

ABSTRACT

JICHA, KARL ARMSTRONG. Individual-Level Predictors of Social Capital and Participation in Collective Action on the Island of Carriacou, Grenada. (Under the direction of Dr. Robert L. Moxley and Dr. Edward L. Kick.)

Communities, particularly those in developing regions of the world, are increasingly being called upon to accept much of the responsibility for addressing the economic and social well-being of their respective populations (Krishna 2002). The capacity of communities to act on their own behalf relies heavily upon their ability to enlist and coordinate the participation of individual citizens. This has led to a renewed interest among scholars in the factors that influence participation in collective civic action. In the process, many social scientists have turned to the concept of social capital as a viable means of enhancing collective community action efforts. This dissertation presents the findings of a case study examining the relationship between social capital and individual participation in collective action events on a Caribbean island recovering from the devastation inflicted by Hurricanes Ivan and Emily in 2004-2005.

Using data drawn from 114 residential surveys on Carriacou, Grenada, over the summer of 2006, this study empirically tests social capital as a predictor of individual participation in purely “civic” forms of collective action. These events are non-contentious efforts to address community goals based on cooperation and consensus-based approaches. In order to better understand the processes through which social capital enhances civic engagement, this study also examines factors that contribute to variability in the multiple dimensions of social capital, namely associational membership, interpersonal trust, and reciprocity (Putnam 1993, 1995, 2000).

The findings indicate that associational membership and age have the strongest total effects on participation in collective action, while the respondent's gender (male) and interpersonal trust are also significant predictors. The analyses of the multiple dimensions of social capital indicate that variability in associational membership is accounted for primarily by the respondent perceptions of the effectiveness of community organizations, their willingness to discuss community concerns with others, and ties to the community. Predictors of interpersonal trust include norms of reciprocity and confidence in central government performance. Those for norms of reciprocity include gender, confidence in central government performance, the frequency of church attendance, associational membership, and ties to the community. Educational attainment is the one predictor that is shared across all three dimensions of social capital. Interestingly, the results of this study reveal that there is not a significant relationship between associational membership and interpersonal trust in the multivariate analysis, suggesting that these two dimensions of social capital may have independent, yet complementary influences on participation in collective action.

This study sheds light on factors influencing individual participation in purely "civic" forms of collective action in a developing region of the world, while contributing to the understanding of the processes through which social capital is formed. To address another limitation in the social capital literature, this dissertation provides measures that are applicable to developing settings rather than using generalized measures constructed from studies in developed countries.

Individual-Level Predictors of Social Capital and Participation in Collective Action on the
Island of Carriacou, Grenada

by
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BIOGRAPHY

Karl A. Jicha was born on April 27, 1971 in Chapel Hill, North Carolina. His parents are Dr. Donald C. Jicha, a distinguished Chemistry professor (retired) at the University of North Carolina at Chapel Hill, and Miriam E. Jicha, an instructional designer (retired) who worked for both Duke University and the University of North Carolina at Chapel Hill. He spent the first 28 years of his life in Chapel Hill before moving to Denver, Colorado, where he lived for two years before moving back to North Carolina where he currently resides with his wife, Candice M. Jicha, daughter Camille C. Jicha, and their three dogs, Sidney, Spike and Cooper. He also has one brother, Colonel Gregory R. Jicha (U.S. Army).

After graduating from Chapel Hill Sr. High in 1989, Karl attended the University of North Carolina at Chapel Hill for his undergraduate degree in Psychology. He graduated with a Bachelor of Arts in December 1993 and worked as a bar manager in Chapel Hill prior to moving to Colorado. After attending graduate school in the Department of Anthropology at the University of Colorado at Denver for one year, he moved back to North Carolina and was accepted as a graduate student in the Department of Sociology and Anthropology at North Carolina State University in 2001. He received a Masters of Science degree in 2003 with a graduate minor in Anthropology. His master's thesis focused on the prevalence of childhood abuse and adverse outcomes among involuntarily hospitalized persons with severe mental illness. Dr. Virginia M. Aldige served as his committee chair.

After receiving his master's degree, he began to focus on the adoption and diffusion of technology and community well-being among rural populations and developing regions of

the world. He was co-advised by Drs. Robert L. Moxley and Ronald C. Wimberley. His doctoral research, under the direction of Drs. Robert L. Moxley, Ronald C. Wimberley, and Edward L. Kick, focused on social capital and participation in collective action on the island of Carriacou, Grenada. The study focused on community-driven efforts to address social and economic development goals on the island. After graduation, he plans to pursue a career as a college professor where he will have the opportunity to expand upon both his teaching and research interests.

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CHAPTER 1

INTRODUCTION

Over the past two decades, communities in both developed and developing countries have become increasingly responsible for addressing many of their economic and social development needs (Chaskin 2001; Krishna 2002). Instances that require community action may arise out of necessity, such as in response to a natural disaster, public safety concerns, or for the purpose of addressing poverty and economic development. On other occasions, the need for citizen participation may materialize in more commonplace events such as school fundraisers or community improvement projects that tend to less pressing community objectives. A community's ability to respond in either instance, referred to as "community capacity," is partly shaped by its level of development, control over resources, and other infrastructural factors (Tilly 1973).¹ At the same time, the ability to act is also influenced by the willingness of individual citizens to participate in local affairs (Putnam 2000). The challenge of coordinating the involvement of individuals for the good of the collectivity, referred to as the "collective action problem," has led to perhaps the most enduring question in the social sciences, "What influences individuals to act for collective goals?"² This

¹ Community capacity is the "interaction of human capital, organizational resources, and social capital existing within a given community that can be leveraged to solve collective problems and improve and maintain the well-being of that community" (Chaskin 2001: 295).

² The best possible scenario occurs when every individual cooperates and participates equally (Putnam 2000). However, an individual benefits the most if he/she elects not to participate and to rely upon the efforts of others instead, referred to as the "free-rider problem" (Olson 1965). The "collective action problem" results when too many individuals free ride, believing that others will do all of the work, and everyone ends up worse off than they would have if they had all cooperