definitions of Social Capital**

<table>
<thead>
<tr>
<th></th>
<th>Networks/Ties</th>
<th>Trust/Norms</th>
<th>Embedded Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coleman, 1988; 1990</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Putnam, 1993; 1995; 2000</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Onyx and Bullen, 2000</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Paxton, 1999</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lochner et al., 1999</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Grooteart &amp; van Bastelear, 2001</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Stone, 2001b</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Saegert et al., 2001</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Schuller, Baron &amp; Field, 2000</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bourdieu, 1986</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Waquant, 1997</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lin, 1999a,b</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lin, Cook, &amp; Burt, 2001</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Foley and Edwards, 1999</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Burt, 1997; 2000</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Woolcock, 1998</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Portes, 1998</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Portes &amp; Landolt, 2000</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

\(^{3}\) These works are by no means an exhaustive list. Rather, each was chosen because it was one of the initial founding works or contained significant discussion of the concept of social capital (as opposed to simply applying it to a given situation). There are literally hundreds of articles that could be listed—I chose those that seemed the most significant.
Networks and Subjective Qualities

Following Coleman’s and Putnam’s work, the most widely used definition views social capital as having two components: objective associations among people—“an objective network structure linking individuals”—with subjective qualities—“reciprocal, trusting, and involving positive emotion” (Paxton, 1999, p. 93). Although some (most notably Woolcock, 1998 and Portes, 1998) argue that norms and trust are outcomes of networks rather than components of social capital, most contend that networks alone are not sufficient (Putnam, 2000). The social ties must also possess certain qualities to be considered social capital. Coleman argues that networks serve as channels for information, but trust and norms of reciprocity governing interactions within networks are key (1988). Both are closely related—norms of reciprocity generate trust, and trust is necessary for norms of reciprocity to develop. Coleman elaborates:

If A does something for B and trusts B to reciprocate in the future, this establishes and expectation on the part of A and an obligation on the part of B. This obligation can be conceived as a credit slip held by A for performance by B. (p. S102)

Coleman also contends that norms (of reciprocity or otherwise) are important in guiding behavior, and constitute a powerful component of social capital. For example, he argues that “a prescriptive norm within a collectivity that is an especially important form of social capital is the norm that one should forego self interest and act in the interests of the collectivity” (p. S104). It is norms such as this that are key components of social structure and that influence behavior.

Putnam also contends that trust and norms are important components; but rather than an outcome of individual exchanges in networks, each is a feature of society that facilitates
positive outcomes (2000). He argues that the most valuable norm is that of “generalized reciprocity: I’ll do this for you without expecting anything back from you, in the confident expectation that someone else will do something for me down the road” (p. 21). Like Coleman, generalized reciprocity and social trust are interrelated. Misztal (1996) clarifies this relationship by stating that:

Norms of generalized reciprocity and networks of civic engagement encourage social trust and cooperation because they reduce incentives to defect, reduce uncertainty, and provide models for future cooperation (p. 177).

In sum, these definitions are based on the idea that networks provide the structure of social capital, and trust and norms are the glue that hold the structure together and allow it to act more efficiently—and that allow it to be called social capital.

**Networks and Embedded Resources**

A second variation argues that social capital also consists of networks (which may or may not have subjective qualities such as trust or norms), but adds the component of resource acquisition. Bourdieu initially defined social capital as the resources available to an individual by way of his or her social relationships (1986). He further states that “the volume of social capital possessed by a given agent depends on the size of the network of connections he can effectively mobilize and on the *volume of the capital (economic, cultural, or symbolic)* possessed in his own right by each of those to whom he is connected” (p. 249, italics added). Thus, social capital consists of two elements: social relationships and the resources available because of those connections. Lin further developed this variation, and argues that social capital should be separated from trust or norms and is better understood as “resources embedded in a social structure which are accessed and/or mobilized in purposive
action” (1999b, p. 28). He further posits three elements of social capital, all resource based:
1. resources embedded in a social structure; 2. accessibility to such resources by individuals; and 3. use or mobilization of such social resources by individuals in purposive actions (p. 35). Similarly, Burt (1997) argues that social capital is the “opportunity” (in contrast with human capital which indicates “ability”) to access various resources (e.g. information, control, etc.) by virtue of a particular location in a network structure (see also Burt, 1992). Social capital is available to those who bridge “structural holes” in networks and serve as a broker of information and other resources between otherwise unconnected parties.

**Forms of Social Capital**

Within the social capital literature, there is somewhat of a split between those who follow each variation. Those who follow the first variation argue that norms and trust are key components of social capital because both are needed to induce efforts toward a common good. Proponents of the second variation argue that without access to resources, the action that trust and norms may (or may not) induce is useless. Recent discussions have shifted to consider the coexistence of both variations and the differential outcomes resulting from the presence of each. Following Granovetter’s (1973) notion of strong and weak ties, distinction has been made between bridging and bonding forms of social capital (Gittell and Vidal, 1998; Putnam, 2000). **Bonding** (within-group) social capital is “inward looking and tends to reinforce exclusive identities and homogeneous groups” (Putnam, 2000, p. 22). It is found

---

4 There also exist a few (Portes, 1998 and Woolcock, 1998) who argue that networks alone comprise social capital—or at least they contend that defining social capital as norms and trust, or as resources represents a tautological argument as norms, trust, and resource acquisition are outcomes of social capital and do not constitute social capital. I disagree, and believe that with careful measurement of each dimension all can be considered components of social capital. Whether or not “trust” or “resources” are an important component of social capital rests largely with the theoretical expectations toward the outcome of interest.
among densely connected groups with strong, affective ties connecting group members to each other, and is important in providing social support and increasing in-group solidarity. For example, “dense networks in ethnic enclaves...provide crucial social and psychological support...[and] furnish start-up financing, markets, and reliable labor for local entrepreneurs (p. 22). The close-knit, dense relationships that comprise bonding social capital are likely to be loose examples of Coleman’s (1988) closed networks that encourage trust and norm development. Bridging (between-group) social capital, in contrast, connects people or groups who are different from each other in some way and addresses how social capital allows for resource acquisition. Unlike bonding social capital where networks are comprised of similar people with presumably similar resources, bridging social capital is key in acquiring a wider variety of resources, and enhancing information diffusion within and between groups (Putnam, 2000).

Although rarely given credit for it, Woolcock also recognized the presence of “two distinct, but complementary forms of social capital”—embeddedness and autonomy (1998, p. 162). Embedded ties are those among members of a group and are characterized by a “high degree of density and closure” (p. 163). Autonomous social ties are those between groups or ties that “provide access to a range of non-community members (p. 164). Woolcock contends that “to overcome the numerous collective action problems entailed in coordinating ‘developmental’ outcomes, actors—and the groups of which they were members—had to be able to draw on both ‘embedded’ and ‘autonomous’ ties” (p. 164).

A similar distinction is made by Paxton in her comparison of within-group and between-group community-level social capital (1999). For Paxton, social capital within a single group (bonding social capital) may be positive for that group, but does not necessarily
“spill over into...social capital for the community” (p. 96), and can even have negative
effects such as are found in the mafia or ethnic separatist groups. She argues that "positive,
community level social capital would be expected to occur when there are positive, trusting
ties between individuals in different groups (p. 97).

Grooteart and van Bastelear add a hierarchical dimension to social capital and argue
that it can be vertical or horizontal (2001). Horizontal social capital, similar to bonding, is
the connections between entities at similar levels in a hierarchical structure. Vertical social
capital is the linkages to those (individuals or groups) higher up in the hierarchical structure,
and is similar to bridging in that it provides access to resources held by those in powerful
positions. Along similar lines, Saegert et al. add yet another form—linking social capital. In
their research on social capital and poor communities, they define bonding social capital as
intra-community ties, bridging social capital as extra-community ties, and linking social
capital as external ties with financial and public institutions (2000). All three, they contend,
are necessary for poor communities to improve their situations.

These distinctions were generated as a way to recognize some of the costs of social
capital, particularly those of being enmeshed in the dense, closed networks celebrated by
Coleman (1988). Most authors agree that bonding (dense, closed networks) and bridging
(weaker, inclusive networks) lead to different outcomes, and that many of the negative
outcomes of social capital (encouraging too much conformity, downward leveling norms,
exclusionary practices (Portes and Landolt, 1996; Portes, 1998; Woolcock, 1998)) are due to
too much bonding and not enough bridging. Bridging social capital mitigates many of these
"costs" by providing ties external to a given group allowing individuals greater access to
resources and reducing dependency (Woolcock, 1998; Putnam, 2000).
In addition to mitigating the potential downsides of social capital, the recognition of both forms provides some closure on the definitional debate. Social capital can be both networks plus trust and strong norms (bonding) and networks plus accessible resources (bridging), and further, both can exist simultaneously within a single setting. For example, a church group may be very tightly-knit, trusting, and operate in the presence of strong norms, but that does not preclude them from having ties to other churches or community groups. An individual may be strongly enmeshed within that group, yet may also have weaker ties to others outside of the group—both represent forms of social capital. Thus, rather than insisting on an “either/or” stance, the recognition of these different forms allows for the inclusion of both variations in empirical studies, either singularly or simultaneously.

**Social Capital as a Resource**

An inherent component of social capital, as with other forms of capital (e.g. human, financial, environmental), is its ability to lead to some outcome for individuals or groups. As Paxton notes, “when social capital is present, it increases the capacity for action and facilitates the production of some good. When active, it facilitates ends for the members of a group and for the group as a whole” (1999, p. 93). Often, social capital is viewed as a mechanism through which other forms of capital are more efficiently utilized. Cavaye clearly describes how all forms of capital (including social) are interdependent:

Having the physical infrastructure or computers or specialized machinery is of little use without the human capital to operate them. Investing financial capital in a new business will be more efficient if there is the physical capital of existing infrastructure and the human capital of skilled employees. Likewise, social capital increases the efficiency of other forms of capital. A group with high levels of trust is able to be more efficient and can produce more than a group with low social capital (2001, p. 7).
Similarly, Coleman states, "the concept of social capital allows [for] taking [social] resources and showing the way they can be combined with other resources to produce...outcomes" (1988, p. S101).

Many studies have empirically tested this notion and found a variety of outcomes occurring for individuals and groups through the presence and use of social capital. For example, Burt found that strategically placing oneself within a social network in the workplace is important for career advancement (1992). Coleman found that access to social capital is key in keeping students from dropping out of school (1988). Lin argues that immersion in resource-rich networks is key for status attainment (1999a). Temkin and Rohe (1998), in their study of Pittsburgh neighborhoods, found that the presence of social capital results in greater neighborhood stability, and that neighborhoods with more social capital were less likely to decline regardless of other factors. An entire research program builds upon the potential for social capital to serve as a primary resource for reducing poverty and sustaining development efforts in developing nations around the world (see Grootaert and van Bastelaer, 2001, and the World Bank Social Capital Initiative website, http://www.iris.umd.edu/socat/default.htm).

Overall, social capital "constitutes an essential means to increase resources and to make more effective use of them" (Warren, Thompson, and Saegert, 2001, p. 2). Because of this conception of social capital as a positive resource, much early research linking social capital to various outcomes took a "more is better" approach. Concern was with how much social capital was present, and the assumption was that more social capital led to better outcomes. That assumption was quickly challenged by scholars noting various negative effects of close-knit, trusting groups. For example, Portes identifies four negative
consequences of social capital: the exclusion of outsiders, excess claims on group members, restrictions on individual freedoms, and downward leveling norms (1998, p. 15). In his study of ethnic groups who control certain economic markets in various cities, Waldinger (1995, p. 557) concluded that “the same social relations that enhance the ease and efficiency of economic exchanges among community members implicitly restrict outsiders”. Thus, “the same strong ties that help members of a group often enable it to exclude outsiders” (Portes and Landolt, 1996, p. 19). Stack’s study of kinship relations among southern African Americans found that the strong family ties and interdependence among family members made it very difficult for individuals, particularly young women, to leave the area in search of better educational or lifestyle opportunities (1974). The same ties often heralded for ensuring survival in impoverished communities can also constrain individual pursuit of other opportunities. Similarly, Portes notes that social capital can result in “downward leveling norms that operate to keep members of a downtrodden group in place”, particularly when the group’s solidarity is “cemented by a common experience of adversity and opposition to mainstream society” (1998, p. 17). While most of these negative consequences are for individuals, there are many examples of densely connected, trusting groups that produce negative outcomes for society. Street gangs, mafia families, drug rings, and racial supremacy groups are all likely characterized by high levels of social capital, yet their actions often lead to harmful ends.

The distinction between different forms of social capital (e.g. bonding and bridging, vertical or horizontal, etc.) led to consideration of variations in outcomes expected in the presence of these different forms and to the conclusion that the “more is better” approach is overly simplistic. “More” can actually be worse. Many scholars argue that the optimal
effects of social capital are found when both forms are present (Saegart, Thompson, and Warren, 2001; Warren et al., 2001; Stone and Hughes, 2002). As previously discussed, the presence of both forms helps to mitigate some of the potential downsides of social capital. Many of these negative consequences occur when bonding social capital has a much stronger presence than does bridging social capital.

Social Capital and Measurement Issues

As with the definition of social capital, there are no agreed-upon measures of the concept—a wide variety of studies use the concept, measure it in a wide variety of ways, and relate it to a wide variety of outcomes. To illustrate the diversity of measurements, three recent edited books were reviewed. The first, by Schuller, Baron, and Field (2000), provides a series of chapters critically examining social capital. The second, by Lin, Cook, and Burt, contains chapters arguing for the use of a network approach to social capital (2001). And the third, Saegert, Thompson, and Warren (2001), discusses forms of community social capital as they relate to poor communities. These books were chosen because they are recent, and thus the contributing authors have been (presumably) exposed to many of the critiques of social capital and its many measures, and because they cover a wide variety of topics and outcomes surrounding social capital. Table 2.2 contains a summary of social capital measures found in a sample of chapters from each book:

---

5 Chapters chosen were those with clearly defined measures reported. Many chapters did not contain empirical research, or did not discuss measures.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Table 2.2. Variety of Social Capital Measures</strong></td>
<td></td>
</tr>
<tr>
<td><strong>In Schuller, Baron, &amp; Field (2000)</strong></td>
<td></td>
</tr>
<tr>
<td>MacGillivray &amp; Walker</td>
<td>Grass-roots organizing</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Maloney, Smith, &amp; Stoker</td>
<td>Associational Life</td>
</tr>
<tr>
<td>Field, Schuller, &amp; Brown</td>
<td>Education of learning-disabled persons</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In Lin, Cook, and Burt (2001)</strong></td>
<td></td>
</tr>
<tr>
<td>Burt</td>
<td>Job success/promotion</td>
</tr>
<tr>
<td></td>
<td>Job attainment</td>
</tr>
<tr>
<td>Lin, Fu, &amp; Hsung</td>
<td>Job attainment</td>
</tr>
<tr>
<td>Erickson</td>
<td>Job attainment</td>
</tr>
<tr>
<td>Lazega &amp; Pattison</td>
<td>Job success</td>
</tr>
<tr>
<td>Hurlbert, Beggs, &amp; Haines</td>
<td>Social support</td>
</tr>
<tr>
<td></td>
<td>Job attainment</td>
</tr>
<tr>
<td>Bian</td>
<td>Social eating practices in China</td>
</tr>
<tr>
<td><strong>In Saegert, Thompson &amp; Warren (2001)</strong></td>
<td></td>
</tr>
<tr>
<td>Foley, McCarthy, &amp; Chaves</td>
<td>Role of churches in poor communities</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohen</td>
<td>Institutional makeup of poor communities</td>
</tr>
<tr>
<td>Fuchs, Shapiro, &amp; Minnite</td>
<td>Political participation among the poor</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As this table indicates, there are a wide variety of ways that social capital is operationalized, even within similar areas of study (e.g. poor communities). Measures ranged from pride in community to organizational membership to network qualities to the presence of internet access—just within these three books. The range of topics was similarly broad. Measures of social relationships are rarely direct measures and instead rely on various proxy indicators such as membership in groups or use of public spaces. While some utilize direct measures of the number of relationships one has, few explicitly examine the patterning of those relationships.

Stone argues that “this ad hoc mixture of measures, indicators, and outcomes ... [has] no doubt contributed to the confusion which exists between social capital theory and measurement” (2001b, p. 2). She further notes that the popularity of the concept has led to a “measurement rush”, which in turn, has resulted in heavy reliance on secondary data, which was not intended to measure social capital, and attempts to “fit” existing measures into the social capital concept. To overcome this problem, Stone advocates for a “theoretically informed measurement framework” in which social capital is first grounded in a theory to guide both the conceptual and operational definitions utilized.

Why Social Capital Needs Theory

Social capital is a type of resource loosely similar to money, buildings, and other traditional forms of capital. And as with other types of resources, it can be linked to many different outcomes. However, without some sort of theory to ground its use, researchers do not have a clear picture of under what conditions for a given unit of analysis will the structure and quality of social relationships lead to a given outcome, and, equally important,
what to look for to identify its presence. In short, as Paxton argues, there is a “large gap between the concept of social capital and its measurement” (1999, p. 90).

Most agree that networks are the key component of social capital, but there are many different kinds of networks—kinship networks, friendship networks, workplace networks, community networks, etc., all of which can have very different characteristics (e.g. dense vs. sparse, small vs. large, vertical vs. horizontal). Persons can also be involved in many different networks simultaneously. Knowing which networks to examine and the importance of certain qualities possessed by the networks in generating an outcomes requires some theoretical knowledge of the outcome under study. For example, Lin found that social capital is important in leading to status attainment for individuals (1999a,b). He examined the extent to which persons had access to resource-rich networks (resources in terms of power, money, and status), and found that the more persons knew others with higher status, the greater the chances for status attainment. Conversely, being enmeshed in resource-poor networks indicated less social capital and therefore less status attainment. Lin based his discussion in the social resources theory of status attainment, for which valued resources in society are wealth, power, and status (Lin, 1982). Thus, “social capital is analyzed by the amount and variety of such characteristics of others with whom an individual has direct or indirect ties” (1999a, p. 36). For Lin, the important features of networks are the wealth, power, and status of a person’s contacts. Other network characteristics are of less importance to Lin because social resources theory does not address them. Burt conceptualized social capital as a resource obtained by occupying strategic positions within social networks (1997). He argues that a person’s upward mobility in the workplace is in some sense dependent on their ability to bridge “structural holes” (gaps between otherwise disconnected parties)
present in workplace networks. For Burt, social capital is identified solely by the network position one holds. He was less concerned with the wealth or status held by ego’s contacts because those resources were not a part of the “structural holes theory”. For the same reason, Burt did not seek to identify a person’s friendship, family, or community networks—none are viewed as an important form of social capital for obtaining a job promotion.

Both Burt and Lin use the same concept—social capital—but conceptualize and measure it differently because of the theoretical perspective upon which their research is based. In both cases, social capital represents a resource via social relationships, but the particular types of social relationships of interest and measurement of them are based in theory. Portes and Landolt argue that it is the failure to explicitly theorize the use of social capital in research that has led to so much confusion about the meaning of the term (2000). He further states that

"in one sentence, social capital is an asset of intact families; in the next, it is an attribute of networks of traders; and in the following, it becomes the explanation of why entire cities are well governed and economically flourishing. The heuristic value of the concept suffers accordingly, as it risks becoming synonymous with each and all things that are positive or desirable in social life (p. 535).

To maintain the viability of the concept of social capital in research requires basing its use in theory. It may well be an asset to families, traders, and cities, but how it operates in each will likely be very different. Family and kinship networks may be a significant form of social capital for family members or children, and this form may be very important in explaining the “creation of human capital” (Coleman, 1988). However, the same family networks that were an important form of social capital in terms of children’s educational achievements may not matter at all (at least not directly) when it comes to getting a
promotion in the workplace. Knowing how social capital differs and where to find it for each requires some kind of theory stating why, how, and which social relations are expected to be important.

In addition to issues of defining and identifying social capital and its effects, the failure to ground the use of social capital in theory has "led to the use of questionable indicators of social capital" (Paxton, 1999, p. 90). Stone echoes this concern when she contends that "...the lack of theoretical precision used in the selection of indicators has led to considerable confusion about what social capital is...and what the relationship between social capital and its outcomes may be (2001b, p. 5). As discussed, social capital has been operationalized in a multitude of ways. And while it has successfully been argued to "cause" a multitude of outcomes, the failure to base the measurement of social capital on theoretical expectations has led to many of the critiques of "over-versatility"—that "the point is approaching at which social capital comes to be applied to so many events and in so many different contexts as to lose any distinct meaning" (Portes, 1998, p.3). Castle echoes this concern and argues that to overcome the limitation of conceptual ambiguity it must be grounded in, rather than considered as, a theory (2002). He further states:

Social capital characteristics such as trust or reciprocity may tell us something about social structure, but they are not the whole of social structure. Such characteristics may contribute to outcomes or effects...it may well be that certain characteristics are necessary for the existence of social capital, but neither provide a description of social structure nor specify effects (p. 337).

In other words, theory is required to determine whether and how social capital is expected to impact outcomes, and social capital in and of itself is not a theory. By explicitly grounding the use of social capital in theory, its operationalization can be evaluated based on tenets of the theory. As previously discussed, having both parents and fewer siblings in the home
(Coleman, 1988) may seem questionable as indicators of social capital to those studying occupational mobility or community action, but may be a crucial source of social capital as noted in theories on the educational attainment of children.

In sum, the previous sections presented an overview of social capital including definitions, measures, and why it is considered a resource. An argument for a theory-based use of social capital was also presented. Of interest in this research is how (or whether) social capital influences outcomes for communities—specifically citizen participation and community action. The following section discusses the possible existence of "community social capital", and presents two theories, one of citizen participation and the other of community action, in which specific forms of community social capital (bonding and bridging) are hypothesized to have effects.

**Community Social Capital?**

The concept of social capital describes how social relations are a resource to individuals and groups. Communities are no exception, and indeed, a significant body of literature exists seeking to identify features of "community social capital" and its potential outcomes. This discussion has been plagued, however, by broader issues such as whether or not social capital can be considered a community property (Portes, 1998) and if so, how it can be measured.

Portes (1998) is the most vocal critic of social capital as a community- or group-level resource. He bases most of his critique on Putnam's study of Italy (1993), and argues that "as a property of communities and nations, social capital is simultaneously a cause and effect. It leads to positive outcomes, such as economic development and less crime, and its existence is inferred from the same outcomes. Cities that are well governed and moving ahead economically do
so because they have high social capital; poorer cities lack in this civic virtue” (Portes, 1998, p. 19).

He argues that to view social capital as a community property, one must “[separate] the definition of social capital, theoretically and empirically, from its alleged affects” (p. 21). This point is valid; however, it does not apply only to analyses based on community social capital—those examining the social capital present for individuals must also heed this caution. In addition, by basing his critique of community social capital on a single author’s work, he failed to recognize many others who have successfully defined and measured social capital at the community level. The problem comes down to one of theory—why and under what conditions should certain types of social relations lead to certain outcomes—and measurement—how are those types of social relations operationally defined and identified. By identifying (through theory) the types of social relationships that may constitute a community resource and measuring their presence accordingly, community social capital can then be considered in relation to various community outcomes.

Portes admits that “there is nothing intrinsically wrong with defining [social capital] as a structural property of large aggregates” (p. 21). In fact, most agree that social capital is a collective asset, found in the relations between and among individuals and groups, and that while individuals both contribute to and use it, they cannot own it (Warren, Thompson, and Saegert, 2001). And indeed, many scholars have defined and measured social capital accordingly and found significant outcomes for the community based on community social capital. Putnam is generally credited with being the first to focus on social capital as a feature of communities (1993), although Coleman (1988) clearly identifies community social capital as a factor that enhances educational attainment. Where they differ is that Putnam,
unlike Coleman, views community social capital as a community resource rather than a resource to individual members of the community. Paxton defined community social capital as the associations (ties) and trust within and between community groups and found that, in contrast to Putnam, social capital has not been declining (1999). Woolcock’s discussion of economic development clearly identifies community social capital defined as both embedded and autonomous ties as key to sustaining long-term development efforts. Seagart, Thompson and Warren’s book (2001) contains several chapters describing how different forms of community social capital (bonding, bridging, and linking) relate to the ability of people in poor communities to mobilize resources and improve their situations.

In some sense, whether or not social capital is a community property depends on whether or not its components (networks, trust, norms, and/or resources) can be considered community properties and measured as such. Networks are fairly unambiguous, and easily conceived of as a community property. Persons have connections with other residents from a variety of situations (as neighbors, friends, co-workers, co-members of groups, etc.), and one could conceivably identify an entire “community network” illustrating all those different connections (given sufficient time, money, and computer software to handle such a matrix!). Resources are also fairly easy to identify. Trust and norms are not as clear. From an exchange theory perspective (Blau, 1964; Cook, 1991) trust and norms of reciprocity are built through repeated exchanges among individuals. Person A does something for person B, person B reciprocates, and then A trusts that B will reciprocate in the future as well. As this occurs repeatedly over time, norms of reciprocation develop and persons A and B view each other as trustworthy. However, that type of trust and norm of reciprocity is between individuals and is not a feature of groups. Many argue that trust and norms can be features of
larger groups. Generalized or collective trust (Dasgupta, 1988; Kramer, Brewer and Hanna, 1996; Govier, 1997; Uslaner, 1999) and generalized reciprocity (Putnam, 2000) are based not in immediate exchanges between individual, but on the assumption that the community or group is trustworthy. Fukuyama (1995) defines this sort of trust as

"the expectation that arises within a community of regular, honest, and cooperative behavior, based on commonly shared norms, on the part of other members of the community...these communities do not require extensive contractual and legal regulation of their relations because prior moral consensus gives members of the group a basis for mutual trust (p. 26).

Willingness to act, then, is based on an expectation of future reciprocity on the part of the group. Putnam argues that this allows society to operate more efficiently—trust and the likelihood of reciprocation need not be demonstrated for every actor when this expectation is present. And, in societies characterized by generalized reciprocity and trust, cooperation for mutual benefit is simpler and more likely.

Generalized trust and reciprocity are both characteristics of a community (or other group). As such, many scholars contend that social capital can be a property of a community (e.g. Putnam, 1993; 2000; Schuller, Baron, and Field, 2000; Saegart, Thompson, and Warren, 2001; Stone, 2001b). However, while it may be a significant community resource, the questions of “a resource for what purpose?” and its subsequent measurement remain. The answers to those questions are found by grounding the link between social capital and a community outcome (community action, in this case) in a theory. The next section provides a discussion of community action and two theories that will assist in determining whether or not social capital is expected to contribute to community action and how it should be identified.
Community Social Capital and Community Action

The previous section identifies community social capital as a potential resource for communities. The overall goal of this research is to examine the link between community social capital and community action. In this section, community action will be defined and two theoretical perspectives discussed to demonstrate how social capital is expected to impact community action. It will be argued that community action occurs in (at least) two levels or "locations" in the community—first, there is participation of local citizens in community projects and, second, is the coordinating actions of those holding community resources—each requiring a different form of community social capital.

Community Action Defined

Studying the causes and consequences of human action is the heart of sociology. And, unlike economics or psychology (to a certain extent), the main contention of sociologists, regardless of theoretical orientation, is that individual traits do not in and of themselves explain action. Human choices are inherently social, that is, social life, to some degree, impacts the choices individuals make. Those choices will differ depending on various social situations one is a part of. A variety of theoretical perspectives placing action on a continuum giving primacy to the individual or to social features have been developed, with some positing that the true answer lies somewhere in the middle. This is also the case when examining the behavior of collectivities.

Community action, as used here, is a form of place-based collective action, defined as the pursuit of a public good (a public good is non-exclusionary in terms of beneficiaries). Collective action and community action are both terms describing a variety of actions carried out by individuals or groups. Both terms can have very different meanings depending on
how they are used. For example, for those following a rational choice tradition, collective action is often referred to in the sense of Olson’s “problem of collective action” (1965) which examines why rational, self-interested individuals would choose to contribute to action from which they will benefit regardless of their contribution. In this sense, inaction is assumed to be normal as contribution toward a public good is considered to be “irrational”. Since Olson’s early work, the idea of collective action has shifted from a focus on individual choices to viewing collective action as multiple persons acting together and “the social and organizational processes that make [collective] action possible” (Oliver, 1994, p. 276). Formal mathematical and theoretical models have been developed showing the likelihood of contributions toward public good efforts under a variety of circumstances such as perceived costs and benefits, the existence of selective incentives to induce participation, presence of group ties, and composition of social group members (Oliver, 1993).

Collective action also refers to social movements, riots, protests, voting behavior, or even fads and crazes with research typically examining factors that allow for the successful mobilization of movement participants or causal factors relating to success or failure of the action (see Duran, 2001; Kim, 2002; Williams, 2002). For example, Hunt and Goel discuss how articulate leaders, available resources, and the capacity to protect group members are key factors in determining the effectiveness of political violence (1980).

Community action also has different meanings. For some, community action refers to the mobilization of underrepresented populations in efforts to accomplish some goal or to gain power (see Hanna and Robinson, 1994; Clayson, 2002). Much of this action occurs in a community setting, involves community residents, and often is in response to community conditions or issues, yet typically involves only certain (usually underrepresented) segments
of the population. Medoff and Sklar (1994) take this view of community action in their study of the Dudley Street Neighborhood Initiative in Boston where a group of residents organized and successfully forced the city to discontinue its illegal dumping practices in the neighborhood.

For others, community action is a broader term that refers simply to the acts of local residents to accomplish some common goal (see Luloff, 1999; Zekari, 1999; Sharp, 2001). For example, Luloff presents a model of community action that follows five stages (1990, p. 227). First, a problem is identified by some individual or group, and interest is expressed in solving it. Second is the formation of an “initiation set” where individuals involved in the action define goals and map out strategies to achieve these goals. Third, the action group seeks cooperation of those with positional or reputational power to legitimize the project to the wider community and thus, fourth, mobilize human and financial resources. Finally, the strategy is implemented. Luloff notes that an important but unintended consequence of this model is a residual network of relationships that can be mobilized for future action. Wilkinson defines community action in a similar fashion, and discusses the interactional processes required to carry it out (1970; 1991).

In this research, community action is viewed as a form of place-based collective action where local residents act in pursuit of a public good that takes place in and will be of primary benefit to the local community. A public good is non-exclusionary, that is regardless of the actors involved, the community as a whole and all of its members are beneficiaries (e.g. building a playground at a city park, city clean-up projects, community centers, festivals, and so on). It is important to note that not all collective action is community action. For example, participation in an anti-war protest may be collective action, but is not
community action because is not of primary benefit to the local community. According to Tilly, “if a group applied pooled resources to common ends, it is carrying out collective action” (1973, p. 214). Whether or not collective action is community action depends on the composition of the group and the common ends to which pooled resources are applied. Thus, if a group of community residents acts collectively, that is applies pooled resources to pursue a goal that is of primary benefit to the place in which they live, they are carrying out community action.

Community Action at Different Levels: Two Theories

Community action as defined above can occur at different levels in a community. For example, there are the voluntary actions of local residents in neighborhood or community improvement projects. There are also the actions of citizens having access to non-social community resources, such as financial capital or decision-making authority. This typically involves a small number of persons who have access to institutional resources that are needed for community action to occur. Each type of action involves the pooling of resources to pursue a public good, yet the resources available to participants and the form of social capital that contributes to each may differ. In this research, the terms “citizen participation” and “community action” are used to describe different, but closely related entities. Citizen participation involves the voluntary acts of local residents—that is, the pooling of human resources. Community action does not exclude citizen participation, but adds the pooling of institutional resources as an important component.
Voluntary Citizen Participation: Social Resources Theory and Bonding Social Capital

Many theories of volunteer work have been proposed, and nearly all posit at least some effect of social networks on increasing the likelihood of participation in volunteer efforts. Volunteer work, defined as "unpaid work provided to parties to whom the worker owes no contractual, familial, or friendship obligations (Tilly and Tilly, 1994, p. 291), can be formal or informal. Formal volunteering consists of activities typically carried out in the context of organizations or as efforts toward some clearly defined collective or public good. Informal volunteering is more private, is not organized, and involves "helping friends, neighbors, and kin living outside the household." (Wilson and Musick, 1997, p. 700). While some theories address both formal and informal volunteering, this research focuses on voluntary efforts toward completion of community projects; thus discussion will be limited to social resources theory as it relates of formal volunteering. Of interest to this research is the theorized effect of social capital on formal volunteering toward the production of a public good in a place-based community.

Social resources theory posits that social connections provide the basis for volunteering. It was developed out of a dissatisfaction with other models focusing solely on individual attributes as causal factors, such as human capital variables (see Smith, 1994), or on other individual-level resources such as time or money (see Brady, Verba, and Schlozman, 1995). According to social resources theory, social relationships are a key resource in inducing voluntary participation. Wilson notes that this is especially the case "when collective goods, such as safer streets, are the goal" (2000, p. 7). Voluntary activity, like other forms of collective action, is expected to occur more easily in the presence of
social networks. Smith argues that social relations—those that are embedded in personal networks—provide the resources, such as information, trust, pooled labor, etc., that make volunteering more likely (1994). Social ties, Wilson and Musick argue, "supply information, foster trust, make contacts, provide support, set guidelines, and create obligations. They make volunteer work more likely by fostering norms of generalized reciprocity, encouraging people to trust each other, and amplifying reputations" (1997, p. 695). Thus, the more persons are enmeshed in social networks, and the more the networks exhibit certain qualities (like trust and norms of reciprocity), the more likely they are to volunteer.

While the mechanisms that link social resources to volunteering are only now being examined (Wilson, 2000), much previous research can be drawn upon. Ryan, Agnitsch, Zhao, and Mullick (2003) argue that individuals are embedded in two types of networks, both of which impact volunteering. The first consists of personal, dyadic relations through which persons obtain information about the need for volunteers (see also Walsh, 1998) and allows for easier recruiting of persons into volunteer efforts. These social networks also serve to "make individuals’ decisions about participating in collective action interdependent" (Gould, 1993, p. 182). The second is the embeddedness of individuals in larger networks such as organizations or community. These networks go beyond personal, egocentric networks that involve only direct ties to include the whole of direct and indirect ties connecting members of a collectivity. Ryan et al. contend that features of those larger networks, such as solidarity, have a significant impact on volunteering (2003). Solidarity emerges in the presence of dense networks where individuals interact and develop a shared identity with the group. Solidarity, or shared identity, promotes volunteering on behalf of a collectivity.
Another key feature of social networks is the trust and norms arising from shared interactions within. Network density is also important to norm formation in that the emergence of norms “depends on a dense and relatively closed social structure that has continuity over time” (Coleman, 1994: 9). Coleman suggests that “an especially important form of social capital is the norm that one should forgo self-interest and act in the interests of the collectivity” (1988: s104). Supporting this notion, Marwell and his colleagues argue that norms supporting collective action are the result of trust emerging from repetitive social interactions which will create a “habit of cooperation” (Marwell, Oliver, and Prahl, 1988). These norms of collective action and the resulting “habit of cooperation” become embedded in the local social structure and become a social resource affecting citizen’s choices to volunteer in community (public good) projects.

Social resources theory posits that social ties are a particular form of resource that leads to voluntary participation, particularly toward collective or public goods. Social ties that are dyadic (individual to individual) or part of a larger network, and have certain subjective qualities (trusting or normative) are expected to predict voluntary participation. If those networks are place-based, it is reasonable to conclude that participation in community projects is more likely. Thus, social relations characterized by certain qualities among the general citizenry can be a resource for communities—and community social capital should be linked to citizen participation in local efforts.

The previous discussion provides the basis for the role of the bonding form of social capital in predicting citizen participation. As discussed, bonding social capital is the affective-based connections among similar, like-minded individuals. For this research, bonding social capital is defined as the social ties characterized by norms of reciprocity and
trust among the general citizenry in the community. Thus, where residents are more connected to each other, and the overall community is trusting and exhibits norms of working together, the community is deemed to have high bonding community social capital. This, in turn, should lead to higher levels of citizen participation.

Widespread citizen participation, however, does not alone result in successful community action. As previously discussed, community action occurs at multiple levels in a community, and while bonding community social capital can explain citizen participation, it says nothing about the mobilization of institutional resources (other than the “human resources” of citizen participants). As Sharp notes, “the capacity to manage and direct the flow of resources and action is likely to depend on one or several network elements possessing the authority or power to influence local action processes” (2001, p. 406, italics added). The second level location involves the bridging form of community social capital, defined here as the social relations that allow for the acquisition and pooling of diverse institutional resources, such as money and decision making authority. The following discussion of regime theory demonstrates that a specific form or location of bridging community social capital is key in community action efforts.

**Mobilization of Resources: Regime Theory and Bridging Social Capital**

Regime theory provides a framework for examining bridging social capital, or connections among diverse groups. It is a network-based theory of community action concerned with how local actors marshal resources to respond to community needs. It recognizes that communities are different from many other groups in terms of formality,

---

6 It is important to note that the term “diverse” as used here implies only “different”. It is not being utilized in the conventional sense referring to racial, ethnic, or gender diversity.
structure, and constituency served, and gives primacy to the role that social relations play in shaping community action—both because of and in spite of those unique features.

Regime theory considers the dispersion of resources throughout a community and argues that community action occurs when individuals informally join forces to bring together separately held resources for use in achieving chosen goals. The reason for the dispersion is the division of labor between the market and the state—both hold necessary, but different resources (Elkin, 1987; Stone, 1989; Mossberger and Stoker, 2001). The state (or government) holds decision-making authority and the market (or business sector) holds financial capital. Informal coalitions, or regimes, are important mechanisms for coordinating needed resources across these institutional boundaries.7

Stone defines a regime as “an informal, yet relatively stable group with access to institutional resources that enable it to have a sustained role in making government decisions” (1989, p. 4, italics in original). It is a voluntarily formed coalition, most often between government officials and those in the business sector, which connects publicly controlled government resources with privately controlled economic resources. Interdependence between sectors is the basis for regime formation—neither sector can accomplish its goals without the assistance of the other. Businesses are dependent on governmental decisions which often determine things such as where they can locate (through zoning laws) and whether or not city services (streets, water, etc.) will be available. City government depends on the business sector to provide financial support to the city through taxes, and jobs and amenities (shopping, services, etc.) for local citizens, all of which are key

7 The government and business sectors are not the only sectors that can be represented by the regime. Many types of regimes have been identified that also include non-government or business groups (see Imboscio, 1998). However, the government and business sectors are the most common.
in maintaining a local population. The relationships that result from this interdependence become stable and enduring over time and are a resource for community action.

Although regimes often include traditional power holders, the power sought by regimes is the “power to” accomplish goals rather than “power over” others (Mossberger and Stoker, 2001; Stone, 2001a). It is this focus on social production rather than social control that moves regime theory from a theory of power to a theory of action. Its participants view the regime as a “means for achieving coordinated efforts that might not be otherwise realized” (Stone, 1989, p. 4) rather than a mechanism for control or oppression. Stone further elaborates:

“‘Coalition’ is the word I use to emphasize that a regime involves bringing together various elements of the community and the different institutional capacities they control. ‘Governing’ as used in ‘governing coalition’, I must stress, does not mean rule in command-and-control fashion. Governance through informal arrangements is about how some forms of coordination of effort prevail over others. It is about mobilizing efforts to cope and adapt; it is not about absolute control. Informal arrangements are a way of bolstering (and guiding) the formal capacity to act. …” (p. 5-6).

In other words, regimes are not formed solely by powerful elites with visions of exploiting a community and its residents for profit maximization; rather regimes represent a community’s method of bridging the needed resources held separately by both the market (capital) and the state (policy making authority) (Mossberger and Stoker, 2001) in order to effectively accomplish goals.

Collaboration between sectors is achieved largely through informal social networks. Regimes are not built in to the formal governing structure, but are formed voluntarily out of a need to bring together resources that each participant holds independently. Stone takes a rational approach in his argument that the regime is held together by the use of selective
incentives, which are "a system of rewards and punishments administered" to induce individuals to "support group aims" (1987, p. 186). He further elaborates, "those who go along with the group by paying dues, respecting picket lines, and so on, receive individual rewards and services; those who do not lose valuable benefits or incur sanctions. Voluntary efforts are thus complemented by inducements or coercion, individually applied" (p. 186). Stone is careful to note, however, that "selective incentives are not the whole story of collective action" (p. 186) and recognizes that not everyone who chooses to participate is so "narrowly opportunistic" (1989). Others have critiqued Stone’s rationalist assumptions as well, and argue that less rational motives (e.g. commitment to the community) more often provide the glue to keep regimes together (see Painter, 1997).

Interestingly, while regime theory has steadily gained popularity in studies of urban power structures over the last decade, and is considered an improvement over other theories of community power (e.g. pluralism, elitism, growth machine), few studies have empirically linked the presence and qualities of a regime to community action. In addition, no well-defined methods exist for identifying regime participants nor have scholars sought to investigate effects of the structural attributes of regimes or their connections with others in the community. In this research, a method of regime identification is developed and network analysis is utilized to examine the structural attributes of regimes.

Regime theory specifies a particular form of bridging community social capital that is of key importance in the mobilization of community resources. Identifying this form of social capital requires examining the connections between individuals with access to

---

8 See Mossberger and Stoker, 2001 and DiGaetano and Lawless, 1999 for greater detail.
institutional resources. The regime represents a form of community social capital that enhances capacity for action in two ways. First, the regime possesses access to and the ability to mobilize significant institutional resources that are often needed for successful community action. Second, the regime can serve as a mechanism for coordinating and directing the actions in various social fields toward community-wide interests (see Sharp, 2001 for a similar argument).

Both forms of social capital have been deemed important in terms of citizen participation and community action. Woolcock argued that the presence of both embedded (bonding) and autonomous (bridging) ties were key in successful community development. He stated that embedded social ties are “a necessary but insufficient condition for long-term development; autonomous social relations complementing the benefits and where necessary offsetting the costs of embeddedness are also required” (1998, p. 164). Similarly, Temkin and Rohe found that where both forms of social capital are present, residents are more committed to the community and have greater ability to act collectively in its behalf (1998). The commitment is a function of bonding, and the ability to act is largely a function of bridging. Cohen found that the absence of “intervening institutions” which provide linkages to resources renders the high bonding social capital often present in poor communities less useful (2001). Although he did not use the term “social capital”, Wilkinson parallels thoughts about the primacy of bonding over bridging social capital in rural communities and posits that both are important resources for rural viability (1991). He argues that rural communities are generally high in bonding forms of social capital (strong or horizontal ties), and the lack of bridging social capital (weak or vertical ties) can make it difficult for communities to act effectively when the problem they are facing requires access to diverse
resources inside and outside the community. He further notes that "this is a deficit and not a strength of rural life. Adaptive capacity is impaired by a lack of diversity in community structure, and local well-being is depressed as a consequence. In addition, the prominence of bonding over bridging has been identified as contributing to the formation of fragmented, exclusive groups. In communities characterized by this structural exclusiveness, action toward public goods is less likely for two reasons. First, action is likely to occur only within the fragmented groups, and thus will be of primary benefit only to that group (e.g. the growth machine). Second, actors will have fewer resources to pool as they will be limited to those found within the group. Where linkages between different groups exist (bridging social capital), these consequences are lessened. Overall, where both forms exist, a "synergy" is expected and the capacity for community action is enhanced.

Hypotheses

The goal of this study is to demonstrate how different forms of community social capital are important in determining a community's capacity to act. This chapter provided an overview of social capital, including a wide range of definitions, measures, and expected outcomes as identified in the literature. This wide range has led to much confusion among scholars, and even to suggestions that social capital is not a viable concept (see Portes, 1998; Portes and Landolt, 2000; Lin, Cook, and Burt, 2001). An argument was presented suggesting that explicitly basing one's chosen definition, measures, and expected outcomes in theory would help to overcome this confusion and maintain viability of the concept. Further, a discussion of community social capital, a somewhat "controversial" concept (see Portes, 1998), demonstrated that social capital can be a community property. Two theories were presented (social resources theory and regime theory) to identify possible forms or
"locations" of community social capital (bridging and bonding) and posit outcomes for citizen participation and community action.

As was briefly discussed in Chapter 1, the theorized relationships will be tested by comparing levels of social capital and community action efforts in two communities. The two sets of hypotheses below posit relationships between two independent (bonding and bridging social capital) and two dependent variables (citizen participation and community action). Bonding community social capital, measured on an interval scale, served as the variable upon which the two communities were selected—for discussion purposes, community A has a high level of bonding social capital and community B, a low level. Bridging social capital, measured by a dichotomous variable indicating the presence or absence of a community regime, is included in a second set of “contingency” hypotheses which may or may not be tested empirically depending on whether differences in the two communities are evident (i.e. one with and one without a regime). The dependent variables are operationalized as the number of voluntary participants in community projects (citizen participation) and the number of projects identified (community action). A detailed discussion of these measures will be included in the next chapter.

Based on social resources theory, bonding community social capital is expected to facilitate citizen participation in community projects. Social networks provide a structural mechanism for generating volunteers and the trusting and normative nature of networks should result in the commitment or willingness on the part of individuals to collectively act on behalf of community-wide interests. Since widespread citizen participation is not a necessary condition for community action, bonding community social capital is not expected
to impact community action. Thus, the following hypotheses will be tested in relation to bonding community social capital:

_Hypothesis 1a:_ The higher level of bonding community social capital in community A when compared to community B will result in a higher level of citizen participation.

_Hypotheses 1b:_ The level of bonding social capital in the two communities will have no effect on the amount of community action.

Based on regime theory, bridging community social capital provides a mechanism through which communities are able to mobilize institutional resources and therefore should provide a greater capacity to act. While the presence of a regime may be accompanied by a high number of citizen participants, there is no theoretical support for effects of their combined presence. Therefore no relationship is hypothesized between bridging community social capital and citizen participation. Depending on the presence of regimes in the two communities, the following hypotheses will be tested:

_Hypothesis 2a:_ Where bridging community social capital is present, the amount of community action will be greater than when bridging community social capital is absent.

_Hypothesis 2b:_ The presence or absence of bridging social capital in the two study communities will have no effect on the level of citizen participation.

A third set of expectations considers the possible combined effects of bonding and bridging community social capital. Rather than stated as hypotheses, their expected effects are reported in Figure 2.1. Based on the selection criteria adopted, one community falls in
Figure 2.1. Expected Combined Relationships of Bonding and Bridging Community Social Capital with Citizen Participation and Community Action

<table>
<thead>
<tr>
<th>Bonding Community Social Capital</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridging Community Social Capital</td>
<td>Present</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Absent</td>
<td>B</td>
</tr>
</tbody>
</table>

CP = Citizen Participation; CA = Community Action

the left column (high bonding) and the other in the right column (left bonding). However, it is possible that one, both, or neither community will have a regime present.

Several possibilities are considered. Higher levels of citizen participation and community action are expected where bonding community social capital is high and bridging community social capital is present (Quadrant A). This is consistent with Temkin and Rohe’s argument that where bonding and bridging provides both the commitment and resources needed for collective action (1998). Where bonding is high and bridging is absent, citizen participation is expected to be high although community action will be minimal (Quadrant B). The commitment among citizens is present, but they lack access to institutional resources needed to effectively act. Where bonding is low and bridging is present, community action is more likely while citizen participation will be limited (Quadrant C). The community action, however, is expected to take place through fragmented groups resulting in the orientation of projects toward limited sectors (e.g. the growth machine). Finally, where bonding community social capital is low and bridging is absent, the likelihood of citizen participation and community action is greatly diminished (Quadrant D).

This chapter provided an overview of the literature on social capital, and presented two theories to guide the formulation of hypotheses. The next chapter contains a discussion
of the methodology utilized in data collection and the measures of bridging and bonding community social capital, citizen participation, and community action. Results of the hypotheses tests will be discussed in Chapter 4. A related but separate component of the analysis will occur in Chapter 5 where the nature of the structure and quality of regime networks (as bridging community social capital) will be explored using network analysis. This is done to introduce a more robust measurement and analysis procedure than has been used in previous research on social capital. Formal hypotheses are not stated to allow for a more exploratory, inductive foray into the link between network structure and community action.

9 Networks of bonding social capital are not examined partly because sufficient network data for doing so is not available.
CHAPTER 3
RESEARCH DESIGN

To examine the proposed relationships between bridging and bonding forms of community social capital, citizen participation, and community action, local community action efforts were examined in two communities. For comparison purposes, the case study sites were selected based on variation in bonding community social capital. The analysis components of this dissertation are split into two parts: testing of hypotheses and analysis of network data. Two types of data are analyzed, including survey data from local residents and participants in community projects and network data of project participants. This chapter details the selection procedures for the case study sites, community projects, and respondents, and provides a profile of the selected communities. It also provides a discussion of the measures of key concepts. The network data will be discussed in detail in Chapter 5.

Selection of 99 Community Sites

This study is part of a large research initiative designed to examine the effects of local social structure on collective action. The project was initiated in 1994 with a statewide mail survey of Iowa's rural communities funded by the Rural Development Initiative. For this study, 99 rural communities with populations between 500 to 10,000 were randomly selected from each of Iowa's counties. A stratified random sampling procedure was utilized to ensure that the sampled communities reflected the population distribution of rural communities throughout the state.

---

10 See Appendix A for a copy of the questionnaire.
Questionnaires were sent to a random sample of 150 households in each community. Within each household, the head or co-head was asked to complete and return the questionnaire. For half of the questionnaires, a male head or co-head was selected; in the other half, a female. Instructions also indicated that if no head or co-head of the sex requested was present, then the existing head of household was to complete the questionnaire. A modified Dillman method (1978) was utilized where a postcard reminder was sent to households two weeks after the initial survey and letter, followed by a replacement questionnaire two weeks after the postcard for those who had not responded. Of the 14,850 questionnaires sent, 10,798 were completed and returned for a response rate of 73%.

Selection of Case Study Sites

Two of the 99 communities were selected for further study based on their levels of bonding community social capital (measures will be discussed later in this chapter). From these measures, communities were ranked and split into quartiles. Communities in the top and bottom quartiles were considered to have high or low levels of bonding community social capital respectively. After identifying levels of bonding community social capital, demographic and ecological factors (e.g. population, percent elderly, income, residential stability, etc.) were considered when making the final selection of case study sites (each of these variables will be discussed in greater detail in upcoming sections). With a ranking of 23rd, Meadville was selected from the top quartile to represent high bonding community
social capital communities and Hillside, ranked at 98th, was selected from the bottom quartile to represent low bonding community social capital communities.\textsuperscript{11}

Profiles of Study Sites

Meadville

Meadville is a community of about 1800 residents located in south central Iowa. It was founded in 1855 to serve as a county seat when two landowners gave land for Meadville to the county.\textsuperscript{12} Unlike Hillside, growth was slow for Meadville. It was not located on or near waterways, nor was it initially located near rail transportation to encourage in-migration patterns. Until 1859 when a stage coach route came through the county, Meadville had no access to public transportation. It was not until 1879 that a railroad was built giving Meadville businesses and residents access to other areas of the state and country.

Although founded in 1855, Meadville did not formally incorporate until 1875. Town historians note that the main reason for incorporation was to put in place a legal structure of a community that could regulate liquor sales. Regulation of liquor also played a major role in the first mayoral election (the "anti-license" side won) and in the first ordinances (the second published ordinance in Meadville prohibited the sale of liquor in the city limits). Schools, a local newspaper, and several businesses were in place before the town incorporated. The main focus of the business sector in Meadville was to provide support for local farmers. As such, its growth and success was, and remains, dependent on changes in agriculture.

Today, Meadville is trying to recover from the aftermath of the 1980's farm crisis and survive the current one. As farmers struggle, so does the local economy. It is without the

\textsuperscript{11} Meadville is “community A” and Hillside is “community B” as identified in the hypotheses in Chapter 2.

\textsuperscript{12} The historical information about Meadville comes from \textit{A Centennial History of Meadville, Iowa} by Jack Terry, published in 1975.
advantage of proximity to a metropolitan area or major transportation routes (the railroad is
gone and there are no major highways going through the town) to stimulate growth. As
farmers (and others) leave the area, the tax base decreases making it more of a struggle for
the city to provide necessary services.

Hillside

Hillside is a community of about 2,800 residents located in west central Iowa. It was
platted and named in 1867 at the junction of the Chicago & Northwestern and Union Pacific
& Sioux City railroads. The population at that time was around 600 and there were eleven
businesses and six schoolhouses. By 1871, Hillside had become an important commercial
center and the town subsequently incorporated.

One cannot adequately study Hillside without noting the importance of the railroads.
At one time, there were three railroads that converged in Hillside. In 1868, the first railroad
shops were constructed and employed fifteen persons. During the next 15 years, the presence
of the railroad in Hillside exploded and its shops, including a round-house, machine shops,
and repair shops, employed nearly 500 persons. The railroad also attracted people to the
community and helped local farmers and merchants take advantage of market prices.
Stockyards were built in the community serving local farmers and as a feeding point for
livestock coming in from the west on its way to Chicago. A railroad bridge was built across
the Missouri River that further opened lines of travel between Hillside and areas to the west.
Population increased rather rapidly, businesses developed and flourished, a newspaper was

\[13\] The historical data for Hillside comes from a small book called The Hillside Area Centennial written to
commemorate the community's centennial in 1971.
founded, recreational opportunities were created, and major public utilities and public infrastructure were built during this time.

Along with such growth, Hillside has suffered some major setbacks. During the national railroad strikes in 1921, the railroad shops closed leaving over 450 persons looking for other employment. The town lost population and businesses suffered. Hillside has found itself recovering from other disasters many times during this century, including a major fire which destroyed much of the downtown area, a series of major floods, which caused major destruction to the business district, and most recently a tornado which struck near the city limits.

Currently, Hillside is facing some of the same issues that exist in much of rural Iowa. Changes in farming and the resulting decline in rural population are affecting the town. However, its location provides it with some advantages not found in other rural Iowa communities. Located about 30 minutes from a fairly major metropolitan area, there is the opportunity for growth as people from the city increasingly migrate to the smaller towns. It sits at the base of the Loess Hills, one of the more scenic areas of Iowa, although neither the community nor the region has taken advantage of this resource in terms of tourism. In fact, recent development efforts (including efforts in Hillside) have threatened the existence of the hills and raised concerns over preservation throughout western Iowa. Hillside also sits on an interstate highway and a major U.S. highway. As such, it can support amenities such as chain hotels and restaurants that many small often communities cannot.

The railroad remains a significant force in Hillside. It employs around 50 families locally and its temporary workers use many of the local services such as hotels and restaurants. The railroad recently added a second track through the town bringing in more
rail traffic from an industrial plant in a neighboring city. Annexing more land to allow for community growth is a major issue for Hillside. In fact, growth in general seems to be very important to the community.

Comparative Features and Trends

Table 3.1 shows an overview of demographic and ecological characteristics of Hillside and Meadville. These variables were selected due to their expected impact on local social structure and community action efforts based on previous findings. For example, population size has been found to impact acquaintanceship patterns (Freudenburg, 1985), which in turn affects the likelihood of participation in community improvement projects (Ryan, et al., 2003). Miller and Shanks (1996) found that older persons are more involved in local political activities than are younger persons. Socioeconomic status has also been found to positively impact individual’s choices to volunteer in community improvement projects (Oliver, 1985). Sampson’s studies indicated that residential stability positively affects local friendship patterns, community attachment, and rates of local social participation (1988).

Table 3.1 Demographic measures of low and high social capital communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Pop.</th>
<th>Pop. 20 miles</th>
<th>% some college</th>
<th>% over age 65</th>
<th>Med. income</th>
<th>Resident Stability</th>
<th>Work in county</th>
<th>Work in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillside</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>2888</td>
<td>151,328</td>
<td>34%</td>
<td>20%</td>
<td>31,512</td>
<td>82%</td>
<td>50%</td>
<td>36%</td>
</tr>
<tr>
<td>2000</td>
<td>2995</td>
<td>N/A</td>
<td>41%</td>
<td>19%</td>
<td>47,250</td>
<td>74%</td>
<td>47%</td>
<td>36%</td>
</tr>
<tr>
<td>Meadville</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>1796</td>
<td>13,317</td>
<td>35%</td>
<td>31%</td>
<td>26,906</td>
<td>84%</td>
<td>87%</td>
<td>76%</td>
</tr>
<tr>
<td>2000</td>
<td>1802</td>
<td>N/A</td>
<td>43%</td>
<td>31%</td>
<td>37,188</td>
<td>70%</td>
<td>82%</td>
<td>74%</td>
</tr>
</tbody>
</table>


14 Residential stability is measured as the percent of population that has either not moved or has moved within the same city during the past five years.
As viewed in Table 3.1, Hillside is the larger of the two communities with a 1990 population of 2888 persons. Population size increased slightly over from 1990 to 2000 at a rate of about four percent. The community is a bedroom community of the Omaha/Council Bluffs metropolitan area, thus explaining the large population residing within a 20-mile radius of Hillside. Meadville is smaller, with a 1990 population of 1796, and very little change occurring over the past decade. It is an isolated community with 13,317 persons in its 20-mile radius. In fact, Meadville is nearly 90 miles away from the nearest metro area. Just over one-third of residents over age 18 has attained at least some college education in each community, with a slight increase in these figures between 1990 and 2000. The age distribution differs somewhat with one-fifth of Hillside’s adult population over age 65 in Hillside compared with nearly one-third in Meadville. The median family income in Hillside is considerably higher than that of Meadville; this is likely due to Hillside’s proximity to Omaha/Council Bluffs where higher paying jobs are available. Additionally, only half of residents work in the local county, while only about one-third work in Hillside itself. This is considerably different from Meadville, where four-fifths of the residents work in the county and nearly three-fourths work in the city. However, residential stability is high for both communities, although it has decreased somewhat over the past decade.

Meadville serves as the county seat of McCormick County; Hillside does not, but it is the largest community in Summit County. Both Meadville and Hillside are governed by a mayor and council form of government. Hillside has a paid city administrator, whereas Meadville does not. Both have active Chambers of Commerce, however, only Hillside’s has a paid staff person. Hillside has its own development organization; Meadville is part of a county-wide development corporation. Hillside also has recently formed a community
foundation that has successfully raised money for community projects. Meadville has no such organization.

Both communities are home to an elementary and high school that serve the community and the surrounding countryside. Due to recent consolidations, the high school in Meadville is McCormick county's only high school; a few elementary schools remain in the smaller towns in the county. Hillside's school system also serves surrounding communities, however there are other school districts in the county. Both communities are also home to many businesses including grocery stores, a variety of retail shops, drug stores, banks, restaurants, etc., where residents can meet their daily needs. Both also have a local hospital and local physicians.

To summarize, the two communities selected as case study sites were chosen based on their level of bonding community social capital with consideration given to various demographic and ecological factors. They were matched on several of these factors. Hillside was chosen as the community with low bonding social capital; Meadville has high bonding social capital. Both sites are similar in terms of population size, percent of residents with at least some college education, and residential stability. They differ in terms of population within a twenty-mile radius, median family income, percent of elderly population, and percent of population who work in the community or county. None of these patterns has changed significantly between 1990 and 2000. They also differ ecologically. Hillside is located adjacent to an interstate highway, and is about 20 miles to a major metropolitan area. Meadville is nearly 90 miles from a metropolitan area and is approximately 20 miles from the nearest interstate highway. Although these important differences exist, both Meadville
and Hillside are self-sustaining and fairly vibrant communities with many local businesses and services and similar governmental structures.

**Selection of Projects and Respondents**

Data were collected through interviews with community residents who were involved in various community projects. Due to the wide variety of possible community action efforts and potentially unmanageable number of actors, criteria were developed for selection of projects and actors. The methodology is similar to that of Freeman’s (1968) study of leadership structure in Syracuse, New York.

**Selection of Projects**

Potential projects for study were identified during interviews with local persons knowledgeable about the community called key informants. The county extension director was asked to provide a list of potential key informants whom were then contacted for a face-to-face informal interview. Persons were asked to provide a brief overview of community projects that had taken place during the past three years as well as give the name or names of key contact persons for each project (called “point persons”). Point persons are similar to Freeman’s “authorities” in that they are the key person “in charge” of a particular project and are believed to have the greatest knowledge about it (1968). However, Freeman’s criteria of “legal responsibility” for a project was not applied here due to the fact that the selected projects do not necessarily involve any legal entities where someone has to have legal responsibility. In most cases there was only a single point person for each project, however this was not restricted. Some projects, particularly those with opposing sides had more than one main leader or point person.
Informants were asked to consider projects that were locally based and in which participants were mostly local residents. Projects mentioned were reviewed to determine if they fit the criteria of a "public good"\textsuperscript{15}. If so, the project was selected for study.\textsuperscript{16} Projects were not limited in terms of number or type; the only criteria were that they were locally based, provided a public good and were ongoing or occurred during the past three years.

Six projects were selected in Meadville, and Hillside informants identified seven. Initially, eight projects were identified in Meadville and nine in Hillside. Two in Meadville were eliminated from consideration after learning that the main point person for each had a terminal illness and was not available for interview. In Hillside, one project (efforts to preserve the Loess Hills) was dropped after determining that it had more of a regional than local focus. In case of the other (a highway bypass around the city), after several interviews, it was determined the project had not reached a point of significant local participation.

Selection of Project Participants

Respondents for this study were selected using snowball sampling based on their involvement the selected community projects. Snowballing began when each point person was interviewed and asked to provide a list of names of other persons in the community who were also "actively involved" in the project. Active involvement was defined for them as involvement that would be recognized by others in the community. Individuals nominated by the point persons were subsequently interviewed during which they were asked to name

\textsuperscript{15} As discussed in Chapter 2, a public good is one that has community wide benefit and beneficiaries are not included or excluded based on their participation in the project.

\textsuperscript{16} Attempts were made to corroborate the key informant’s assessment of the relative significance of each project before final selections were made. The extent to which a project was mentioned by multiple key informants was one such indicator; newspaper articles about the project were also reviewed. Neither, however, served as a criteria for project selection.
other actively involved citizens.\textsuperscript{17} To continue the snowball procedures, individuals nominated by at least two non-point persons were also interviewed\textsuperscript{18}. Two nominations from non-point persons were required to avoid bias due to accidental nominations, respondent memory errors, and the possible tendency to nominate friends (Freeman, 1968). Thus, to be considered a \textit{potential project participant}, an individual had to be either a point person, be nominated by a point person, or be nominated by at least two non-point persons who were themselves identified as participants. To be recognized as an \textit{actual project participant}, the individual had to self-acknowledge participation in the project in which they were nominated. All respondents discussed in the upcoming analysis are \textit{actual} project participants, although they will be referred to simply as project participants.

An additional criterion was that the point person or participant had to be a local resident. This restriction was partially for logistical reasons and also to limit focus of the study on “local” action. A couple of exceptions were made, however, when the nature of the project required non-residents to become an integral part of the project. For example, school-related projects often included persons throughout the school district. While such projects may be locally-based because the school is located in the community, participants from other localities within the district may be recognized. In such circumstances, non-residents were treated as project participants. In addition, persons in the countryside surrounding the community were included if they considered the local community to be their “home community”. That decision was left to the respondent.

\textsuperscript{17} Here, this methodology deviates slightly from Freeman (1968). Freeman required the nomination by two "authorities" (point persons), while here nomination by a single point person is sufficient. In most cases, only one point person exists for each project, therefore requiring at least two nominations would not work.

\textsuperscript{18} Again, this follows Freeman’s methodology.
Persons could be nominated for or self-acknowledge participation in multiple projects. When interviewed, respondents were shown the complete list of projects and asked to select those in which they were actively involved. If more than three projects were selected, respondents were instructed to choose the three they were most involved in. Nominations of others were provided by respondents only for the three chosen projects. However, a person was considered “active” in all projects where participation was acknowledged and they received a sufficient number of nominations from others. Thus, a person could be recognized as an active project participant (i.e. both nominated and self-acknowledged) yet not provide additional nominations for a project as such nominations were limited to only the three projects selected. This occurred in only a few cases.

Altogether, interviews were conducted with 116 project participants—70 in Meadville and 46 in Hillside. Response rates were 71 percent (70/99) and 70 percent (46/66) for Meadville and Hillside respectively. Semi-structured interviews of about one hour in length were conducted with all point persons and potential project participants.19 In addition to participating in the face-to-face interview, respondents were asked to complete a paper and pencil survey containing demographic information and many of the key questions from the initial resident survey conducted in 1994. This was done to determine whether there were differences between project participants and the general population of the communities.

19 See Appendix B for a copy of the instrument used.
Table 3.2. Summary of Sampling Criteria

<table>
<thead>
<tr>
<th>Unit</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Level of bonding community social capital</td>
</tr>
<tr>
<td></td>
<td>Ecological and demographic features</td>
</tr>
<tr>
<td>Project</td>
<td>Locally based</td>
</tr>
<tr>
<td></td>
<td>Participants are mostly local citizens</td>
</tr>
<tr>
<td></td>
<td>Result is a public good</td>
</tr>
<tr>
<td></td>
<td>Ongoing or occurred in past 3 years</td>
</tr>
<tr>
<td>Point Person</td>
<td>Identified by local key informant</td>
</tr>
<tr>
<td></td>
<td>Self-acknowledged involvement</td>
</tr>
<tr>
<td></td>
<td>Local resident</td>
</tr>
<tr>
<td>Participant</td>
<td>Identified by point person, or</td>
</tr>
<tr>
<td></td>
<td>Identified by at least 2 eligible participants</td>
</tr>
<tr>
<td></td>
<td>Self-acknowledged involvement</td>
</tr>
<tr>
<td></td>
<td>Local resident</td>
</tr>
</tbody>
</table>

Table 3.2 provides a summary of the criteria for inclusion for each sampled unit in this study. Two communities from an initial random sample of 99 were purposively selected based on their level of bonding community social capital as measured in the 1994 survey of community residents—one each from the top and bottom quartiles. In addition, demographic and ecological features considered. Projects occurring during the past three years were selected based on their intention of achieving a public good. Participants were selected based on their involvement in projects. “Point persons”, or those most “in charge” of a particular project, were nominated by local key informants. A second group called project participants were nominated by either point persons or two other eligible project participants. To be considered an actual project participant, and thus be asked to provide nominations, self-acknowledged participation was required as was, in most cases, being a local resident.
Measurement of Key Concepts

This section will discuss measures of the concepts—bridging community social capital, citizen participation, and community action—to be used in testing the hypotheses generated in Chapter 2.

Bonding Community Social Capital

From the initial survey data (1994), measures of three dimensions (density of acquaintanceship, trust, and norms of collective action) of bonding community social capital are constructed (see Table 3.3 for item wording and descriptive statistics for each measure). A factor scale for density of acquaintanceship is created by combining responses to three questions measuring density of local acquaintanceships, similar in nature to Freudenburg’s measures (1986). The trust measure, an indicator of generalized trust in the community (see Kramer, Brewer, and Hanna, 1996) is constructed from responses to evaluations of the community using three seven-point semantic differential questions. Another factor scale measuring norms of collective action is constructed from responses to three questions on threats to the community that involve feelings and actions associated with collective identity. The reliability of the trust scale is relatively high, (alpha = .79); the reliability of the network of acquaintanceship is lower (alpha = .65); and the reliability of the norms of collective action scale was high (alpha = .86). These three scales were summed and community level means were constructed by aggregating individual residents’ scores. As discussed, rankings of those means served as the basis for selection of the case study sites.
Table 3.3. Descriptive Statistics, Scale Items, Reliabilities (N=99)

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acquaintance Scale Items</strong> (Reliability=.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I just feel like talking, I can find someone in</td>
<td>4.03</td>
<td>.84</td>
</tr>
<tr>
<td>Community to talk to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What proportion of the adults living in Community</td>
<td>2.73</td>
<td>.96</td>
</tr>
<tr>
<td>would you say you know by name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>About what proportion of your close personal adult</td>
<td>3.68</td>
<td>1.15</td>
</tr>
<tr>
<td>friends live in Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale Mean &amp; Standard Deviation (Factor Scale)</td>
<td>.00</td>
<td>.35</td>
</tr>
<tr>
<td><strong>Trust Scale Items</strong> (Reliability=.79)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unfriendly/Friendly</td>
<td>5.55</td>
<td>1.30</td>
</tr>
<tr>
<td>Indifferent/Supportive</td>
<td>4.94</td>
<td>1.47</td>
</tr>
<tr>
<td>Not Trusting/Trusting</td>
<td>5.16</td>
<td>1.39</td>
</tr>
<tr>
<td>Scale Mean &amp; Standard Deviation (Factor Scale)</td>
<td>.00</td>
<td>.20</td>
</tr>
<tr>
<td><strong>Norms of Collective Action Items</strong> (Reliability = .86)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indifference about the community</td>
<td>1.98</td>
<td>.76</td>
</tr>
<tr>
<td>Failure of people to work together</td>
<td>2.17</td>
<td>.70</td>
</tr>
<tr>
<td>Loss of community spirit</td>
<td>2.18</td>
<td>.76</td>
</tr>
<tr>
<td>Scale Mean &amp; Standard Deviation (Factor Scale)</td>
<td>.00</td>
<td>.26</td>
</tr>
</tbody>
</table>

Bridging Community Social Capital: Identification of the Regime

Traditional regime analysis suffers from a lack of methodological rigor. While a significant focus in the literature has been on developing regime theory and comparing regimes in different places, procedures for the identification of regimes as subjects of study remains underdeveloped. Nearly all regime studies are case studies, often historical in nature, illustrating differences in regime types across various locations. Yet discussions of how

---

20 Respondents were asked: If I feel like just talking, I can usually find someone to talk to (1=Strongly Disagree; 2=Disagree; 3=Neither Disagree or Agree; 4=Agree; 5=Strongly agree); About what proportion of the adults living in (Community) would you say you know by name? (1=None or very few; 2=Less than half; 3=About half; 4=Most; 5=All); About what proportion of your close personal adult friends live in (Community)? (1=None or very few; 2=Less than half; 3=About half; 4=Most; 5=All).

21 Items in the trust scale are all on a seven point semantic differential scale, where higher values indicate more positive attributes for the community (i.e. 1=not trusting; 7=trusting and so on).

22 Respondents were asked whether or not the following were threats to the community: Indifference about the community; Failure of people to work together; and Loss of community spirit. Response categories were 1=Severely Threatens, 2=Somewhat Threatens, and 3=Doesn’t Threaten. Higher scores indicate more norms of collective action.
regimes are identified are rarely included. A single exception is found in Stone’s (1989) work in Atlanta which was a historical case study combined with event analysis. He relied on documents and other public records (newspapers, city meeting minutes, etc.) to identify regime members and analyze various events, secondary data to provide local context, and interviews with “participants in the civic and political life of Atlanta” (p. 259) to obtain in-depth information about local events.

Although regime theorists claim to have moved beyond traditional ways of thinking about community power, their methods seem to follow traditional positional or reputational approaches for identifying regime participants. They also rely heavily on documents (newspaper articles, meeting minutes, etc.) to re-trace the “stories” behind the actions of regimes. In many ways, their approach falls subject to the same criticisms given to positional and reputational methods of identifying local power structures (see Flora et al., 1992). In addition, these methods are less likely to identify non-traditional regime members (i.e. those other than government officials or business representatives) because document analysis is likely to reveal only persons in public or visible roles in the community.

In this research, an attempt is made to specify and illustrate a method for identifying regime members. The method overall mimics Stone’s work in that an event analysis is conducted; yet it differs from Stone in that the identification of regime members occurs through a careful examination of a wide range of local events (1989). Regime members will be identified based on a set of criteria to be discussed shortly.

To identify regime members, consideration is given to the theoretical definition of regimes—they are a fairly stable (i.e. enduring and not project specific) coalition of actors representing different sectors within the community who have access to different resources
and merge these resources to pursue social production—and to Mossberger and Stoker's (2000) four criteria of longstanding cooperation, an identifiable policy agenda, a goal of social production, and government and non-government representatives as members. Potential regime membership for this study is based on the following criteria: First, the actor must have initiated one or more projects in the community.\textsuperscript{23} Initiation of a public good project implies a goal on the part of the actor to use their power for social production toward a public good. Second, the actor must have been involved in more than one project. This provides evidence of the use of resources toward multiple goals and of cooperation with other members over time. As a proxy for longstanding cooperation, regime actors must have recognition by other actors as a person who is known to have an ability to "get things done" in the community.\textsuperscript{24} Thus, potential regime members are project participants who were actively involved in two or more local projects, who initiated at least one, and who are recognized by other local actors for their ability to accomplish goals.

The second step to regime identification involves examining features of the group of potential regime members. To be a regime, the group must consist of members from different sectors in the community, representing access to different resources. Finally, the group must be connected. To determine this, a component analysis examining the nomination patterns among potential regime members will be conducted. A component is a subgraph in a network with no external connections. Component analysis reveals fragmentation in networks; if multiple components exist among potential regime members,

\textsuperscript{23} Respondents were asked to indicate who initiated each of the studied projects. \textsuperscript{24} In addition to nominations of project participants, respondents were asked to name individuals in the community who were known to be effective in implementing community projects. These individuals were not required to be a project participant in any of the projects studied here.
then a stable coalition does not exist\textsuperscript{25}. Thus, if there are no persons (or very few) meeting the initial criteria and the group does not contain representatives from different sectors or does contain more than one component, then a regime will not exist, which means, in turn that the community does not have this particular form of bridging community social capital.

**Measures of Citizen Participation and Community Action**

The measure of citizen participation is the number of project participants in each community as identified through the respondent selection procedures previously discussed. Similarly, the indicator of community action is the number of public goods-related projects completed in each community. While both are simple measures, the criteria for identifying them were stringent. To be counted as a participant, an individual had to both acknowledge involvement and be recognized as an active participant. Thus this measure does not overestimate citizen participation by including those individuals who may only have attended a meeting or made a donation.\textsuperscript{26} Similarly, while the projects for study were community-defined—that is, local key informants identified potential projects—they had to meet the public good criteria in order to be included. The number of projects, then, represents the total number of public good projects completed in the community over a three-year period.

\textsuperscript{25} Component analysis will be discussed in greater detail in Chapter 5.

\textsuperscript{26} The purpose here is not to say that those types of participation are not important. However, attending a meeting or writing a check are not the same level of participation as actively working on the completion of a project.
CHAPTER 4

ANALYSIS AND FINDINGS

The analysis is split into two chapters, each corresponding to the purposes of the research that were discussed in the first chapter. In this chapter, the findings related to the hypotheses stated in Chapter 2 are discussed. Chapter 5 addresses the potential for relational data and network analysis to be utilized for directly examining relationships that constitute community social capital. This chapter begins with a description of the project participants and projects and the testing of hypotheses 1 and 1a. This is followed by the identification of the regimes in each community, and given the presence of regimes, the subsequent testing of the remaining hypotheses.

Description of participants

As discussed, interviews were conducted with 116 project participants—70 in Meadville and 46 in Hillside—involving in the 13 projects selected. Comparisons of respondents and the general population on demographic items are shown in Table 4.1. Figures for the general population are from the 2000 U.S. Census.

In both communities, participants were more likely than those in the general population to be male, married, to hold a college degree, and to be employed full time. In addition, a majority of participants were between ages 30 and 64, with almost no participation from younger people (those age 18 to 29). However, the elderly were more often participants in Hillside than in Meadville.

Note that these comparisons are not between participants and non-participants, but between participants and the general population of residents. General residents could have been project participants.
Table 4.1. Comparison of Respondents and General Residents

<table>
<thead>
<tr>
<th></th>
<th>Meadville</th>
<th>Hillside</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 - 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>3.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>General population</td>
<td>13.7%</td>
<td>21.5%</td>
</tr>
<tr>
<td>30 - 44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>32.8%</td>
<td>36.6%</td>
</tr>
<tr>
<td>General population</td>
<td>21.9%</td>
<td>27.2%</td>
</tr>
<tr>
<td>45 - 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>52.3%</td>
<td>41.4%</td>
</tr>
<tr>
<td>General population</td>
<td>25.3%</td>
<td>25.7%</td>
</tr>
<tr>
<td>65 +</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>11.9%</td>
<td>22.0%</td>
</tr>
<tr>
<td>General population</td>
<td>39.6%</td>
<td>25.6%</td>
</tr>
<tr>
<td><strong>Percent Men</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>66.2%</td>
<td>73.9%</td>
</tr>
<tr>
<td>General population</td>
<td>42.9%</td>
<td>46.1%</td>
</tr>
<tr>
<td><strong>Percent Women</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>33.8%</td>
<td>26.1%</td>
</tr>
<tr>
<td>General population</td>
<td>57.1%</td>
<td>53.9%</td>
</tr>
<tr>
<td><strong>Percent Married</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>91.9%</td>
<td>84.8%</td>
</tr>
<tr>
<td>General population</td>
<td>63.3%</td>
<td>59.2%</td>
</tr>
<tr>
<td><strong>Percent w/ college degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>62.1%</td>
<td>37.0%</td>
</tr>
<tr>
<td>General population</td>
<td>20.3%</td>
<td>19.6%</td>
</tr>
<tr>
<td><strong>Percent employed (FT &amp; PT)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>75.0%</td>
<td>85.2%</td>
</tr>
<tr>
<td>General population</td>
<td>52.0%</td>
<td>65.7%</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$30,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>16.4%</td>
<td>14.6%</td>
</tr>
<tr>
<td>General population</td>
<td>57.7%</td>
<td>41.7%</td>
</tr>
<tr>
<td>$30,000 to $50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>16.4%</td>
<td>36.6%</td>
</tr>
<tr>
<td>General population</td>
<td>23.1%</td>
<td>23.9%</td>
</tr>
<tr>
<td>$50,000 and greater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant</td>
<td>67.2%</td>
<td>48.8%</td>
</tr>
<tr>
<td>General population</td>
<td>22.2%</td>
<td>34.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Census, 2000

*Note: in the census, marital status is determined for individuals over age 15, while the sampling frame of respondents includes only individuals over age 18. The number of individuals between ages 15 and 18 in each community is fairly small and is not expected significantly alter this percentage. A similar circumstance exists for employment, where the census figures include people over age 16.
Participants in both communities were more likely than the general population to have higher income levels. However, the distribution of participants represented both middle and high income categories in Hillside whereas a majority of participants came from the high income group in Meadville.

**Description of Projects**

A brief description of the six projects in Meadville and seven in Hillside is given below, with a more detailed discussion of each included in Appendix C. Table 4.2 contains a summary list of the projects and the number of participants in each.

**Meadville Projects**

Projects in Meadville were oriented toward the social well-being of its residents, and ranged in topics from an annual festival to the creation of local services and amenities (see Table 4.2).

**Table 4.2. Selected Projects and Number of Project Participants**

<table>
<thead>
<tr>
<th>Meadville (n=70 participants)</th>
<th>Hillside (n=46 participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998 Ayr Days (n=22)</td>
<td>Highway Overpass (n=7)</td>
</tr>
<tr>
<td>Family Resource Center (n=13)</td>
<td>Senior Center (n=11)</td>
</tr>
<tr>
<td>Teen Center (n=17)</td>
<td>Wellness/Aquatic Center (n=15)</td>
</tr>
<tr>
<td>Walking/Bicycle Trail (n=18)</td>
<td>Business and Industrial Recruitment (n=5)</td>
</tr>
<tr>
<td>Beer Garden (n=7)</td>
<td>Community Foundation (n=10)</td>
</tr>
<tr>
<td>County-wide Law Enforcement</td>
<td>School Bond Issue (n=10)</td>
</tr>
<tr>
<td>(n=13)</td>
<td>City Land Annexation (n=11)</td>
</tr>
</tbody>
</table>

Ave. = 15 participants per project  
Participants as % of total pop. = 3.9%

Ave. = 9.86 participants per project  
Participants as % of total pop. = 1.6%
Ayr Days is Meadville’s community festival and is held annually in July. This tradition began during the farm crisis when community leaders wanted to provide a positive forum for residents to get together and support each other. The Family Resource Center was developed to coordinate child-care and early-childhood education services in the community. Local childcare providers collaborated with school officials to conceptualize, design, and obtain funding for this center. After the alcohol-related death of a local high school student, adults and youth joined forces to create a local Teen Center to provide local youth with a place for safe activities. The teen center involved significant local donations of time, money, and skills to renovate a donated building on the town square. It is managed by local youth who are ultimately overseen by a local board of directors. To increase recreational opportunities in Meadville, the creation of a walking and bicycle trail through town was proposed. While many local residents supported this project, it ultimately failed due to significant opposition by affected landowners. Holding a Beer Garden was proposed to raise funds for entertainment costs at the 1999 Ayr Days celebration. This project also failed when significant opposition to city sponsorship of an alcohol-related event arose. Instead of holding the beer garden as planned, local citizens donated money to cover the costs. Finally, plans were being made to shift from city controlled to county-wide law enforcement due to increasing costs to the city of providing police services, and difficulties in retaining law enforcement staff.

Hillside Projects

Projects in Hillside were largely oriented towards economic development and community growth, and ranged from construction of a highway overpass to the creation of amenities for youth and the elderly. Due to concern over safety issues and frustration about
traffic snarls due to train traffic, the city, in conjunction with Union Pacific Railroad and the Iowa Department of Transportation, initiated plans to build a highway overpass over railroad tracks crossing a major highway in town (see Table 4.2). The coordination of efforts was successful, and the overpass is widely cited by respondents as “one of the best things that has happened in Hillside”. A senior center was built after local seniors expressed concern about the location, inaccessibility, and inadequacy of the current site. Although there was debate regarding the appropriate location, funds were raised and the senior center was successfully built. In order to provide local youth with more recreation and attract new families to the community, a new wellness/aquatic center was proposed. This project involved raising significant funds (around $1,000,000), and coordination with the newly formed community foundation. Business and industrial recruitment efforts were ongoing in the community, involving chamber and economic development persons as well as local business persons. To provide funding for various community projects, a community foundation was established. The foundation was instrumental in providing funds for the senior center and the wellness/aquatic center. A school bond issue was initiated to address failing infrastructure in the local school buildings. Although the need for it generated much debate in the community, it was passed by voters. Finally, the most contentious project in Hillside was efforts by the city to annex a newer housing addition just north of the city. Residents in this area strongly opposed the city’s plans and while they never formally organized, they were quite vocal in their opposition and at the time of the study had begun pursuing legal counsel to stop the annexation from occurring.

The figures in Table 4.2 provide support for hypothesis 1a that a greater level of citizen participation would exist in the community with high bonding community social
capital. Meadville, with more bonding community social capital, had a greater number of participants (n=70) in local projects than did Hillside. This is in spite of its smaller population (1796 versus 2888). There were also a greater number of participants, on average, in each of Meadville’s projects than those for Hillside (15 compared to 9.86). Additionally, a greater percentage of Meadville’s population were participants 3.9% or 70 of 1796 residents compared to 1.6% or 46 of 2888 residents. Overall, on all indicators, citizen participation was greater in the community with high bonding social capital than the one with low community social capital. The figures also provide support for hypothesis 1b—that no relationship exists between bonding social and community action. The number of projects completed was almost the same for both communities (with 6 in Meadville versus 7 in Hillside).

Hypothesis 2a posited that where bridging community social capital in the form of a community regime was present, community action would be more likely. To address this hypothesis, the presence of a regime must first be determined. To identify regimes, project participants in each community were first classified according to the three previously discussed criteria: the number of projects in which they were participants, whether they had initiated any of the projects, and whether they were recognized by other participants having an ability to “get things done” in the community. To be considered a potential regime member, participants first had to meet all three criteria. Table 4.3 shows the breakdown of participants in each category. In Meadville, 70 project participants were identified. Nineteen of the 70 were involved in more than one project; 18 initiated at least one project, and 13 of those were recognized as project implementers.
Table 4.3. Number of Participants Meeting Regime Criteria.

<table>
<thead>
<tr>
<th></th>
<th>Meadville</th>
<th>Hillside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project Participants</td>
<td>70</td>
<td>46</td>
</tr>
<tr>
<td># Involved in multiple projects</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td># Initiators</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td># Recognized as implementors</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

In Hillside, 46 project participants were initially identified with 18 reporting involvement in multiple projects, 17 initiated a project and 13 were recognized as being project implementers.

A fourth criteria deals with whether or not the potential regime members represent different community sectors and, accordingly, have access to different community resources. If all members are from the business sector, for example, with no government or other sectors represented, then a regime does not exist. Previous regime analysis provides little guidance for classification of individuals into sectors. For this research, identification of the sector each person represents was based on their occupation and/or position in the community. The government sector includes individuals who are either in elected positions or in positions that provide the individual with significant policy making authority (such as a non-elected city administrator). The business sector includes individuals who are business owners or who are likely to have access to significant financial resources by way of their position (such as a bank president). Remaining individuals were placed into a third category representing the general citizenry of the community.

Table 4.4 identifies the sectors represented by potential regime members. Three sectors are represented in Meadville and two in Hillside. In both communities, however, the business sector is represented by just over half of all potential regime members.
Table 4.4. Sectors Represented by Potential Regime Members

<table>
<thead>
<tr>
<th>Sector Represented</th>
<th>Meadville</th>
<th>Hillside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>5 (38%)</td>
<td>6 (46%)</td>
</tr>
<tr>
<td>Business</td>
<td>7 (54%)</td>
<td>7 (54%)</td>
</tr>
<tr>
<td>Citizenry</td>
<td>1 (8%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

The government sector is also heavily represented, whereas the general citizenry is represented in Meadville by a single individual.

By definition, a regime is an informal coalition of actors with access to different community resources. Thus, the final criteria addresses whether or not members are indeed a coalition rather than simply fragmented groups from different sectors. To accomplish this, matrices of nomination patterns between regime members were constructed and component analysis conducted. A component is a maximally connected sub-graph within a larger network (see Figure 4.1). Maximally connected means that all nodes in a component are connected to each other (directly or indirectly) and there are no connections to nodes outside of the component. If more than one component is identified in either regime matrix, then a regime does not exist for that community. The identification of a component signifies fragmentation between groups as shown in Figure 4.1.
Component analysis using UCINET computer software (Borgotti, Everett, and Freeman, 1999) revealed a single component in each community comprised of all potential regime members. Thus, regime members in both communities are connected across sectors, either directly or indirectly.

Based on these criteria, thirteen participants were identified as regime members in each of the two communities. Table 4.4 contains a listing of the demographic makeup of the each regime. In both communities, regime members essentially mirror project participants in demographic characteristics. Regime members are more likely to be male than female, married than unmarried, homeowners, employed full-time, and to have relatively high incomes. As with the project participants, members of Meadville’s regime are more highly educated than those in Hillside, while those in Hillside are older and have lived in the community longer.
Table 4.5. Regime Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Meadville</th>
<th>Hillside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Age (Mean)</td>
<td>48</td>
<td>51</td>
</tr>
<tr>
<td>Length of Residence (Mean)</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>9 (69%)</td>
<td>11 (85%)</td>
</tr>
<tr>
<td>Women</td>
<td>4 (31%)</td>
<td>2 (15%)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>11 (85%)</td>
<td>11 (85%)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS or less</td>
<td>2 (15%)</td>
<td>3 (23%)</td>
</tr>
<tr>
<td>Some college</td>
<td>2 (15%)</td>
<td>7 (54%)</td>
</tr>
<tr>
<td>College Degree</td>
<td>9 (70%)</td>
<td>3 (23%)</td>
</tr>
<tr>
<td>Home-owner</td>
<td>12 (92%)</td>
<td>13 (100%)</td>
</tr>
<tr>
<td>Children at home</td>
<td>6 (46%)</td>
<td>4 (31%)</td>
</tr>
<tr>
<td>Employment Status*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>8 (62%)</td>
<td>9 (82%)</td>
</tr>
<tr>
<td>Part-time</td>
<td>1 (8%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Retired</td>
<td>1 (8%)</td>
<td>2 (18%)</td>
</tr>
<tr>
<td>Income*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$30,000</td>
<td>3 (23%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>$30,000 to $50,000</td>
<td>1 (8%)</td>
<td>4 (31%)</td>
</tr>
<tr>
<td>$50,000 and greater</td>
<td>7 (55%)</td>
<td>9 (69%)</td>
</tr>
</tbody>
</table>

*Does not sum to 13 or 100% due to missing cases.
Table 4.6. Placement of Study Sites

<table>
<thead>
<tr>
<th>Bridging Community Social Capital</th>
<th>Bonding Community Social Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>High</td>
</tr>
<tr>
<td>A Meadville</td>
<td>C Hillside</td>
</tr>
<tr>
<td>Absent</td>
<td>B</td>
</tr>
</tbody>
</table>

The identification of a regime in both Meadville and Hillside results in the placement of each community in the two-by-two table as shown in Table 4.6. Unfortunately, without variation in bridging community social capital between the communities, little can be discussed in terms of hypotheses 2a or 2b. The combined effects add little to the discussion—citizen participation and community action were high where bonding community social capital is high and bridging community social capital present, and citizen participation was low and community action was high where bonding is low and bridging is present. The results do, however, suggest a potential role of bridging community social capital in community action as several projects were completed in both communities where a regime was identified, however the lack of variation makes conclusive results unavailable.

The analysis to this point supports the hypothesis that bonding community social capital is a factor that enhances citizen participation. Where bonding community social capital was high, more citizens were involved in community projects. There was also a larger number of participants per project, and participants comprised a larger proportion of the population in Meadville when compared to Hillside. This is consistent with the tenets of social resources theory (Wilson, 2000) and with findings from other empirical studies (e.g. Chee, 2001; Ryan, et al., 2003). The role of bridging community social capital is less clear. Its expected positive influence on community action could not be established. Regime theory
posits that community action occurs when local informal coalitions exist making possible the pooling of institutional resources. The findings here do not refute that proposition, yet no basis of comparison existed upon which a conclusion could be drawn regarding of regime theory. Both communities had a regime and both communities completed several projects.

This does not, however, eliminate the possibility of a role for community regimes in facilitating community action. It is also quite possible that identifying the presence of a regime is less important than identifying the nature and qualities of the ties between regime members. In the next chapter, structural qualities of regime networks and their potential for influencing community action are explored in greater detail.
CHAPTER 5
COMMUNITY SOCIAL CAPITAL AND NETWORK ANALYSIS

In the previous chapters, the concept of social capital was explored. The review of literature traced the history of social capital, identified some of the issues and concerns surrounding its use, and emphasized the need for social capital to be theoretically grounded. A case was made for the existence of community social capital as a property of and resource available to place-based communities. Two theories—social resources theory and regime theory—discussed how different forms of social capital can be considered resources for mobilizing citizens and institutional resources to support collective acts on behalf of the local community. Hypotheses were generated and tested using data collected in two rural communities. Findings suggest that bonding community social capital enhances citizen participation. However, the findings surrounding bridging community social capital were inconclusive as a regime was identified in both study sites. Although community action was noted in both communities, in the absence of a community without a regime, it is impossible to assess the relationship between community regimes (serving as bridging community social capital) and community action. Nonetheless, there still is ample theoretical basis to consider bridging social capital as a community resource.

This chapter is methodological in its intent, and explores the use of relational data as a measure of community social capital, in this case, as it relates to community action. It illustrates how network analysis of relational data can provide insight into features of a community’s social structure that may facilitate community action processes. The analysis presented in this chapter is exploratory and is not accompanied by substantive hypotheses. Rather, regime networks will be examined to identify structural qualities that may indicate a
capacity for community action. While regimes represent only one form of community social capital and do not reflect the entire picture of community action, analysis will be limited to regime networks to illustrate the method and simplify the discussion.

**Why Network Analysis?**

Research using a social network perspective focuses on how “the structure of relations among actors and the location of individual actors in the network have important behavioral, perceptual, and attitudinal consequences for both the individual units and for the system as a whole” (Knoke and Kuklinski, 1982, p. 13). Outcomes for a community or any type of group are somewhat dependent on the structure or patterning of social relationships. For example, a formal organization with a highly centralized authority structure may be very effective in stable times, but unable to adapt when the environment becomes turbulent (Robbins, 1990). Bodemann’s study of patterns of community ties in a Sardinian village found that a local power structure was based solely on longstanding kinship ties was less able to function when the “demands of national capitalism called for more differentiated and flexible divisions of labor and more far-ranging relationships” (1988, p. 128). Similarly, Granovetter (1973) argued that different network features—strong and weak ties—have different consequences, and that both are necessary for social stability and well-being. Strong ties build solidarity among group members, but weak ties are also important. While the presence of strong ties among group members makes for a close-knit group, the absence of weak ties can make it difficult for communities (as groups) to act effectively when the problem they are facing requires access to resources outside of the community (see also Wilkinson, 1991; Woolcock, 1998; Saegart, Thompson, and Warren, 2001). Thus, examining the network structure of a community will likely provide important insights into
its capacity to act effectively. An effective method for examining a network’s structure is found in social network analysis.

Social network analysis involves the analysis of relational data—"the contacts, ties, and connections, the group attachments which relate one agent to another and so cannot be reduced to the properties of the individual agents themselves" (Scott, 1991, p. 3). It "stresses the relationships among social entities and the patterns and implications of those relationships. Its key assumptions are that actors and actions are to be viewed as interdependent rather than independent, and that the relational ties between actors are the channels for the transfer or flow of material or non-material resources" (Schuller, Baron, and Field, 2000, p. 19). Network analysis provides a series of mathematical tools for analyzing various structural characteristics of social networks, such as density, centrality, power, influence, prestige, and many others.

**Network Analysis and Social Capital**

The concept of social capital overlaps extensively with the assumptions underlying network analysis. Regardless of definitional preference (networks plus norms and trust or networks plus resources) or choice of form (bonding or bridging, horizontal or vertical, etc.), the crucial element of social capital is social networks. Social capital is first and foremost about relationships. However, a majority of research using social capital uses indirect measures of relationships and their qualities, with some contending that social capital is "impossible to measure directly" and necessarily requires the use of proxy indicators (Grootaert and van Bastelaer, 2001, p. 9). These proxy measures commonly include questions about formal or informal social participation, including, for instance, membership in organizations, participation in recreational activities, activities in public spaces, visiting
friends, etc. (Baum et al., 2000), and assume that as more people are involved more
custom networks have occurred. However, as Stone notes, many indicators like these “do not tell
us whether some of [those] ‘networks’ involve social relations at all...they tell us more about
the ways in which people spend their leisure time than providing specific information about
the social networks they are part of” (2001b, p. 12).

The earlier discussion in Chapter 2 noted that a “more is better” approach to
identifying and measuring social capital overly simplifies and ignores the different forms
social capital may take. The focus on bridging and bonding forms recognizes that individuals
are embedded in different types of networks that can be considered resources for different
outcomes. It is possible, however, that the different forms (bridging and bonding) each have
very different structural characteristics. Bonding and bridging social capital are still nearly
always conceptualized in a “more is better” sort of way with measures typically indicating
presence or absence of social capital or measures of network size or the variety of types of
ties (e.g. friends or family; local or extra-local) are constructed. For example, Gittell and
Vidal argue that community groups are better able to mobilize resources when more
bridging-like connections, such as links to financial, government, or educational institutions,
are available (1998). Hurlbert, Beggs, and Haines found that bonding social capital,
measured as the number of family and friends one has, is an important source of social
support in recovery from a natural disaster (2001). Both examine the role of different forms,
but limit the measure of social capital to network size or number of different types of
connections present. Similar patterns are found in measures of trust or norms—more trust or
more norms is equated with a greater the level of social capital.
Recently, however, attention has been given to bridging social capital, where networks provide a means of resource acquisition and mobilization (Lin, 1999a, b; Foley and Edwards, 1999). Access to resources and their subsequent mobilization is less dependent on how many people are connected, but rather is a function of the patterning of those connections. For example, a large network with little access or ability to mobilize resources due to its structural composition should represent less social capital than a smaller-sized network with access to resources and a structural makeup that facilitates rather than hinders mobilization.

Social network analysis provides a method for directly analyzing the structural patterning of social relationships, however relatively few have used this technique in conjunction with social capital28 (see Burt, 1997; 2001; Sharp, 1998; 2001b; Lin, Cook, and Burt, 2001 and for exceptions), and even fewer (Sharp 1998; 2001b) have specifically utilized network analysis procedures to examine community social capital. Yet many scholars argue that direct analysis of networks is important (Foley and Edwards, 1999; Schuller, Baron, and Field, 2000; Lin, Cook, and Burt, 2001; Stone, 2001b). For example, Stone argues that “conceptualizing social relations as networks enables us to identify the structure of social relations...as well as their content”, which in turn, helps separate measures of social capital from measures of its outcomes (2001b, p. 6). She further states that “social network analysis.....is in many ways concerned with those aspects of networks which are necessary to understand social capital, and forms a rich reference for the study of networks in

28 By this I mean directly associating or measuring social capital as social networks and utilizing network analysis procedures. Many studies of social capital take a network perspective (e.g. Lin, 1999a,b; Angelusz and Tardos, 2001; Wellman and Frank, 2001) and many studies using network analysis are implicitly examining social capital-like features (Flap and Volker, 2001; Moerbeek and Need, 2003). However, an explicit combination of the two is rarely undertaken.
In their critique of the traditional "more is better" approach to measuring social capital, Foley and Edwards argue that

A network analytic conception of social capital rightly calls attention to the fact that resources are not equally available to all individuals or collective actors operating within [a community]. Analysts are required to do more than place actors in the proximity of resources; analysts need to demonstrate that actors have access to those resources, and network analysis shows the way (1999, p. 168).

Thus, measures limited to network size say little about an actor's ability to access resources; direct analysis of network structure helps to overcome this limitation. Schuller, Baron, and Field note that social capital is "a function of relationships" and as such, "social network analysis occupies a significant place in the conceptual genealogy of social capital" (2000, p. 20).

The use of relational data to measure social capital and network analysis to analyze it may provide answers to unanswered questions about the role of social capital in various outcomes—specifically of interest here is its role in community action. For present purposes, the presence of bridging community social capital measured as a community regime has been identified as a potential factor that facilitates community action. What is not revealed here, nor in most analyses of community regimes (see Mossberger and Stoker, 2000), is knowledge about the structural characteristics of the community regime and their potential impact on regime effectiveness. By definition, the regime represents a single group with connections across institutional sectors. However, the extent of connections among regime members is not known. The effectiveness of a loosely connected regime may differ from that of a tightly connected one. Additionally, the ties between sectors may be tenuous or highly dependent on a few individuals, which could result in instability or decreased sustainability.
of the regime over time. A fragmented regime, held together by only a few people, risks coming apart should a key individual leave for whatever purpose. It is also less likely to be effective as information and resources flow will be impeded. Finally, a highly centralized regime may not respond to a wide variety of community needs, and the desires of the most central individuals may outweigh the desires of others.

Addressing such issues involves a direct study of the network qualities of the regime itself. This section will introduce relational data (networks) as a measure and network analysis as a tool for analyzing directly the structural characteristics of networks serving as social capital. As an illustration, the regime networks from the two communities will be analyzed. Attention will be limited to features of these networks that are expected to facilitate community action. Community action was defined in Chapter 2 as the application of pooled resources in pursuit of a public good. To be considered a resource for community action, the structural qualities of the regime network must indicate an ability to facilitate community action efforts. Those structural qualities will be discussed in relation to a model of community action processes proposed by Wilkinson (1970).

Wilkinson (1970) identifies five “problems” that must be overcome for community action to be successful: awareness, organization, decision making, resource mobilization, and resource application. As shown in Table 5.1, he identifies tasks that are involved in each and the community structure that is most relevant for accomplishing the task.
### Table 5.1. Problems in a Community Action Process

<table>
<thead>
<tr>
<th>Problem</th>
<th>Associated Task</th>
<th>Associated Community Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>Initiation and spread of interest</td>
<td>Multi-interest planning and evaluation</td>
</tr>
<tr>
<td>Organization</td>
<td>Organization of sponsorship</td>
<td>Coordination and control</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Goal setting and strategy determination</td>
<td>Policy making and programming</td>
</tr>
<tr>
<td>Resource Mobilization</td>
<td>Instrumental recruitment of resources</td>
<td>Legitimation, cohesion building, and selective stockpiling</td>
</tr>
<tr>
<td>Resource Application</td>
<td>Implementation</td>
<td>Selective use of resources</td>
</tr>
</tbody>
</table>


The problem of *awareness* has to do with the “communicative activities of initiating and spreading interest in some [locally-identified] need” (p. 60). This often occurs through some kind of “multi-interest planning and coordinating structure, where problems related to all types of local interests are recognized and where plans are made within the context of the total scope of programs then in operation” (p. 60). The second problem, *organization*, involves forming a new or re-adapting an existing group to deal with the issue. Wilkinson notes that this involves a local structure that can coordinate and maintain some semblance of control over the action process. *Decision making* typically occurs within a local policy making structure, and involves setting goals, gathering information regarding possible solutions and available resources, and selecting from alternatives. *Resource mobilization* involves recruiting and securing resources, including people, money, and materials. It requires a structure that has access to resources, builds local cohesion, and provides legitimacy to the action undertaken. Finally, *resource application* involves utilizing the mobilized resources toward goal accomplishment. The structure of interest here is that which
can selectively apply local resources, and maintain local control of the process in the event significant resources are mobilized from extra-local sources.

Measures of the regime's structural qualities expected to indicate capacity to overcome each of these problems are discussed in a future section. In the next section, network analysis as a method is discussed.

**Introduction to Network Analysis—A Brief History**

Network analysis is a relatively new procedure in the social sciences, although its theoretical roots go back nearly fifty years. The idea of a network was originally used as a metaphor to describe communities or social structure. Radcliffe-Brown (1952) suggested that social structure is "a network of actually existing social relationships" (p. 21), and MacIver viewed society as "a web of social relations" (1962, p. 5). This metaphor became an analytical concept when researchers began to define and use it in more specified ways (Mitchell, 1969), beginning with the pioneering work of British Anthropologist John Barnes (1954). Barnes developed the concept of a social network in his study of a Norwegian fishing village (Bremmes). He viewed the community as several overlapping systems, that included a permanent territorial system of administrative units, an industrial system of fishing and farming, and a system of kin, friends, and acquaintances. These systems were all connected through individuals in the form of a network:

Each person is, as it were, in touch with a number of other people, some of whom are directly in touch with each other and some of whom are not. ... I find it convenient to talk of a social field of this kind as a network. The image I have is of a set of points, some of which are joined by lines. The points of the image are people, or sometimes groups, and the lines indicate which people interact with each other. (p. 43)
Barnes argued that networks linked together people living in Bremmes and also linked Bremmes to other places. His major contribution to network analysis was the notion that properties of networks have important implications for social behavior that extend beyond the diffusion of information (Coleman, Katz, and Menzel, 1957) or task completion (Festinger, Schachter, and Back, 1950) as had been the focus of previous network research. He also contributed by specifying network properties. For example, Barnes applied the term “mesh” to describe the connectedness among people tied to other persons in a network. Smaller societies, he proposed, are more tightly meshed than larger societies.

In her study of social networks and family roles, Bott further specified the network concept by arguing that networks can be “open” or “closed”, where either form results in different consequences for social action (1957). Friendship ties and the flow of norms, she found, are more influential in closed networks than in open networks. Epstein took this research another step in his study in Africa of all social contacts for a single person over a couple of days (1961). He argued that Bott’s distinction between open and closed networks could apply to different parts of a single person’s network, with the closed parts forming a close-knit, “effective” network and the open parts forming a more loosely-knit “extended” network. It is through contacts between members in the effective network that norms and values are defined and clarified; these norms and values reach others through the extended part of the network to those with whom network members themselves have no direct contact.29

29 Epstein was studying how these norms and values were transmitted from the urban elite sectors of society to the rest of the population. Thus, his conception here shows norms and values forming in the elite sectors and being transferred to others. He does not discuss the possibility of the flow going from non-elite to elite persons.
While such attempts at specifying network characteristics had been useful, universally accepted measures of network qualities remained lacking until the late 1960’s when Clyde Mitchell wrote a seminal piece linking network analysis with graph theory (1969). This work extensively defined several concepts useful when examining network characteristics; many still exist today, although often with different terminology. Mitchell argued that there are two components of networks: morphology (form) and interactional criteria. Within each component, several concepts were described. The morphology, or form of a network included anchorage, reachability, density, and range. Anchorage is the starting point of a network, and is most often an individual but can be a group. Reachability indicates the extent to which people can use their relationships to contact others as measured by the number of steps from one person to another. Density is the degree to which people who are connected with any one point also know each other. Range is the proportion of ties to a point in comparison with all other ties. Interactional criteria included content, directedness, durability, intensity, and frequency. Content represents the purpose of the linkage (e.g. friendship, kinship, co-worker, etc.); several contents between two actors is known as multiplexity. Directedness is the degree of reciprocity that exists; whether exchanges between network members flow in one direction or both ways. Durability is a measure of how long the network lasts in terms of obligations and rights held by members (not in terms of membership of any one point). Intensity is a measure of the strength of ties, or the extent to which network members honor obligations and rights. Finally, frequency is a measure of how often or regularly network members are in contact. Mitchell’s development of these specific measurable characteristics moved networks from a useful metaphor to a measurable, analytical concept.
Scholars in the United States were slower to adopt the network as a sociological concept, although a few early sociometric studies existed that used the concept. As early as 1932, Moreno discussed using visual representations showing the connections within social structure:

A process of charting has been devised by the sociometrists, the sociogram, which is more than merely a method of presentation. It is first of all a method of exploration. It makes possible the exploration of sociometric facts... It is at present the only available scheme which makes structural analysis of a community possible (p. 95-96).

Similarly, Lundberg and Lawsing sought to determine whether the “informal and private affinities and nucleations of an ordinary community [can] be discovered and charted with any degree of accuracy, and if so, what [does] this societary structure reveal (1937, p.326). They found that local social relationships’ “character, degree, intensity, size, direction and duration determine the resulting societal configurations in a community, and hence, the organizational and social functioning of the community” (p. 334). Hunter’s graphical representations of Atlanta’s power structure were networks, although he didn’t label them as such (1953). Hunter even used network-related terminology, such as identifying a central figure in the structure as a “star” (p. 70).  

Wellman’s research in Toronto brought network analysis more explicitly into the community sociology field, by studying the affects of local networks on community ties. Wellman (1979) defined community in terms of networks as “those bounded sets of links and nodes, all of whose members are connected either directly or via indirect paths or short

---

30 Hunter may have been in the forefront of using network analysis, but clearly did not recognize his fortune. In fact, he noted that sociograms showed “the leaders who were most frequently chosen as the very top leaders tended to choose one another more frequently than they chose [others]. Aside from this point, the sociogram was not found to be particularly useful” (p. 69, italics added).
lengths (p. 74). He used network analysis to address “the community question”, which asked how large-scale divisions of labor affected community ties. Wellman found that although extended and differentiated networks were common, strong kinship and friendship ties still existed among residents in a Toronto neighborhood.

Fischer’s work took a different approach by examining features of communities that impact networks (1982). He found that non-urban residents are closer to kin and urban residents are closer to non-kin, and concluded that population concentration of a community explains differences in community networks. Laumann and Pappi’s research examined community networks and found that substantial communication within networks of elites led to their ability to influence the outcomes of community issues (1976).

All of these researchers (and many others) further developed and refined the concept of social network analysis into a useful analytical tool. Additionally, advances in computing technology have made possible sophisticated analyses of complex networks, and have allowed for standardization of accepted network measures. Today, social network analysis has been used in studies of community interaction patterns and power structures (Wellman, 1979; Wellman and Leighton, 1979; Howard, 1988; Bodemann, 1988; Perrucci and Potter, 1989; Knoke, 1994; Sharp, 2001), social support (Walker, Wasserman, and Wellman, 1994), marketing (Arabie and Wind, 1994), organizations (Krackhardt and Brass, 1994; Mizruchi and Galaskiewicz, 1994), occupational mobility (Levine and Spadaro, 1988; Burt, 1997; 2000) and even in epidemiological research (Morris, 1994).

It is important to note that the concept of elite networks or power circles has been around for a long time, beginning with Hunter’s early work in Atlanta. However, as Useem (1980) noted and Knoke (1994) concurs, “direct verification of the impact of the elite...is still needed” (p. 223). In other words, while the idea of power networks has existed for a long time, methods of adequately measuring a network’s influence did not exist until recently.
Relational Data

Network analysis is used to examine relational aspects of social structures (Scott, 1991). Typical (non-network) methods of data collection result in attribute data which are the attitudes, opinions, behaviors, etc. that belong to particular agents. These data are regarded as attributes of individuals or groups and are often quantified and analyzed using various methods of variable analysis. Network analysis, on the other hand, is concerned with the analysis of relational data—the “contacts, ties and connections, the group attachments and meetings, which relate one agent to another and so cannot be reduced to the properties of individual agents themselves” (p. 3).

In this research, a participation approach (Laumann, Marsden, and Prensky, 1983) was used to collect relational data for analysis, whereby project participants were asked to identify other participants in each of the projects they selected. Nominations indicate co-participation in a project; the existence of some kind of social relationship between individuals is assumed. From these nominations, regime members were identified and matrices showing the connections between members were constructed. For illustration purposes, Figure 5.1 shows a data matrix similar to those constructed for the regime networks.

Figure 5.1. Example Network Matrix

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

32 In some ways, this is a risky assumption. Co-participation does not necessarily imply a relationship. It is possible the project participants are recognized by someone with whom they have never had direct contact with. However, given the small size of the networks, the extent to which individuals work together in multiple settings, and the nature of these small communities, I feel safe in making this assumption.
This is a square matrix where the letters, A, B, C, and D represent each node. Nodes can be individuals, groups, communities—whatever unit is of interest. Matrices can also be non-square. For example, in an affiliation matrix, nodes going down the left side of the matrix may be individuals and nodes across the top may be organizations or groups those individuals are affiliated with. For this example, as with the networks constructed for this research, all nodes are individuals. In all matrices, rows contain the nominator and columns the nominees. The first row in the example matrix shows that node A nominated B and D; B and D were nominated by A.

The numbers in the matrix correspond to relations. Where a non-zero value is entered, a nomination was given. The most commonly used matrix is square, where row and column nodes are identical, binary, where 1 indicates the presence of a relationship and 0 represents no relationship, and symmetric where if A nominates B, B is automatically considered to have nominated A. This example matrix is more complicated—it is square, but valued and directed—but such a matrix allows for more sophisticated analysis. It is directed, meaning non-symmetric—person A did not nominate person C, but person C did nominate person A. A similar pattern exists between D and B. The matrix is valued in that numbers greater than 1 indicate a different type of relation between nodes. Values can represent strength of ties, multiple organizational affiliation, or any other indicator of importance. The distinction between matrix forms (binary vs. valued, symmetric vs. directed) is similar to the distinction between nominal or ordinal and interval/ratio levels of data. Binary and symmetric matrices (like nominal or ordinal data) are useful, but different and more sophisticated forms of analysis are available when using valued and directed data.
The matrices for the regime networks are square, valued, and directed. Values greater than one are multiple nominations, indicating co-participation in multiple projects (e.g. person A nominates person D twice—once for each project selected). Values, in this case, will range from zero to three because respondents could provide nominations for a maximum of three projects; therefore co-participation is limited to three projects. The data is also directed (i.e. non-symmetric), meaning that respondent’s nominations are neither required nor assumed to be reciprocal in the construction of matrices.

**Network Visualization**

Visual representations of the network are created from matrices. Nodes are the points in the network, and the lines represent a relation. For the example matrix, the network is visualized as shown in Figure 5.2. Because the data is directed, arrowheads are needed for each line. Double-headed arrows indicate reciprocal nominations. Although not shown here, line thickness can be used to indicate value, or greater tie strength.

**Figure 5.2. Example Network Visualization**
An important component of visual representations of networks is that the picture accurately reflects the structure of interaction patterns actually existing in the network.

Freeman and Webster (1994) describe general interaction patterns as follows:

...whenever human association is examined, we see what can be described as thick spots—relatively unchanging clusters or collections of individuals who are linked by frequent interaction. These are surrounded by thin areas—where interaction does occur, but tends to be less frequent... (p. 226)

An important component of visual representation of network structure, then, is to allow one to visually locate the “thick” and “thin” spots of interaction. Moreno’s early work introduced the sociogram as a method of visual presentation of social structure (1932). He was one of the first to view social connections as a series of points (persons) connected by lines (relationships). However, his method of visualization lacked well-defined procedures for determining exact positioning of the points and lines—others using the same data may have drawn very different pictures and, accordingly, very different conclusions. Thus, mathematical procedures for network visualization were developed. Positioning of the nodes in the upcoming regime networks (see Figures 5.3 and 5.4) is based on the most commonly used procedure, multidimensional scaling (MDS), which converts graph-based distance to physical distance in a visual layout (Scott, 1991). The goal of the MDS algorithm is to “arrange points in such a way that the distances between pairs of points in the image correspond to the distances between individuals in the data matrix” (Freeman, 2000, p. 48). Thus, points in the graph that are close together visually are “closer” in terms of the interaction patterns between them, occasionally even overlapping.
Regime Networks

The graphs or networks shown in Figures 5.4 and 5.5 visually depict the interaction patterns between nodes in the regime networks. Nodes in the graph were moved *slightly* in cases where they overlapped to enhance readability. In both regime networks, node shapes indicate the sector (government, business, or citizenry) that the node represents. Circles indicate government, squares show the business sector, and triangles represent the citizenry. This allows for a clear picture of the coalition between sectors and potential bridging of resources—a key regime component.

The regime networks for both communities consist of thirteen nodes, each representing a regime member. Regime members in Meadville are the mayor, two city council members, the school superintendent, the county extension director, the director of the local economic development group, the president of the chamber of commerce, the presidents of both local banks and the vice-president of one, two local business owners, and a local citizen (a nurse) who is known as “a real up-and-comer” in terms of community involvement (in the words of a local project participant). In Hillside, regime members include three city council persons, the current and previous mayors, the city administrator, the president of the chamber of commerce, the presidents of two local banks, and four local business owners.
Figure 5.4. Meadville Regime Network

Figure 5.5. Hillside Regime Network
The visual representations of each network illustrate interesting patterns for each regime. In both cases, individuals are clustered by sector, although this is more evident in Hillside where those individuals representing the business sector are clustered on the right, with those from the government in a cluster on the left. Hillside’s regime also appears to be more dense and to contain a few highly central individuals (the city administrator and both bank presidents), whereas Meadville’s regime is more diffuse. While a visual analysis can identify important network features, several measures of network qualities have been developed to reveal patterns in relational data. The next section will discuss those measures that are relevant to the analysis of the regime networks.

Introduction to Relevant Network Measures

As discussed, networks will be analyzed to identify structural features that indicate community social capital. In this case, attention will be given to features that facilitate community action by providing an ability to deal with the five problems as identified by Wilkinson (1970) that can occur during a community action process. The network features most relevant to this end are density, centrality and centralization, and the presence or absence of cliques. This section will provide an overview of these measures, ending with a discussion of how those measures indicate an ability to address the five problems noted by Wilkinson.

Density

Density is a measure of connectedness in a network. It is calculated by dividing the number of lines or connections existing by the total number possible. Density scores range
from zero to one, with zero representing completely disconnected nodes and one representing totally connected nodes. Figure 5.6 shows examples of variations in density.

**Figure 5.6. Graphical Representation of Density**

![Graphical Representation of Density](image)

Density measures show the extent to which nodes in a network are connected. A limitation of the density measure is its dependency on network size. A larger network will generally be less dense than a smaller one because the likelihood of being connected to a large proportion of nodes decreases as the network size increases. In other words, it is more likely that a larger proportion of nodes will be connected in a network with ten nodes than in a network of 100. Thus, the density of networks of substantially differing sizes cannot be readily compared. In addition, density can be a problematic measure of cohesion when there are subgroups within a network (Friedkin, 1981). Density scores consider the whole network, such that a network comprised of very dense subgroups that are only loosely connected may have a low density score and thus be considered less cohesive.

**Centrality and Centralization**

Another important issue is the extent to which those connections are concentrated around nodes. That issue is addressed by examining measures of centrality and centralization. Centrality, an ego-centric measure, refers to the specific positioning of nodes in a network relative to other nodes (Scott, 1991), and is most often used as a measure of
social power. A person’s location in a network affords him or her with certain opportunities and constraints. To the extent that opportunities are high and constraints are low, a person is more central in the network and thus holds greater power (Freeman, 1979). For example, a person who connects otherwise unconnected sub-groups (a “bridge”) holds a position of power because he/she can control the flow of information between the groups. Such a person receives a high centrality score. A person with very few contacts is lower in power because he/she has access to less information and fewer choices of contacts to call upon when needed, and would receive a lower centrality score.33

Commonly used measures of centrality include degree, betweenness and closeness. Degree centrality is measured as the number of nodes to which another node is directly connected. Degree centrality indicates how well connected an individual is relative to others in the network. It ignores indirect connections through others and one’s position within the overall network. In addition, the actual degree score will be highly dependent on network size. Betweenness is the extent to which a node lies “between” other nodes in a network. Betweenness measures emphasize the capacity to interrupt or control information flow (Marsden, 1990), therefore serve as a “broker” or “gate-keeper”. A node having a low degree score (not well connected) can have a high betweenness score due to its intermediary position in the overall network. Closeness measures focus on the distances between nodes, which, unlike degree centrality, considers both direct and indirect ties. A node is characterized by a high closeness score when it lies at short distances from many other nodes in the network—

33 This, of course, is often dependent on who those few contacts are and the resources they hold. For example, a person having only two contacts but with very powerful and resource laden individuals will have more power than a person with five contacts who are less powerful themselves. Some measures of centrality are able to capture this. See Bonacich (1972) for more detail.
that is, if it is easily reachable. Rather than focusing on ability to control or serve as a bridge as with betweenness measures, closeness measures indicate accessibility to others and "reflect freedom from the control of others" (Marsden, 1990, p. 444). A node close to many others is not dependent any single node in that more choices of contacts are available.

**Figure 5.7. Illustration of Centrality**

The three forms of centrality discussed above can be identified by examining the network shown in Figure 5.4. In that network, node C has the highest degree centrality as it has more direct connections with others. Node C is also the closest to all other nodes—that is, it has the most direct and indirect ties to other points. However, node B is highest in betweenness centrality as it holds the most central position between other nodes by providing the only connection between node E and the rest of the network.

When directed data are available, measures of degree and closeness centrality account for differences in directions of connections. For example, in-degree measures (the number of ties to a node) show the extent that a person is recognized by others—it is often a measure of prominence. Out-degree measures (the number of ties from a node) are an indication of a node's relative influence, or the extent to which a node acknowledges others. Similarly, in-
closeness measures the extent to which a node is easily reachable by many others in the network. Out-closeness is the extent a node can reach others in short distances.

Related to centrality is the “centralization” of the overall network. Centralization is a socio-centric measure that “describes the extent to which cohesion [density] is organized around particular focal points” (Scott, 1991, p. 92) and “reflects the variability in centrality scores among units [nodes] (Marsden, 1990, p. 455). Greater variability between point centrality scores generally results in higher network centralization, however, depending other network characteristics, that is not always the case. There may be significant variability in betweenness centrality among points, but if network density is overly high there is little ability for any one node to be between others thus leaving no single node for the network to center around. In this case, betweenness centralization would be relatively low.

Like centrality, measures of centralization can be *degree-based, closeness-based*, or *betweenness based*. Degree centralization measures the extent to which nodes in a network tend to center around those with many direct ties. With directed data, measures of in-degree centralization (prominence) and out-degree centralization (influence) are possible. Closeness centralization examines how nodes tend to be linked indirectly. And betweenness centralization focuses on the chaining of nodes, and the extent to which the network centers around certain linking nodes. Centralization scores, with a range from 0 to 1, represent the amount of variability in centrality scores in a particular network as a percentage of the variability found in a star network of the same size. A star network is the most centralized network possible, consisting of a center node with all other nodes connected only to it. It has the greatest variability possible among centrality scores, where the center node is completely central on all three measures and the other nodes have the least centrality possible.
Conversely, both wheels, where each node is connected to two other nodes in such a way to form a circle, and maximally connected graphs where density is equal to 1.0, are the least centralized with centralization scores of zero.

**Cliques**

Another important network feature involves the identification of sub-groups, or cliques, within the overall network. The presence of cliques can be viewed as an indicator of network fragmentation. A *clique* is similar to a component in that it requires maximum density, however it does not exclude outside contacts among points in the network. The presence of cliques can indicate either centralization or cohesion. A common procedure of clique identification is the *n-clique* method. This method includes points that are connected by a maximum path length of *n*. A path length of one, a "1-clique", would consider only direct connections, while a "2-clique" includes indirect connections (connections through others). Because a clique is mathematically defined, nearly all networks with at least moderate density will have cliques present. Of frequent interest is the number of cliques in relation to the size of the network, the number of nodes contained in each, and the way the clique is embedded in the overall network structure. A small number of cliques each containing a significant number of nodes can indicate fragmented groups. The number and size of cliques in a network also indicates the extent of opportunities and obstacles to communication or resource transfer (Scott, 1991).

Whether or not density, centrality, and cliques are positive or negative for a network depends upon the research question under study. Highly dense networks are generally more stable and provide individual nodes with greater autonomy; they also are less dependent on any single node or nodes. For example, Knoke (1983) found that being a member of a dense
organizational network increased the organization’s capacity to mobilize resources by making it less dependent on a single source. He states that “by spreading [the organization’s] needs for valued resources [to many organizations], an association can better retain substantial autonomy and power to pursue its collective social influence objectives” (p. 1078). Overly dense networks can also be less efficient in the absence of some kind of central organizing structure within them. A highly centralized network is often more efficient, but is also dependent on relatively few nodes and becomes less stable. Additionally, high centralization indicates a relative unequal distribution of power and resources (see Laumann, Marsden, and Galaskiewicz, 1977; Sharp, 1998; 2001).

Network Qualities and Community Action

To guide the analysis of the regime networks presented here, attention is given to the network features that show how the social connections can be considered a resource for community action—that is, how the network is a measure of community social capital. Chapter 2 identified two “locations” of community social capital in relation to community action. The first is found in the trusting and normative connections among the general citizenry in the community (bonding community social capital) that are key in sustaining commitment to the community and subsequent voluntary citizen participation. The second location, bridging community social capital or the community regime, is found in the connections among those with access to a diverse set of local institutional resources. Those connections are important in providing coordination and mobilization of resources, which, according to Wilkinson’s model (1970), are crucial for successful community action. The following analysis will focus solely on the latter as an illustration of using relational data and network analysis to assess bridging community social capital.
To determine how social connections can serve as a resource for community action, features of regime networks will be analyzed that are believed to indicate capacity to overcome the five problems identified by Wilkinson (1970). In some cases, those expectations are based on previous literature; in other cases where previous literature does not provide guidance, logical conjectures are made. In all cases, focus is limited to sociocentric measures that address the structural features of the entire regime network. While an individual’s position in a network can be an indicator of the social capital available to that individual and the capacity for that individual to be powerful, affect change, get ahead, and so on, the focus here is on community-level social capital. Community social capital is not indicated by the position of an individual in a network, but rather by the qualities of the network as a whole.

In review, several network measures will be utilized in the analysis. Density is an indicator of the connectedness among individuals, and is often used to measure cohesion. Degree centralization considers the extent to which there are a few individuals with more direct ties than others; out-degree is a measure of influence (ties going out) and in-degree a measure of prominence (ties coming in). Closeness centralization considers direct and indirect ties, and indicates the presence of a few individuals who are more accessible by others (in-closeness) or more able to access others (out-closeness). Betweenness centralization indicates the presence of individuals who are in the position to serve as brokers in the network. The concentration of centrality measures the extent to which a few regime points

---

34 Point centrality will be used to determine the concentration of centrality measure. Although point centrality is usually an egocentric rather than sociocentric measure, it is utilized here to describe the extent that centrality of all types is concentrated in the hands of a few individuals. In that sense, it is descriptive of the entire network rather than of individual points.
members are concentrated across multiple forms of centrality. Finally, the presence or absence of cliques indicates the extent of fragmentation in the network.

**Network Qualities and Wilkinson’s Model**

In terms of the *awareness* problem, measures of both density, and degree indicate the ease of communication within a network. This is supported by Lai and Wong (2002) who found that communication is enhanced when both a few central individuals are present to serve as “opinion leaders” and begin the communication process and strong, direct ties are available to facilitate information flow. A moderate to high out-degree centralization score would indicate the presence of a few central nodes, and relatively high density shows the presence of strong ties. In addition, information flow requires the relative absence of “stopping points”, or places in the network where communication could get “hung up”. A lower betweenness centralization score indicates fewer impediments to spreading awareness. A related issue is the reachability or accessibility of nodes in the network—more nodes would be accessible, either directly or indirectly, when in-degree and in-closeness centralization scores are low.

Successfully overcoming the problem of *organization* requires some ability to influence others. Knoke argues that influence indicates an ability to persuade others to support one’s interests—a key component of organization (1994). An out-degree centralization score indicates the presence of influential nodes in a network; a moderate to high out-degree centralization score suggests the network has the capacity to successfully organize for community action.

*Decision-making* involves two abilities: access to information and the power to make decisions. By definition, the regime includes some element of the community’s policy
making structure; thus the power to choose among alternatives is an inherent attribute of a regime. At issue, then, is the extent to which information can be made available. As with facilitating awareness, a less centralized network based on in-degree, in-closeness, and betweenness centralization would indicate both greater contact among individuals resulting in easier information flow and greater access to the variety of information available. In addition, the extent to which centrality is concentrated among a few individuals—that is, whether a few individuals hold central positions across several forms of centrality—indicates the likelihood that diverse solutions will be considered. Where centrality is concentrated, power is concentrated meaning that a few individuals are in the position to exert considerable influence over decision making processes, possibly to the exclusion of others.

Access to resources is also an inherent component of any regime. By definition, all members bring resources into the network. However, they must also be able to effectively mobilize those resources—a factor often overlooked in previous literature on regime theory. A key issue in resource mobilization is building cohesion. Bourgeois and Friedkin argue that cohesion is “substantially more likely between actors who are in contact than between actors who are not in contact” (2001, p. 246). Thus, a network structure which facilitates contact among individual members will also likely indicate cohesion. Structural qualities that facilitate contact would relatively high density, low in-degree and in-closeness, and the absence of cliques. Density indicates the extent of connectedness in the network; in-degree and in-closeness centralization indicates the presence of sufficient direct and indirect ties to allow easy resource flow. And, where cliques are present, fragmentation in the network is more likely, making cohesion of the entire network less likely. Additionally, a network structure moderate to high in out-degree centralization has a few influential nodes who can
call on others to generate needed resources. Thus, the potential for resource mobilization increased for regime network structures that are relatively high in density, moderate to high in out-degree centralization, low in in-degree and in-closeness centralization, and have no cliques are present.

The application of resources is likely facilitated by a network structure where an unimpeded outflow of resources is possible (Galaskievicz, 1979). Here too, relatively high density and a low in-degree and in- and out-closeness centralization scores would indicate the presence of sufficient connections through which resources can be directed. Also important is the absence of a “broker” (i.e. low betweenness centralization) who is in the position to impede the flow of resources. Moderate to high out-degree centralization scores would indicate the capacity for some individuals to direct resources and maintain some measure of control over their application.

In sum, the regime network should be a better resource to the community—that is, a more effective form of bridging community social capital—if it is relatively dense, moderate to high in out-degree centralization, relatively low in in-degree and in-closeness centralization, and does not have cliques. High density indicates the capacity for information and resource flow throughout the network as many individuals are connected to each other. Low in-degree and in- and out-closeness centralization also indicate this capacity as the lack of centralization implies that all network members are easily accessible either directly or indirectly. Low betweenness centralization indicates the relative absence of individuals serving as “brokers” who can slow information and resource transfer. Similarly, as cliques are an indication of network fragmentation, their absence indicates that resources are not concentrated in a few fragmented areas. Relatively high out-degree centralization indicates
the presence of a few influential individuals having sufficient power to organize others and who can call on others to obtain and apply resources. Finally, less concentration of centrality in a few hands demonstrates likelihood that a variety of alternatives will be considered in the decision making process. Table 5.2 summarizes each of the network qualities associated with the ability to overcome each of Wilkinson’s problems.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Associated Task</th>
<th>Associated Network Qualities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>Initiation and spread of interest</td>
<td>Relatively high density</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate to high out-degree centralization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low in-degree, in-closeness, out-closeness, and betweenness centralization</td>
</tr>
<tr>
<td>Organization</td>
<td>Organization of sponsorship</td>
<td>Moderate to high out-degree centralization</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Goal setting and strategy determination</td>
<td>Low in-degree, in-closeness, and betweenness centralization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal distribution of centralality</td>
</tr>
<tr>
<td>Resource</td>
<td>Instrumental recruitment of resources</td>
<td>Relatively high density</td>
</tr>
<tr>
<td>Mobilization</td>
<td></td>
<td>Moderate to high out-degree centralization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low in-degree and in-closeness centralization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Absence of cliques</td>
</tr>
<tr>
<td>Resource</td>
<td>Implementation</td>
<td>Relatively high density</td>
</tr>
<tr>
<td>Application</td>
<td></td>
<td>Moderate to high out-degree and out-closeness centralization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low in-degree, out-closeness, and betweenness centralization</td>
</tr>
</tbody>
</table>
Analysis of Regime Networks

The following sections discuss the features of the regime networks in Meadville and Hillside. For ease in explanation, networks are considered to be "low", "moderate", or "high" in terms of density and centralization. No accepted cutoff points have been identified in the literature for each, but for this discussion, "low" describes density or centralization of below 40 percent, "moderate" is between 40 and 60 percent, and "high" is anything over 60%.

Measures of overall network density and three types of centralization are shown in Table 5.3. Meadville’s regime network is moderately dense in that 42% of all possible connections are present. In terms of degree centralization, which accounts for direct ties, the regime does not center around a few prominent individuals (in-degree = 26.4%), but does contain a few influential individuals (out-degree = 62.5%). Prominence is measured by ties coming to an individual from others; influence is measured by connections going from and individual to others. The regime is moderately centralized in terms of accessibility (in-closeness = 41.6% and out-closeness = 49.5%), indicating that there are a few individuals who are highly accessible and more able to access others. And, the regime is relatively low in betweenness centralization (betweenness = 20.7%), indicating a relative absence of individuals serving as brokers.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Meadville</th>
<th>Hillside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>42.3%</td>
<td>64.1%</td>
</tr>
<tr>
<td>Degree Centralization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-degree</td>
<td>26.4%</td>
<td>56.9%</td>
</tr>
<tr>
<td>Out-degree</td>
<td>62.5%</td>
<td>65.9%</td>
</tr>
<tr>
<td>Closeness Centralization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-closeness</td>
<td>41.6%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Out-closeness</td>
<td>49.5%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Betweenness Centralization</td>
<td>20.7%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>
Hillside’s regime network is highly dense with over 60 percent of the possible connections present (Table 5.3). It is also highly centralized in terms of degree—the regime tends to center around a few prominent (in-degree = 56.9%) and influential (out-degree = 65.9%) individuals. However, the regime is less centralized in terms of closeness (in-closeness = 26.5% and out-closeness = 27.8%) and betweenness (17.2%), indicating ease in accessibility for all individuals and the relative absence of individuals serving as brokers.

The centralization measures reported in Table 5.3 indicate overall centrality in the regime, but say nothing of the concentration of centrality around certain individuals. To determine that, it is necessary to examine the patterns of centrality for individuals within each regime.

Table 5.4. Concentration of Centrality for Meadville Regime Network

<table>
<thead>
<tr>
<th></th>
<th>Out-degree</th>
<th>In-degree</th>
<th>Out-closeness</th>
<th>In-closeness</th>
<th>Betweenness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business (Insurance)</td>
<td>12</td>
<td>4</td>
<td>75</td>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>Nurse</td>
<td>9</td>
<td>8</td>
<td>75</td>
<td>57</td>
<td>33</td>
</tr>
<tr>
<td>Chamber President</td>
<td>8</td>
<td>5</td>
<td>63</td>
<td>52</td>
<td>15</td>
</tr>
<tr>
<td>Bank 1 President</td>
<td>7</td>
<td>5</td>
<td>60</td>
<td>41</td>
<td>5</td>
</tr>
<tr>
<td>City Council (1)</td>
<td>5</td>
<td>5</td>
<td>52</td>
<td>60</td>
<td>23</td>
</tr>
<tr>
<td>School Supt.</td>
<td>4</td>
<td>4</td>
<td>50</td>
<td>52</td>
<td>11</td>
</tr>
<tr>
<td>Extension Director</td>
<td>4</td>
<td>3</td>
<td>39</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>Mayor</td>
<td>4</td>
<td>5</td>
<td>55</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>Bank 2 President</td>
<td>4</td>
<td>4</td>
<td>55</td>
<td>40</td>
<td>0.6</td>
</tr>
<tr>
<td>Economic Dlvpmt.</td>
<td>3</td>
<td>6</td>
<td>46</td>
<td>63</td>
<td>12</td>
</tr>
<tr>
<td>Bank 1 VP</td>
<td>2</td>
<td>8</td>
<td>38</td>
<td>71</td>
<td>8</td>
</tr>
<tr>
<td>Business (Pharmacy)</td>
<td>2</td>
<td>7</td>
<td>60</td>
<td>43</td>
<td>0.5</td>
</tr>
<tr>
<td>City Council (2)</td>
<td>2</td>
<td>2</td>
<td>36</td>
<td>46</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>5.1</td>
<td>5.1</td>
<td>53.2</td>
<td>52.2</td>
<td>11.8</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>2.9</td>
<td>1.7</td>
<td>12.2</td>
<td>9.6</td>
<td>11.7</td>
</tr>
</tbody>
</table>
Table 5.4 shows degree, closeness, and betweenness centrality scores for each individual in the Meadville regime network. Figures in bold indicate individuals with the greatest centrality for each measure (the top three values in each category of centrality were highlighted). The table shows dispersion of centrality across regime members. For Meadville, no single individual dominates across all forms of centrality. Thus, even though the network is highly centralized in terms of influence (out-degree) and moderately centralized in terms of accessibility (both in- and out-closeness), no single individual or group of individuals dominates across all types. This suggests that access to and control of resources is fairly evenly distributed among individuals. As an interesting side note, the most dominant person is a local nurse who is central in four of the five forms of centrality.

<table>
<thead>
<tr>
<th>Table 5.5. Centrality Concentration for the Hillside Regime Network</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Out-degree</strong></td>
</tr>
<tr>
<td>City Administrator</td>
</tr>
<tr>
<td>City Council (3)</td>
</tr>
<tr>
<td>Mayor</td>
</tr>
<tr>
<td>Bank 1 President</td>
</tr>
<tr>
<td>Previous Mayor</td>
</tr>
<tr>
<td>City Council (1)</td>
</tr>
<tr>
<td>City Council (2)</td>
</tr>
<tr>
<td>Business (service station)</td>
</tr>
<tr>
<td>Business (investments)</td>
</tr>
<tr>
<td>Business (Agriculture)</td>
</tr>
<tr>
<td>Chamber President</td>
</tr>
<tr>
<td>Bank 2 President</td>
</tr>
<tr>
<td>Business (construction)</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
</tr>
</tbody>
</table>
Centrality is much more concentrated in Hillside’s regime. In fact, there are four “key players” in this regime—the city administrator, a city council member, the mayor, and the president of a local bank—who are highly central across at least four of the forms (see Table 5.5). These four individuals are in the position to potentially access, control, and mobilize more resources than others in the regime giving them greater power.

**Regimes as Bridging Social Capital**

Integrating Wilkinson’s model and regime theory is one way to demonstrate how a particular set of social relationships are a community resource. However, it is possible that a regime exists and only supports certain actions. In that case, it would be difficult to refer to the set of social relationships comprising the regime as “community social capital”. In the case of the two regime networks studied here, the analysis reveals that members of the regime were involved in all projects in Meadville and all but one in Hillside (see Table 5.6).

<table>
<thead>
<tr>
<th>Table 5.6. Involvement of regime members in projects</th>
</tr>
</thead>
<tbody>
<tr>
<td># Regime Members</td>
</tr>
<tr>
<td>Meadville Projects</td>
</tr>
<tr>
<td>1998 Ayr Days (n=22)</td>
</tr>
<tr>
<td>Family Resource Center (n=13)</td>
</tr>
<tr>
<td>Teen Center (n=17)</td>
</tr>
<tr>
<td>Walking/Bicycle Trail (n=18)</td>
</tr>
<tr>
<td>Beer Garden (n=7)</td>
</tr>
<tr>
<td>County Law Enforcement (n=13)</td>
</tr>
</tbody>
</table>

| Hillside Projects | |
| Highway Overpass (n=7) | 7 (100%) | Yes |
| Senior Center (n=11) | 0 (0%) | No |
| Wellness/Aquatic Center (n=15) | 7 (47%) | Yes |
| Business/Industrial Recruitment (n=5) | 2 (40%) | Yes |
| Community Foundation (n=10) | 3 (30%) | Yes |
| School Bond Issue (n=10) | 3 (30%) | Yes |
| City Land Annexation (n=11) | 6 (55%) | Yes |
In addition, the identified "point person" for each project was also a regime member in all but two projects (one in each community). As discussed in Chapter 3, the point person for a project is the individual or individuals who are considered to be the main leader or organizer for the project. This suggests that regime members have significant input into projects in both communities.

The structural qualities of the regime networks, however, indicate important differences between the two communities. Comparatively speaking, Meadville's regime is moderately dense, highly centralized in terms of influence (out-degree), moderately centralized in terms of accessibility (both in-closeness and out-closeness), and minimally centralized in terms of prominence (in-degree) or brokerage (betweenness). In addition, no small group of individuals dominates across all forms of centrality, indicating a relatively equal distribution of access to resources. In contrast, Hillside regime is highly dense and highly centralized in terms of influence and prominence (in- and out-degree), but less so in terms of accessibility or brokerage. There is also small group of four individuals with whom centrality is concentrated. Unlike Meadville's regime, access to and control of resources is fairly concentrated among a few individual in Hillside's regime.

As previously discussed, bridging social capital is important for accessing a wide variety of resources. By definition, the community regime exists to merge diverse resources and its structural features demonstrate each regime's potential capacity for such merging to be efficient or effective for purposes of community action. Table 5.7 summarizes the network qualities necessary to overcome Wilkinson's five problems of community action; the actual network of the two regimes are also listed.
Table 5.7. Regime Network Qualities in Meadville and Hillside

<table>
<thead>
<tr>
<th>Problem</th>
<th>Network Qualities Indicating Social Capital</th>
<th>Network Qualities Identified in Each Community</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meadville</td>
<td>Hillside</td>
</tr>
<tr>
<td>Awareness</td>
<td>High density</td>
<td>Moderate Density</td>
</tr>
<tr>
<td></td>
<td>Moderate to high out-degree</td>
<td><strong>High out-degree</strong></td>
</tr>
<tr>
<td></td>
<td>Low in-degree</td>
<td>Low in-degree</td>
</tr>
<tr>
<td></td>
<td>Low in-closeness</td>
<td>Moderate in-closeness</td>
</tr>
<tr>
<td></td>
<td>Low out-closeness</td>
<td>Moderate out-closeness</td>
</tr>
<tr>
<td></td>
<td>Low betweenness</td>
<td><strong>Low Betweenness</strong></td>
</tr>
<tr>
<td></td>
<td>Moderate Density</td>
<td>High Density</td>
</tr>
<tr>
<td></td>
<td>High out-degree</td>
<td>High out-degree</td>
</tr>
<tr>
<td></td>
<td>Moderate to high out-degree centralization</td>
<td>High out-degree</td>
</tr>
<tr>
<td></td>
<td>Low in-degree</td>
<td><strong>Low in-degree</strong></td>
</tr>
<tr>
<td></td>
<td>Low in-closeness</td>
<td>Moderate in-closeness</td>
</tr>
<tr>
<td></td>
<td>Low betweenness</td>
<td><strong>Low-betweenness</strong></td>
</tr>
<tr>
<td></td>
<td>Equal distribution of centrality</td>
<td>Concentrated centrality</td>
</tr>
<tr>
<td>Decision-making</td>
<td>High density</td>
<td>Moderate Density</td>
</tr>
<tr>
<td></td>
<td>Low in-degree</td>
<td>Low in-degree</td>
</tr>
<tr>
<td></td>
<td>Low in-closeness</td>
<td>Moderate in-closeness</td>
</tr>
<tr>
<td></td>
<td>Low betweenness</td>
<td><strong>Low-betweenness</strong></td>
</tr>
<tr>
<td></td>
<td>Equal distribution of centrality</td>
<td>Concentrated centrality</td>
</tr>
<tr>
<td>Resource</td>
<td>High density</td>
<td>Moderate Density</td>
</tr>
<tr>
<td>Mobilization</td>
<td>Low in-degree</td>
<td><strong>Low in-degree</strong></td>
</tr>
<tr>
<td></td>
<td>Low in-closeness</td>
<td>Moderate in-closeness</td>
</tr>
<tr>
<td></td>
<td>Moderate to high out-degree</td>
<td><strong>High out-degree</strong></td>
</tr>
<tr>
<td></td>
<td>Absence of cliques</td>
<td>No cliques</td>
</tr>
<tr>
<td></td>
<td>Moderate in-closeness</td>
<td>Low in-closeness</td>
</tr>
<tr>
<td></td>
<td>Moderate out-closeness</td>
<td>Low out-closeness</td>
</tr>
<tr>
<td></td>
<td>Low betweenness</td>
<td><strong>Low Betweenness</strong></td>
</tr>
<tr>
<td>Resource</td>
<td>High density</td>
<td>Moderate Density</td>
</tr>
<tr>
<td>Application</td>
<td>Moderate to high out-degree</td>
<td><strong>High out-degree</strong></td>
</tr>
<tr>
<td></td>
<td>Low in-closeness</td>
<td>Moderate in-closeness</td>
</tr>
<tr>
<td></td>
<td>Low out-closeness</td>
<td>Moderate out-closeness</td>
</tr>
<tr>
<td></td>
<td>Low betweenness</td>
<td><strong>Low Betweenness</strong></td>
</tr>
<tr>
<td></td>
<td>Moderate density</td>
<td>High Density</td>
</tr>
<tr>
<td></td>
<td><strong>High out-degree</strong></td>
<td>High out-degree</td>
</tr>
<tr>
<td></td>
<td>Moderate in-closeness</td>
<td>Low in-closeness</td>
</tr>
<tr>
<td></td>
<td>Moderate out-closeness</td>
<td>Low out-closeness</td>
</tr>
</tbody>
</table>
| Qualities listed in bold indicate consistency between the network qualities indicating the presence of bridging community social capital and the network qualities actually identified in the two regimes. Overall, there is considerable consistency between the network qualities indicating social capital and the qualities exhibited by two regimes. This suggests
that both regimes serve as a resource for overcoming the problems associated with community action. Accordingly, both communities are viewed as having bridging community social capital present. At the same time, however, differences between the regimes are noted.

The regime network in Meadville possessed most of the features believed to facilitate decision-making, whereas the regime network in Hillside had only two. On the other hand, the qualities of Hillside’s regime indicated a greater capacity for spreading awareness, resource mobilization, and resource application than did those for Meadville. They were fairly equal in the other three areas.

The strengths and weaknesses of each regime were often visible in the processes of project completion. The process of carrying out projects in Hillside often involved significant controversy. In fact, in five of the seven projects, there were identifiable, opposing sides. Additionally, many Hillside respondents identified competition and controversy as a part of the community’s character. Faced with such an environment, decision-making would be more difficult, and more likely to require persons to choose between competing sides. The fact that centrality is concentrated around fewer individuals in Hillside implies that such individuals hold positions of significant power and, accordingly, their wishes may override others. This, in fact, was observed during the completion of the aquatic center in where a couple of the more central regime members “took over” fundraising efforts when they believed the current group (the Swimming Pool Association, or SPA) in charge of fundraising was not collecting sufficient funds quickly enough. This led to hard

---

35 See Appendix C for a detailed discussion of each project.
feelings on the part of SPA members who felt their previous efforts were unappreciated, and difficulties in cooperation between the two groups.

A greater capacity for resource mobilization in Hillside was also observed. Hillside was able to mobilize significant financial resources to complete projects—four of the seven projects involved raising in excess of $1,000,000 (each) to complete. This was due partially to the regime’s willingness and ability to seek external sources of funding. Another factor was the presence of a couple of wealthy families in the area who were connected to a few regime members and were willing to contribute significant amounts of money to local projects. However, those resources likely were mobilized for several different projects because the highly dense and cohesive structure of the regime allowed unimpeded resource flow.

Controversy in Meadville was less frequent and avoided when it arose. While mild disagreements among residents occurred in several projects, opposing sides were readily identified in only one of the six projects. Decision making in Meadville involved appeasement of all interests rather than choosing between them. The dispersion of centrality among several individuals likely played a role in this—power was less concentrated when compared to Hillside, leaving no one or few individuals to unilaterally choose between options. In some ways, decision making was enhanced as many more options would be considered. However, when decision making involved tough choices and appeasement was not possible, the less centralized network structure in Meadville’s regime may be more of a burden than a benefit.

The processes observed in the completion of the family resource center and the walking and bicycle trail project provide an illustration of how concentration of centrality
can be both a benefit and burden to decision making. Completion of the family resource center involved merging several child-care providers into a single facility. Significant discussion occurred regarding possible funding sources, the administrative structure the center should take, its location in the community, and the role individual providers would play in the organization. Choices were made after a variety of options were considered, and as a result, the family resource center is considered a success in the community. Regime members were key in providing information for discussion, and because centrality was dispersed more options were available for consideration. A different scenario was observed for the walking and bicycle trail project. The goal of this project was to provide a walking and bicycle trail along an old rail line through town. Landowners adjacent to the rail line objected, and two sides formed—those for the trail and those against it. The absence of individuals holding sufficient power to choose between those sides resulted in the project’s demise. The trail was never completed.

Additionally, while Meadville successfully completed many projects, it was far less successful than Hillside when it came to mobilizing significant financial resources. This was particularly true when it came to procuring financial resources for projects with heavy involvement of the government sector. The fragmentation in Meadville’s regime may play a role in lessening its capacity to effectively merge resources across sectors.

Summary

The main purpose of this chapter was to investigate the potential for relational data and network analysis to be utilized to measure and analyze bridging community social capital. Regime networks of communities were used as an example case. More importantly, however, features of such networks that are likely to facilitate community action were
identified and compared to regime networks in two communities. The findings indicated that the features of the actual networks were highly consistent with the features expected to increase the capacity for community action. Thus, the social relations found in the regime networks could be considered a resource to the two communities, and as such, a form of community social capital.

From this chapter a few overall conclusions can be drawn. First, relational data can be used to measure social capital. While this analysis focused on a very specific type of social capital, and analyzed only a single network as a measure of it, there is nothing prohibiting the same types of methods and analysis to be applied to other forms of social capital and other types of networks. Relational data provides a direct measure of social relations, and through network analysis, structural features can be identified which are deemed important to the outcome of interest.

Second, the complexity of bridging community social capital was revealed. Conventional ways of conceptualizing and measuring social capital in terms of “presence or absence” or “more or less” focus too heavily on numbers or types of ties while ignoring important structural features. A large network may not indicate “more” social capital if ties are too dispersed or are structured in such a way that inhibits access to resources. In addition, the same network may possess qualities useful in some situations, but less so in others. Analysis of relational data reveals these complexities. For example, analysis of the two networks, both of which were the same size, showed that Meadville’s regime possessed features conducive to decision-making, but lacked those needed for resource mobilization. The reverse was found in Hillside. Those observations would not have been possible if conventional measures focusing on network size or proxy indicators were utilized.
Finally, the importance of grounding measurement of social capital in theory was validated. Theory is crucial for identifying the types of networks to study, the individuals or groups to be included as nodes, and the structural features that are of likely importance to the outcome of interest. As a method, network analysis will show the structural qualities of any social relations, and some interesting pictures of the network. But without theory to guide the initial measurement of social relations, little can be ascertained from the analysis. In this analysis, regime theory identified the specific set of social relationships to examine. Important structural features of those social relationships were identified based on their believed likelihood of overcoming various problems associated with community action (Wilkinson, 1970). Without regime theory and Wilkinson’s model as guides, the networks and analysis of them would have been difficult and quite possibly meaningless. Social capital as a concept is based on the notion that social relations are a resource to individuals, groups, communities, states, and so on. However, to accurately understand which relations matter and how particular structural qualities of those relations matter, the measurement and analysis must first be embedded in theory.
CHAPTER 6
CONCLUSION

In this chapter, a summary of the study will be presented, along with its theoretical and methodological contributions, some implications for community development, limitations, and needs for future research.

The purpose of this research was to examine community social capital and its relationship to community action. It proceeded in two parts—one theoretical and one methodological. In the theoretical component (Objectives 1 and 2), the complex history of social capital was traced and an argument was made that theory is needed to guide the use and measurement of social capital. Two theories—social resources theory and regime theory—were presented to guide efforts to "locate" forms of community social capital. Two forms of community social capital were identified—bonding and bridging—and their effects on citizen participation and community action were tested in two communities. Findings were mixed—more citizens participated in local projects where bonding community social capital was high, but since bridging social capital was identified in both communities, its effect on community action could not be empirically verified. However, it may be that presence of certain social relationships is less important than the nature and qualities of those relationships.

The second component was largely methodological, and examined relational data and network analysis as they relate to the measurement and analysis of social capital (Objective 3). A discussion of the relevance of network analysis to social capital was presented. The history of network analysis was traced and an introduction to relevant network measures was provided. A model of problems that must be addressed for community action to be
successful was presented (Wilkinson, 1970), and network qualities expected to indicate
capacity to overcome those problems were identified. Regime networks (serving as bridging
community social capital) were analyzed to examine the extent to which they possessed those
qualities. Both regime networks were found to possess most of the necessary qualities, but
strengths and weaknesses were observed. It was argued that utilizing network analysis to
examine relational data as a measure of social capital revealed important patterns in social
relationships that conventional measures of social capital often overlook.

Theoretical Contributions

The major theoretical contribution made by this dissertation is the argument for
grounding social capital in theory. As discussed, social capital has been utilized to explain a
wide variety of outcomes, and as such, has been operationalized in a wide variety of ways.
This has led to significant confusion and debate among scholars, with some contending that
the social capital may not be a viable concept in social research. Viewing social capital a
concept that must be grounded in theory simplifies things considerably. Theory provides a
basis for the types and qualities of networks that are important for a given outcome, and
outlines the conditions under which social capital should matter. Once theoretically defined,
the operationalization and measurement of social capital is much more clear. For example,
regime theory discussed how social networks among local actors with access to institutional
resources play a key role in the increasing a community’s capacity to act. The networks of
importance are those between actors holding institutional resources—thus, measurement of
this form of community social capital involves identifying those particular networks as
opposed to friendship or kinship networks that are also present in the community.
A second theoretical contribution of this research is the linking of regime theory and community social capital. Regime theory is generally applied in studies of community power structures, however its focus on a particular set of networks as a resource to community action is very much in line with the social capital concept. Although regime theory is still in the development stage, it has a great deal to add to discussions of community social capital and community action. Of particular interest is its focus on power as social production rather than social control. Power, when addressed in the context of social capital, is sometimes viewed as a form of social control, or “power over” others. That is especially evident in discussions of the potential downsides of social capital (Portes and Landolt, 1996) where networks constrain individual choices, or in research examining unequal distribution of resources (Schulman and Anderson, 1999). However, the “power to” act and accomplish goals is also important, and in some sense, is the foundation upon which the notion of social capital rests. Regime theory identifies a particular form of social network whose power is to access, coordinate, and mobilize resources toward action.

Finally, although the results, both in the tests of hypotheses and network analysis, do not conclusively support the role of bridging community social capital, what they do reveal is that social capital is a complex entity. As with most human behaviors, social relationships are not easy to define, explain, measure, or predict. Initially, social capital was conceptualized and measured in a “more is better” way. More connections or more trust or more resources were believed to result in better outcomes. And in many cases, this is likely true. In this research, more citizens participated in local projects where bonding community social capital was high—that is, in the presence of trusting and normative connections throughout the community. Emerging discussion about the negative features of social
capital, however, has led to recognition that social capital takes on different forms (e.g. bridging and bonding, horizontal and vertical, embedded and autonomous) which are important in different ways. This research adds to that by suggesting that each of those forms may also differ structurally. While there was variation in bonding social capital across the two communities, bridging community social capital was identified in both. However, the networks of that bridging social capital were structurally different yet, both had features supporting them as community social capital (as it relates to community action). I suspect that there will be very few communities that do not have some level of bonding or bridging social capital—the question for future research becomes one of identifying the structural elements of each that facilitate the outcome under study. Although not directly addressed in this study, it appears that strengths in a particular network can make up its weaknesses. For example, density is an indicator of the extent to which network nodes are connected—thus, higher density allows for easier information and resource flow as more people are connected to each other. However, information and resource flow may be possible in a less dense network if it is also less centralized in terms of direct and indirect ties—that is, if direct and indirect ties are spread fairly evenly among nodes.

**Methodological Contributions**

This dissertation also makes several methodological contributions. The most significant is the use of relational data and network analysis to directly examine community social capital. There is significant discussion in the literature supporting network analysis as an important method in social capital research, yet few have undertaken such a venture. This is particularly true in the case of community social capital. Networks are usually measured indirectly or simply by counting the number or types of ties one has. These measures are
aggregated, and where residents have more ties, or have a wider variety of ties, the community is said to have more social capital. However, these measures say little about the structural composition of those ties, or the structure of ties across community residents or groups. Nor will they allow for the identification of sub-groups or significant cleavages in the community, or for direct analysis of access to resources. Using a true network approach (i.e. with relational data as a measure of social capital) shows relationship patterns clearly and directly, and sub-groups are readily identifiable. And, as with this dissertation, the analysis of actual networks allows one to directly examine structural patterns that either facilitate or hinder mobilization of those resources.

A related contribution is the way the findings of this and other studies using network analysis can guide the development of new non-network measures of social capital. While examining actual relational networks is an exciting trajectory in social capital research, the collection of relational data is not feasible in many situations and conventional survey research methods are still needed and valuable. Insights about the nature and qualities of social relationships found through network analysis can provide input toward the development of new ways of measuring social capital. For example, in this research, the concentration of centrality was noted as a possible reason why Hillside may be less effective than Meadville in decision-making processes. The extent to which networks contain central or non-central individuals has not been included in traditional measures of social capital, yet it may be quite important. While centrality is generally a network measure, other non-network indicators of centrality could be developed and included in research using more conventional methods.
Another methodological contribution is the development of clear procedures for the identification of community regimes. To date, regimes have been identified differently from place to place with little discussion of methodology for doing so. Clear procedures for regime identification provide much needed empirical rigor, and allows for the possibility that regimes will not exist in some places.

Network analysis also advances the analysis of community regimes and makes possible better comparisons of regimes across localities. Most comparisons of regimes are based solely on the characteristics of regime members or the types of actions they pursue. Examining the structural features of regimes in addition to the characteristics of regime members will allow for a better understanding of how regimes operate and easier comparison of regimes in different places.

**Limitations**

There are several limitations of this study that need to be addressed. First, the small number of communities and the fact that they were purposively selected makes generalization of the results difficult. One hopes, however, that the patterns found in these two communities are not totally unique and the findings more widely applicable. Additionally, a small number of cases is somewhat of a necessity when directly examining social networks. Network analysis is not easily applied to a large number of cases, nor is computer software always able to handle large-sized networks. Further, collection of network data is costly in terms of both time and money. Because of this, comparisons across a large number of places are not often feasible. The trade-off, however, is a clearer picture of the structure of social relationships than traditional attribute data provide. As adequate procedures for sampling of relational data become more refined and more widely known,
network analysis will likely move beyond its traditional case study approach. This will allow for the study of more cases and a subsequent ability to generalize to a population (see Granovetter, 1976).

An additional limitation is the lack of attention to affective qualities such as norms and trust for ties in the regime network. While it is possible to examine affective qualities of network ties in the context of network analysis, data to do so was not collected. Given the focus on bridging social capital and emphasis on access to resources and the capacity to mobilize them, this is not a significant limitation, however it is possible that the affective qualities of the relationships have an impact. A related issue, however, is the lack of actual measures of resources held by nodes. Access to resources is assumed given the theoretical and operational definitions of regime members, however no direct confirmation of that access is attempted. While the resource of decision-making authority is clearly represented by the government sector of the regime, access to financial capital perhaps should not be assumed simply due to representation by the business sector.

Finally, while the procedures for identification of the regime network represent a significant improvement over the current lack of procedures, it is possible that the regime is an artifact of the projects studied. This raises the question of stability—whether the regime would look different if different projects had been selected for study. The use of a reputational indicator somewhat mitigates this—an individual would likely not have a longstanding reputation in the community for being able to successfully implement projects if he or she was involved only in a single project at one point in time. In some ways, this is an inherent problem in conducting cross-sectional network-based research. Some procedure has to be in place to identify network participants, and sometimes that procedure is very
closely related to the outcome of interest. Traditional random selection of participants is
generally not efficient or effective. In this research, networks of project participants were
identified to study the structure of social relationships surrounding the completion of
community projects. This can make difficult the separation of network structure and its effect
on community action, and raise questions about any discussion of causality. A different
approach would be to identify the network structure— in this case, of the regime— and then
examine the effects of that structure on future community action. In that sense, this
dissertation is just a first step.

Implications for Community Development

The idea that the structure of social relationships impact community outcomes is not
new. The extent of interaction patterns (Putnam, 1993) and the inclusive nature of leadership
structure (Sharp, 1998; 2001) have been found to have significant impact on a community’s
capacity to act collectively. In addition, the interactional field perspective argues that as
community development is an interactional process, strengthening the social interactions in
the community is crucial for successful development. Kretzmann and McKnight’s “asset-
building” approach to community development identifies social relationships as key in
building bridges between community groups and sectors (1993). This research built on that
tradition, and showed that the trusting and normative connections between a community’s
citizens was related to the number of citizens willing to participate in community projects.
Further, the presence of a network capable of mobilizing significant resources was identified
as a potential factor in the completion of community projects. An implication for community
development practices, then, is to promote social connections among residents and across
groups with access to diverse resources exist in the community. Successful development is less likely in their absence.

On the other hand, care must be taken to ensure that social capital, community or otherwise, is not viewed as "a panacea for the ills of modern society" (Wall, 1998, p.313), and assumed by practitioners to be able to make up for the absence of other resources.

Warren, Thompson, and Saegert (2001) note that increasing reliance on the self-help model of community development (see Christenson and Robinson, 1989) has led to an over-focus on social resources while ignoring the need for other, non-social resources, especially in poor communities. They note that: "social capital is not an alternative to providing greater financial resources and public services to poor communities. Rather, it constitutes an essential means to increase such resources and make more effective use of them" (p. 2).

Thus, a related implication is promoting the right mix of different forms of social capital. As Stone and Hughes argue:

...too much emphasis on 'bonding social capital' might not provide communities and their members with the resources required to be either self-reliant or self-determining, whereas 'bridging' or 'cross-cutting' ties are argued to open opportunities and enable access to greater and varied resources (2002, p. 73).

Development practitioners should be mindful of this, and ensure that adequate emphasis is placed on promoting bridging ties.

While much emphasis is placed on the key role of social relationships (more or fewer, presence or absence) in sustaining community development, little emphasis has been given to identifying structural features of those social relationships or assessing particular structures that facilitate or inhibit local development efforts. In this research, both Meadville and Hillside were found to have a network structure in place that should facilitate community
action. However, each network identified potential strengths and weaknesses—Meadville’s regime network shows greater capacity for decision-making, yet may be less effective in resource mobilization and spreading awareness. In Hillside, resource mobilization is a strength, but decision making may be more difficult. In terms of community development practice, constructing such a network allows a practitioner to identify such strengths and weaknesses, and to build on strengths and assist the community in overcoming weaknesses.

In a broader sense, Murdoch (2000) suggests that a network approach is the “new paradigm of rural development” (p. 407). He suggests that communities should be viewed in network terms, and their capacities toward action assessed in terms of local and extra-local network structures. He argues that ascertaining rural community’s positioning in an overall network structure of internal and external agencies and socio-economic structures sheds light on potential economic development activities likely to be successful. While network analysis was used on a smaller, intra-community scale in this research, it is not limited to such an approach. Network analysis is possible with any type of relational data. Relationships need not be between individuals, but can be between places and other places, places and agencies, agencies and firms, and any others. The benefit of such analysis is a clear picture of actual relationships. In this sense, a community’s place in the broader structural environment can be identified and implications of such positioning assessed.

Unanswered Questions and Future Research

Theoretical Issues

The link between community social capital and community action was explored in this dissertation, yet questions remain. Most importantly, is whether or not the presence of a community regime serving as bridging community social capital really makes a difference in
a community's ability to act. While the findings from the hypotheses tests were inconclusive, analysis of the regime networks identified characteristics of the two regimes likely to facilitate successful community action. I suspect future research will find that structure matters over presence—that is, a regime (or other bridging-like structure) likely exists in many places, but what makes a difference in terms of community action is the patterning of relationships among members.

Other questions have to do with the analysis of networks showing bridging community social capital. More research is needed to determine which network features are most important in facilitating community action. For example, density and out-degree were argued to facilitate the spread of awareness in community action. It is possible that one is more important than the other—or that neither matter, and a different network feature should be identified. It may be that certain network features matter under some circumstances, but not in others. The research conducted here was exploratory in nature, and meant to provide a start to a longer process of empirical validation. Much future research is needed to determine how structural features of social relations matter—similar studies in other places at other times and under different circumstances will help to address those issues and support (or refute) the findings presented here.

Finally, as with most studies of social capital, this research examined community social capital as an independent rather than a dependent variable. Social capital has been found to play a key role in a variety of outcomes, however little is known about the factors leading to its creation. Portes discusses a variety of “sources” of social capital (e.g. bounded solidarity, value introjection, enforceable trust, and reciprocity exchanges), yet little has been done to empirically validate these sources or identify others. Much more research is needed
in this area if building community social capital is to be part of a community development agenda.

**Measurement Issues—Validity and Reliability**

There are also questions regarding whether a network (regime or otherwise) constitutes an adequate measure of social capital—that is, whether relational data is both valid and reliable. Validity is a matter of whether or not the network reflects the particular construct it is intended to measure. Empirical assessments of the validity of relational data are few (Ferligoj and Hlebec, 1999), likely because network analysis is relatively new in many theoretical arenas, and is often used descriptively. However, some emerging discussion of network validity has occurred, mostly in studies of social support or friendship networks where survey research methods are utilized and a sufficient number of cases exist for testing purposes (see Ferligoj and Hlebec, 1999). Social capital is more complicated in that it can be identified in many different types of networks—connections between friends, kin, co-workers, community residents, community leaders, organizations, communities, and many others have all been identified as social capital. In this research steps were taken to ensure that the regime network was a valid measure of a community regime—theoretically informed procedures for regime identification were developed and followed. More research is needed, however, to adequately assess its validity as a measure.

The reliability of network data has received slightly more attention than validity. The main issue surrounding reliability of relational data is in respondent-recall and accuracy—that is, do respondents provide all ties that fit a given criteria when asked. Much of this research is grounded in Bernard, Killworth, and Sailer’s conclusion that “people do not
know, with any acceptable accuracy, to whom they talk over any given period of time” (1981, p. 15).

To increase reliability, several methods are possible. Traditional test-retest methods are possible, but limited for two reasons. First, depending on the network of interest, data collection can be costly in terms of time and money. Retesting requires replication of each network, which would effectively double those already high costs. A bigger issue is that the test-retest method assumes some degree of stability of relationships. While close, intimate connections are likely to be stable, many types of network ties are much more fluid and dynamic (Marsden, 1990). Thus, the test-retest method is only applicable to certain types of networks.

Another method to require reciprocation of nominations—that is, a relation is only assumed accurate when both nodes indicate its presence. Hammer, for example, found that when compared to actual observations, reciprocated nominations were more accurate than non-reciprocated nominations (1985). Many studies, however, have found that networks tend to significantly underestimate actual relationships when reciprocation is required (Alexander and Campbell, 1964; Laumann, 1969; Schulman, 1976; Hammer, 1984). In addition, rates of reciprocation are affected by network density, where higher rates are found in higher-density settings (Marsden, 1990). Finally, reciprocation is more likely in certain types of networks than in others. For example, friendship and kinship networks more accurately generate reciprocal relationships than do other types of networks (Sudman, 1985; Antonucci and Israel, 1986).

Yet another method of ensuring respondent accuracy is to provide multiple instances for recall (Ferligoj and Hlebec, 1999). Asking a series of questions about each nominee
provides the respondent with memory triggers that may result in additions or deletions of nominees and increase accuracy. This method was utilized in this research, and while no records were kept of the changes to initial nominations given, those changes often occurred. In this sense, the data likely provides a more reliable measure of the actual regime networks.

In sum, while the methods utilized in this research likely yielded both valid and reliable relational data, much empirical assessment is still needed. The use of relational data as a measure of community social capital is relatively new, and whether or not it holds up under empirical scrutiny remains to be seen.

**Conclusion**

In conclusion, the overall finding of this study is that community social capital is important, but complex. Community social capital is a term referring to relationships in a place-based community that serve as a resource to that community. However, communities are complex entities, comprised of a wide variety of individuals, groups, and institutions—all of which are interconnected. To adequately study the effects of community social capital, researchers must recognize this complexity and allow for it in their research design and measurement strategies. Regardless of its complexity, community social capital provides an exciting basis of study for those interested in the future of rural communities. Rural communities are renowned for the qualities of their social relationships. Recognizing the resource potential of those relationships allows focus to shift from the many things rural places often lack (e.g. financial capital, human capital) to the things that they are capable of accomplishing when working together.
APPENDIX A

RESIDENT SURVEY

(Comm Name) Iowa:
A Community Study

IOWA STATE UNIVERSITY
Ames, Iowa

June 1994-B
I. Place of Residence

The first set of questions is about where you now live and where you’ve lived in the past.

A. Where do you live? (Circle your answer.)

1. Within city limits ________
2. Outside city limits of (Comm Name), on a farm ________
3. Outside city limits of (Comm Name), not on a farm ________

B. How many miles do you live from (Comm Name)? ________ miles

C. What community other than (Comm Name) do you live closest to?

D. How many miles do you live from this community? ________ miles

E. Have you ever lived in or around (that is, on a farm or rural nonfarm) the following sized communities? (Circle your answers.)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>e.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>f.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

F. People have different reasons for living in a particular community. Circle the THREE MOST IMPORTANT reasons why you live in (Comm Name). (Circle three only.)

1. Grew up there
2. Close to relatives/in-laws
3. Friendliness of people
4. Close to job
5. Affordable housing
6. Scenic area
7. Safe area
8. Strong school system  
9. Medical services available  
10. Good leadership  
11. Low property taxes  
12. Can’t afford to leave  
13. Take care of aging relatives  
14. Other (Specify)  
15. Other (Specify)  

II. Community Services and Facilities  
A. Please rate the overall quality of services and facilities located in (Comm Name).  

<table>
<thead>
<tr>
<th></th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don’t Know</th>
<th>Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>_vg</td>
<td>_g</td>
<td>_f</td>
<td>_p</td>
<td>_</td>
<td>_na</td>
</tr>
<tr>
<td>a</td>
<td>Jobs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b</td>
<td>Medical services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c</td>
<td>Public schools</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d</td>
<td>Shopping facilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e</td>
<td>Adequate housing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f</td>
<td>Recreation/entertainment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g</td>
<td>Child care services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h</td>
<td>Senior citizen programs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i</td>
<td>Programs for youth</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
C. Do you stay MOSTLY IN YOUR HOME COMMUNITY to acquire the following services, or do you go MOSTLY OUTSIDE OF YOUR HOME COMMUNITY? Please circle the appropriate numbers for each of the services.

<table>
<thead>
<tr>
<th>Service</th>
<th>Mostly In Home Community</th>
<th>Mostly Outside Home Community</th>
<th>Do Not Use/Purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Primary health care</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Specialized health care</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Shopping for daily needs</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. Shopping for “big ticket” items</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. Recreation/entertainment</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f. Church</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

D. Please rate the following GOVERNMENT services available in (Comm Name).

<table>
<thead>
<tr>
<th>Government Services</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don't Know</th>
<th>Do Not Receive Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Police protection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>b. Condition of streets</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>c. Condition of parks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>d. Water</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>e. Fire protection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>f. Garbage collection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>g. Emergency response service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

E. How would you rate the overall quality of GOVERNMENT services in (Comm Name)?

1. Very good
2. Good
3. Fair
4. Poor
5. Don’t know
Here is a list of things people have said may pose a threat to the future of small communities. Please indicate if you feel each of the following DOESN'T THREATEN, SOMEWHAT THREATENS or SEVERELY THREATENS the future of (Comm Name).

<table>
<thead>
<tr>
<th></th>
<th>Doesn’t Threaten</th>
<th>Somewhat Threatens</th>
<th>Severely Threaten</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>no</em></td>
<td><em>so</em></td>
<td><em>se</em></td>
<td><em>se</em></td>
</tr>
<tr>
<td>a. Lack of jobs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Quality of schools</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Increase in crime</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Increase in the number of single parent families</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Loss of family farms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f. Closing of small businesses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>g. Indifference about the community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>h. Lack of leadership</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>i. Failure of people to work together</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>j. Loss of community spirit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>k. Increase in number of homes where both parents work outside the home</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>l. People moving out of the community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>m. People moving into the community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
III. Attitudes About Community

A. Rate (Comm Name) as a place to live by indicating whether you AGREE or DISAGREE with the following statements by circling the appropriate numbers.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Most everyone in (Comm Name) is allowed to contribute to local governmental affairs if they want to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Being a resident of (Comm Name) is like living with a group of close friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. When something needs to get done in (Comm Name), the whole community usually gets behind it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. If you do not look out for yourself, no one else in (Comm Name) will</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. I am trusted by the people in (Comm Name) who know me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Community clubs and organizations are interested in what is best for all residents</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g. Residents in (Comm Name) are receptive to new residents taking leadership positions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h. If I feel like just talking, I usually can find someone in (Comm Name) to talk to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i. If I had an emergency, even people I don't know would help out</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j. People living in (Comm Name) are willing to accept people from different racial and ethnic groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>k. I think that “every person for themselves” is a good description of how people in (Comm Name) act</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>l. Differences of opinion on public issues are avoided at all costs in (Comm Name)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
m. If I called a city office here with a complaint, I would likely get a quick response

n. Overall, (Comm Name) has more things going for it than other communities of similar size

B. About what proportion of the adults living in (Comm Name) would you say you know by name?

1. None or very few of them
2. Less than half of them
3. About half of them
4. Most of them
5. All of them

C. About what proportion of all your close personal adult friends live in (Comm Name)?

1. I really have no close personal friends
2. None of them live here
3. Less than one-half of them live here
4. About one-half of them live here
5. Most of them live here
6. All of them live here

D. About what proportion of your adult relatives and in-laws (other than very distantly related persons) live in (Comm Name)?

1. I have no living relatives or in-laws
2. None of them live here
3. Less than one-half of them live here
4. About one-half of them live here
5. Most of them live here
6. All of them live here
E. In general, do you prefer communities where people feel comfortable dropping in on each other without notice, or where they wait for an invitation before visiting, or where people pretty much go their own way with little contact with each other?

1. Drop in without notice
2. Wait for an invitation
3. Go their own way

F. What about (Comm Name)? Would you describe it as a community where people feel comfortable dropping in on each other without notice, or where they wait for an invitation before visiting, or where people pretty much go their own way with little contact with each other?

1. Drop in without notice
2. Wait for an invitation
3. Go their own way

G. Some people care a lot about feeling part of the community they live in. For others, the community is not so important. How important is it to you to feel part of the community?

1. Very important
2. Somewhat important
3. Little or no importance

H. During the past year, have you participated in any community improvement project in (Comm Name) such as a volunteer project or fund-raising effort?

1. Yes
2. No
3. Don’t know/Uncertain

I. In general, how would you describe your level of involvement in local community improvement activities and events?

1. Very active
2. Somewhat active
3. Not very active
4. Not at all active
J. How interested are you in knowing what goes on in (Comm Name)?

1. Very interested
2. Somewhat interested
3. Neither interested nor disinterested
4. Not interested

K. In general, would you say you feel “at home” in (Comm Name)?

1. Yes, definitely
2. Yes, somewhat
3. No, not much
4. No, definitely not

L. Suppose that for some reason you had to move away from (Comm Name)? How sorry or pleased would you be to leave?

1. Very sorry to leave
2. Somewhat sorry to leave
3. It wouldn’t make any difference one way or the other
4. Somewhat pleased to leave
5. Very pleased to leave

IV. Describing Your Community

A. Imagine a scale for each pair of words listed below. For the first pair, 1 on the scale indicates totally friendly and 7 indicates totally unfriendly. The numbers in between (2, 3, 4, 5 and 6) are degrees of friendliness. For each pair of words, please circle one number which best describes (Comm Name).

<table>
<thead>
<tr>
<th>.1</th>
<th>.2</th>
<th>.3</th>
<th>.4</th>
<th>.5</th>
<th>.6</th>
<th>.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Dangerous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Supportive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Exciting</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Prejudiced</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Rejecting of new ideas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Trusting</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Well-kent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

- Friendly
- Dangerous
- Supportive
- Exciting
- Prejudiced
- Rejecting of new ideas
- Trusting
- Well-kent

Unfriendly
Safe
Indifferent
Boring
Tolerant
Open to new ideas
Not trusting
Run down
V. Neighborhood

A. How many years have you lived in your present neighborhood? ________________ years

B. In the next set of questions, please indicate whether you AGREE or DISAGREE with each of the following statements about your NEIGHBORHOOD.

<table>
<thead>
<tr>
<th>Strongly Agree (sa)</th>
<th>Agree (a)</th>
<th>Undecided (u)</th>
<th>Disagree (d)</th>
<th>Strongly Disagree (sd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I can always count on my neighbors when I need help</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. I don't have time to visit with my neighbors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. My neighbors can always count on me when they need help</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Our neighborhood is closely knit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Compared to other sections of (Comm Name), my neighbors have more trust in each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

C. Suppose that for some reason you had to move from your NEIGHBORHOOD into another section of (Comm Name). How would you feel?

1. Very sorrow to leave
2. Somewhat sorrow to leave
3. Would make no difference one way or the other
4. Somewhat pleased to leave
5. Very pleased to leave
VI. Organization and Group Memberships

A. How involved are you in LOCAL groups and organizations, that is, those that hold meetings and activities in (Comm Name)? Please circle ‘1’ if you are not involved with a particular type of group. If you do belong to any of the organizations in a category, please circle the number that indicates your level of attendance.

<table>
<thead>
<tr>
<th>Category</th>
<th>Do Not Belong</th>
<th>Never</th>
<th>1-5 Times A Year</th>
<th>6-10 Times A Year</th>
<th>Once A Month</th>
<th>Weekly or More</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Service and fraternal organizations (such as Lions, Kiwanis, Eastern Star)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>b. Recreational groups (softball, bowling, card clubs)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>c. Political and civic groups (PTA, PEO, historical groups, local development organizations)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>d. Job-related organizations (labor unions, professional associations)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>e. Church-related groups (church committees, Bible study groups)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>f. All other groups and organizations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

B. Considering ALL of the types of groups and organizations listed above, about how many LOCAL groups in total do you belong to?

__________________ groups/organizations

C. About how many organizations that hold meetings OUTSIDE of (Comm Name) do you belong to?

__________________ groups/organizations

D. Considering your TOTAL involvement with organizations, would you say you are more involved with LOCAL ones or those OUTSIDE of (Comm Name)?

1. More involved locally
2. More involved outside community
3. About the same
4. Don’t belong to any
VII. Background Questions

Finally, we need to ask a few questions about your background and past experiences. This information, as with all information provided in this survey, will be used for statistical analysis only and will remain strictly confidential.

A. Your age (as of last birthday)? ____________ years

B. Your sex?

1. Male
2. Female

C. What is your current marital status?

1. Married
2. Divorced/Separated
3. Never married
4. Widowed

D. How long have you lived in the (Comm Name) area? _________ years

E. Have you ever lived elsewhere?

1. Yes
2. No

F. Do you own or rent your current residence?

1. Own
2. Rent
3. Have some other arrangement

G. How many people, including yourself, live in your household? ________________ persons
H. How many of the people living in your household are under 18 years of age? (Write in "0" if none)

___________ persons

I. Your highest level of formal education attained?

1. Less than 9th grade
2. 9th to 12 grade, no diploma
3. High school graduate (includes equivalency)
4. Some college, no degree
5. Associate degree
6. Bachelors degree
7. Graduate or professional degree

J. Your present employment status?

1. Employed or self-employed on a full-time basis
2. Employed or self-employed on a part-time basis
3. Retired
4. Full-time homemaker
5. Student
6. Unemployed

Overall satisfaction with your present employment situation (circle your answer)

1. Very satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very dissatisfied
K. What is your spouse’s present employment status?

1. Employed or self-employed on a full-time basis
2. Employed or self-employed on a part-time basis
3. Retired
4. Full-time homemaker
5. Student
6. Unemployed

Please list his/her primary occupation

Occupation ____________________________
Community where employed ____________
Miles traveled to work (one-way) ____ miles

L. What was your approximate gross household income from all sources, before taxes, for 1993?

1. $9,999 or less
2. $10,000-19,999
3. $20,000-29,999
4. $30,000-39,999
5. $40,000-49,999
6. $50,000-59,999
7. $60,000-74,999
8. $75,000 or more
Hello, my name is ____________________. I'm a member of the Iowa State University Research Team you may have read about in the Journal-Herald. The research I am involved in is being conducted to help us better understand the role of citizen participation in Iowa’s rural communities. It’s part of a larger university program called Iowa’s Rural Development Initiative that began back in 1994 when one rural community from each of Iowa’s 99 counties was chosen to participate in a study. Hillside was chosen from Summit County. Perhaps you remember the survey conducted through your county extension office? That was the beginning of the Rural Development Initiative.

This year, with funding from the United States Department of Agriculture, we’ve chosen three of the original 99 communities to visit and find out more about recent community projects or events. We are talking to several people like yourself to better understand who participates in community projects, why they get involved, and what happens as a result of their involvement. Eventually, we hope the lessons you and others have learned will be shared with communities throughout the state through cooperative extension.

All the information you and others provide will be strictly confidential. We ask your permission to tape our discussion for the simple reason of accuracy. However, none of what you say will be published or used in any form which would identify you as the source, nor will the names of individuals be mentioned in our findings. Of course, all tapes will be destroyed once they have been transcribed.

Depending on your level of involvement in Hillside projects, this interview should take about an hour.

Are there any questions you would like to ask before I begin?

Then let's begin.
1. What do you like best about living in Hillside? Why?

2. What do you like least about living in Hillside? Why?

3. Thinking back, what do you feel are the three most important things that have happened over the past 3 years or are currently happening that make Hillside a better place to live?
   1. ________________________________
   2. ________________________________
   3. ________________________________

4. Looking ahead to the next 3 years, what do you think are the three most important things that need to be done to make Hillside a better place to live?
   1. ________________________________
   2. ________________________________
   3. ________________________________
5. Based on a few prior interviews and on information found in the Journal Herald, these issues and events seem to have received widespread attention over the past 3 years. (HAND RESPONDENT CARD A). Please identify which of these issues or events you have been actively involved in at any time over the past 3 years. By “actively involved”, I’m referring to situations where you would be recognized by other community members as someone who either supported or opposed the project by your actions or deeds.

6. IF RESPONDENT INDICATED MORE THAN 3 ISSUES: Of the issues you mentioned, which 3 would you say you were most involved in?

1. __________________________

2. __________________________

3. __________________________
7. Describe how ISSUE became a community issue. OPTIONAL FOR LATER INTERVIEWS.

8. As you recall, what individuals initiated or first became involved with this issue? (PUT THESE NAMES ON MASTER NOMINATION LIST):

9. What organizations first became involved with this issue?

Now we want to find out more about ISSUE as it has evolved over time. For the next questions, please consider the entire duration of this issue’s existence.

10. Which of the following best represents how ISSUE was handled in the community? (SHOW RESPONDENT CARD B)
   1. There was consensus from the beginning. GO TO 11
   2. There were many points of view expressed. ASK 10b
   3. There were two clearly defined sides that were in opposition. ASK 10b

10b. Were the differences ever resolved? If so, which ones and how were they resolved?

USE CARD C FOR THE NEXT TWO QUESTIONS
11. On a scale from 1 to 10, rate the extent you think all information about ISSUE has been openly exchanged among Hillside residents and groups. Use 1 to indicate very restricted exchange and 10 to indicate completely open exchange with numbers in between representing degrees of restricted or open exchange. ____________

12. Using the same scale, rate the amount of community-wide involvement that has existed with this issue. In this case, use 1 to indicate virtually no community-wide involvement was evident and 10 to indicate total community-wide involvement. ____________

13. Did ISSUE or might ISSUE impact any city elections? Y  N  DK

14. Did most of the discussion about ISSUE take place informally rather than in more formal settings? Y  N  DK

15. Have there been any permanent divisions in Hillside as a result of ISSUE? Y  N  DK

16. Did the Journal Herald cover this issue? IF NO, GO TO 17 Y  N  DK

16a. Which one of the following (SHOW CARD D) best describes the role of the local newspaper in this issue?

1. It reported all sides of ISSUE
2. It reported only one side of ISSUE
3. There was only one side to ISSUE
Now, we want to discuss your involvement with ISSUE.

17. Why did you first become involved with ISSUE?

17a. Were there any job related or organizational commitments that led to your involvement? If so, what were these commitments?

18. Please describe your involvement with ISSUE.

19. Who, if anyone, helped get you involved? NAMES GO ON MASTER LIST

19a. Were any of these people not actively involved? IF YES, CROSS THEM OFF MASTER LIST WITH A SINGLE LINE.

20. Who did you help get involved? NAMES GO ON MASTER LIST

21. As you recall, besides yourself and others you’ve already mentioned, who else from in or around Hillside has been actively involved in ISSUE? I am wondering about those who may have either supported or opposed the issue, and whose actions would be recognized by others who have been involved in this issue. (NAMES GO ON MASTER LIST)

AT THIS TIME, HAND RESPONDENT THE MASTER LIST.

22. Overall you’ve mentioned the people on this list as being actively involved in ISSUE. Are there any others you have not mentioned? If so, could you please write their names on this list?
Now, I am going to ask you a few questions about the individuals on this list. Would you please circle the “Y” in the box corresponding to the appropriate response to the following questions.

23. Of these individuals, who have you had the most contact with concerning ISSUE?

24. Of these individuals and including yourself, which one or ones had the greatest influence on the decisions made concerning ISSUE?

25. Who, if any, opposed the issue?

26. With which, if any, of these individuals have you had close business or professional contact? By “professional or business contact” I mean those with whom you frequently communicate concerning business or professional matters.

27. Do you or have you over the past 3 years served on the same board of directors with any of these individuals?

28. If yes, which board(s) did both of you serve on?

END OF USING MASTER LIST!!!!!!!

29. We’ve been discussing individuals from in and around Hillside who were actively involved with ISSUE. Did others not from this area also play an active role?

1. Yes – GO TO 30
2. No – GO TO 31

30. We would like to know who they were and the nature of their involvement with ISSUE.
31. Do you have anything to add about ISSUE that we haven’t yet discussed?

IF THE ISSUE IS APPROPRIATE, GO TO THE NEXT PAGE. IF NOT, SKIP TO EITHER TO NEXT ISSUE (if appropriate), OR QUESTION 32

32. So far, we have limited discussion to the last 3 years. Can you think of any significant issue(s) or event(s) throughout the history of Hillside which have had substantial impact on the community?
33. If I wanted to know more about the history of Hillside, who would be good to talk to?

GO TO FRIENDSHIP QUESTIONS
40. Which of the following best describes how important community decisions are normally made in Hillside? (SHOW RESPONDENT CARD E)

1. Hillside is pretty much run by one group of citizens whose influence spans across almost every important community decision.

2. Hillside consists of several different small groups of citizens whose influence varies depending on the public issue under consideration

3. Hillside has no small group or groups that consistently influence community decisions. In other words, decision making in Hillside is widespread among many different citizens.

The following questions will ask you to identify certain individuals in the community. We would like to know their name, occupation, and gender. If the individual is retired, please list their previous occupation.

41. Who are the four people in Hillside most effective in implementing community projects? [THE DOERS IN THE COMMUNITY]

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>F</td>
</tr>
</tbody>
</table>
42. Who would you say are the four individuals most effective in representing the community of Hillside to the outside? [AMBASSADOR TO THE OUTSIDE]

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>M</td>
</tr>
</tbody>
</table>

43. If a project was before Hillside, please list up to five people whose support would be essential for the project to succeed. [THOSE WHO GIVE THE PROJECT LEGITIMACY]

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>M</td>
</tr>
</tbody>
</table>

44. Who are the three people most effective in stopping projects?

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>M</td>
</tr>
</tbody>
</table>
45. Would you like a report of the results of this study? **If yes, please write your name, address, and phone number below.**

____________________

____________________

____________________

That concludes our questions. Thank you very much for your time. We want to let you know that we may be contacting you again for another component of our research. We will be providing the results of our research in the form of a community presentation sometime in the future.
APPENDIX C

DESCRIPTION OF COMMUNITY PROJECTS

Meadville Projects

1998 Ayr Days. Ayr Days is an ongoing annual celebration for Meadville. It was started in the 1980's as a way to provide something positive and uplifting in the midst of the farm crisis which was very difficult for the community. Today, it celebrates the Scottish heritage in the community thanks in part to the work done by the local historical society. They bring in bag pipers, have a Scottish tea, a golf tournament, a parade, numerous food stands, and a dance in the evenings all as part of the celebration.

Family Resource Center. The family resource center was created to provide centralized daycare in Meadville. Discussion about creating a single, comprehensive child care organization began in the late 1980's. Many of the current day care facilities and preschools in Meadville were deemed insufficient for child care (i.e. not handicapped accessible, had no way to separate kids by age, etc.). In addition, services were duplicated throughout the community (i.e. several daycares serving the same aged kids, having similar programs, all paying separate bills, etc.) A group formed with the goal of merging the child care centers and preschools into a single entity and house them all in a single building that would account for all the various child care needs (daycare, preschool, Head Start, special needs programs, etc.) and lessen perceived inefficiencies due to duplication of services. Activities for this project involved seeking funding through loans and grants, many of which were approved. The school superintendent and elementary school principal were both instrumental in helping the center apply for and receive grants, and the center has a contract
with the school to provide their maintenance and cleaning, thus the Family Resource Center is closely linked with the school. City officials became involved when the center wanted to apply for a CDBG grant. Today the center is up and running and is viewed as a success in the community. It is overseen by a local board of directors, who were continuing to merge family services—at last contact, they were seeking an Empowerment grant to bring together preschool and Parents as Teachers services for the whole county.

**Teen Center.** The teen center was initiated to address concerns about the lack of appropriate local activities for youth in Meadville. The catalyst for the project was the alcohol-related death of a high school boy. After his death, a survey completed through PAWS (Positive Assets Works Program) identified a lack of entertainment options for teens as a significant problem. In addition, the survey revealed that the youth in the community felt ignored and that they had no voice in the community. As a result, the idea of a teen center emerged. This center was to be created and managed by local teens under the supervision of a board of directors comprised of teens and adults, and by one paid staff member to handle the financial end of it. The project itself involved selecting a site, renovating and remodeling that site, determining availability and funding for the project, and choosing various activities that would take place there. A local doctor and his wife donated a building to house the teen center. Local citizens volunteered time and labor, equipment, and supplies (*i.e.* carpentry, plumbing, painting, flooring, etc.) to help renovate the building. Some individuals from outside the community also contributed with financial support or labor. Grants were applied for and received and local people donated funding to support the teen center. While in the organizing and building stage during our interviews, the teen center has since been finished and is in use. Long-term duration and success of the center will not
be known for awhile, however a recent article in the Des Moines Register (2002) indicated that the teen center was still considered successful by community residents.

**Bicycle/Walking Trail.** The bike trail project emerged out of a locally led effort to reclaim a long since abandoned railway corridor through town for multi-use recreational purposes. Although a local historic preservation group had proposed the idea many years earlier to the city, the idea didn’t really crystallize until representatives of county government were drawn into the issue in 1998. Key to their support was knowledge of applicable state and federal grants the community was eligible to receive for the project. Despite some institutional support, landowners adjacent to the abandoned right-of-way objected to the proposal and publicly voiced their opposition to the route that would cut through their backyards.

Part of the controversy involved establishing rightful ownership of the right-of-way. As part of a package deal to entice the railroad into the community so many years ago, the city had agreed to offer the company an incentive to serve the community by offering them use of a right-of-way until such use was no longer needed. When the railroad abandoned the line in 1973, confusion arose over rightful ownership of the right-of-way property. In at least one case, the railroad sold a deed to an adjacent property owner, despite no legal entitlement to do so having been granted only an easement, not outright ownership. In most cases, though, adjacent landowners simply adopted the land as their own and made minor improvements by building a shed or two on the property. Such actions were not challenged until the 1990s when the bike trail project was proposed and murmurs of land reclamation were heard emanating from city hall.
With the grant deadline looming, proponents garnered the support of county supervisors who promptly committed funds to a preliminary technical investigation of the route. However, the city council took a more tentative approach by choosing to gauge the public reaction to the proposal before announcing its position. This was done by sponsoring a town meeting where results of the feasibility study were publicized, as well as an informal survey issued to adjacent landowners. After collecting feedback from Meadville residents, the city council made a decision to table the project, making no subsequent effort to address the controversial project.

**Beer Garden, 1999 Ayr Days.** The Beer Garden project (controversy) began as a fundraising effort for the 1999 Ayr Days celebration. The Chamber of Commerce had decided to hire a well known band to play at a street dance held during Ayr Days. The Chamber planned for a beer garden at the dance, with proceeds going to pay the cost of having the band ($3,700). The beer garden plan became controversial as some citizens did not want an alcohol related event at Ayr Days. It was thought to set a bad example for the youth and would also limit youth participation in the dance. The debate became bitter, ending in the resignation of the president of the Chamber of Commerce. Finally, to resolve this conflict, local citizens donated enough money to cover the cost of the band eliminating the need for the beer garden.

**County-wide Law Enforcement.** This project involved discussion and planning among city and county residents and officials regarding the possibility of the community giving up its police force and allowing the county to provide law enforcement coverage in its place. The city would provide money to the county with an agreement that certain hours and amounts of coverage would occur within the city limits. The county sheriff’s department
would be the agency responsible for planning, hiring officers, and providing training and equipment. They would also have authority over law enforcement within the city and county.

This discussion was largely due to difficulties Meadville was having in retaining people to serve as officers and in having money to provide the mandated training necessary for new hires. It was thought among many that county-wide law enforcement would be a more financially efficient method of providing protection to the city's residents. There was some dissention, though, as many did not wish to give up city control over the actions of law enforcement officers. Some argued that the main goal of discussing county-wide law enforcement was actually to remove the current police chief from his position rather than to save money, although not many revealed this sentiment. Although still in the discussion stages during our time in the community, countywide law enforcement is now a reality for Meadville. Their sole officer resigned leaving them without protection and with little choice but to switch to the county wide plan.

**Hillside Projects**

**Highway 30 Overpass.** This project involved coordinating local, state, and private funds to build an overpass that would go over the rail lines which previously crossed Highway 30 in Hillside. Along with safety issues, Hillside residents were frustrated about long waits at the tracks when trains were running. When Union Pacific decided to build a double track in this area, concerns were raised that the problems associated with train traffic would only worsen. Thus, efforts to build an overpass were initiated. This project involved the financial contributions of three entities: the DOT, Union Pacific Railroad, and the city of Hillside. Each contributed roughly one-third of the cost of building the overpass. The
overpass was a highly wanted and valued project in the community, and one of the few that did not generate local dissention. Interestingly, when asked to name things that made Hillside a better place to live, a high majority of respondents named the overpass—many times it was first on their list.

**Rand Center.** The Rand Center was initially conceived of as a senior center, but was built as a community center. Prior to the building of the Rand Center, the senior center was in the basement of the Baptist church in Hillside. This was bothersome to some as they didn’t feel comfortable going to this church and the site was too small to efficiently handle serving the meals. Thus, efforts began to find a new location for the center. Land was acquired from the city and from the railroad, and a local citizen with fundraising knowledge assisted in obtaining funding for building the center. Although primarily used for senior citizen activities, the Rand Center is a community center and can be used for community activities, wedding receptions, family reunions, etc. There was some controversy in the community over the best location for the center. Accessibility to seniors (i.e. location in or near downtown) had to be balanced with the higher cost of locating the center in this area.

**Hillside Community Foundation.** The brainchild of a relative newcomer to the community, the non-profit Foundation was established in 1998 to raise money for community projects by soliciting donations and assets from area residents. The idea was to stop the flow of local dollars into a nearby metropolitan area that had such a foundation, but one that funneled money out of the area and into another state. By setting up a non-profit Foundation in Hillside, residents could keep local money local while planning to finance development projects.
The Foundation is comprised of both solicited members and an appointed board; it is structured to be a kind of umbrella financial organization that coordinates with committees overseeing specific community projects. With its grant writing team, the Foundation is in a position to assist community development efforts in seeking outside funding sources. The need for a Foundation in the community became apparent during an effort to replace an aging swimming pool, which needed sponsorship from a non-profit organization to not only qualify for grants, but to handle donations for tax purposes. However, as a direct result of its close affiliation with the swimming pool/wellness center project, residents tend to associate its establishment with the wellness project whereas the Foundation was established with a broader purpose in mind, namely, to provide financial support for a variety of community development projects.

**City Land Annexation.** Annexation of land has been an on-going issue in Hillside as the city seeks to grow in population and increase tax revenue. Because of the topography of land surrounding Hillside, growth can only occur in certain areas. The city successfully annexed land to expand the city limits to the west, but also wanted to annex land to the north and east. Their preference was a newer housing addition in the hills to the north, which was predicted to continue growing as families moved there from a nearby metropolitan area. However, current residents in this area were strongly opposed to becoming city residents. They did not want to live under the city’s rules and regulations nor did they want their property taxes to increase substantially which they believed would occur if annexed. In addition, these residents did not believe that the city could adequately provide the promised

---

36 Hillside is located at the base of the Loess Hills, and only a couple miles from the Missouri River. As such, all land to the west and of the current city limits is in a flood plain and not suitable for development.
services (water, sewer, fire, police, streets, etc.) in exchange for the increased tax expense. Although this group never officially organized, they were very vocal and even hired legal counsel to represent their interests. As a result of this opposition, the city chose to first pursue annexation of land to the east. There was some opposition there as well, however it was not as strong (or at least as vocal), and was expected to be a simpler process.

**Wellness/Aquatic Center.** The project, originally known as the new municipal swimming pool project, evolved in the mid-1990s from grassroots efforts of the Swimming Pool Association (SPA). In 1997/8, the Hillside Community Foundation offered to help the SPA write grant proposals and manage pool finances. In late 1998, a steering committee was formed for the wellness center to review the business plan and publicize a local fund drive. Fundraising goals were set and most were met. Construction was due to begin in late summer, 1999. There was some controversy over this project. Some citizens felt like the old pool should have been fixed rather than torn out in favor of a new one. Others felt there wasn’t need for a pool at all given the high cost of either repairing or building new. In addition, when the Foundation became involved, strained relations developed between the individuals involved in SPA and those on the newly formed steering committee. This was due to feelings on the part of some SPA leaders that their initial work to finance the pool was unappreciated and even ridiculed by the Foundation and the new steering committee.

**School Bond.** The school bond was initiated when a need to add a new addition onto the school was identified. In the past, numerous repairs and additions had been done at significant cost to the school. The school board hired an architect to examine whether it would be more cost effective to continue the repairs or build a new school. A structural engineer from the state department of education examined the primary and middle school
buildings and all but condemned both of them. As a result, the school board chose to build new additions onto the elementary and high school buildings requiring a bond issue to raise money. Public meetings were held to provide citizens with information and a chance to ask questions. Some controversy arose as some people did not trust the findings of the structural engineer, and others felt the community should repair the schools rather than build new additions. However, due to proactive efforts by the school board to communicate with voters, the bond issue passed its first time out. A 60% majority is required to pass a bond issue; 62% and 63% positive votes were obtained on both parts of the bond issue.

**Business and Industrial Recruitment.** An ongoing effort toward business and industrial recruitment developed from a perceived need to boost the economic conditions in the community by making improvement in that sector. The recruitment vision is to create more jobs and on a related note, increase the local population by attracting more people. Organizations chiefly involved in recruitment efforts include the community Chamber of Commerce, City offices, and the County Economic Development Corporation. Unfortunate for the success of recruitment efforts, these organizations have had little success cooperating. Moreover, as long as the local Chamber is involved, a conflict of interests may crop up as well. Local support for incoming businesses can rankle Chamber members who may be faced with new competition while potentially financing (through increased taxes) that competition through city promises to provide some incentives, like free water or sewer, for example.

In addition to this problem, some residents suspect that the County Economic Development Corporation is out to serve the interests of communities other than Hillside, making for an uneasy alliance. With such a mixed bag of competing interests, the
recruitment issue is facing a number of challenges posed by the resulting inter- and intra-community controversy.
REFERENCES


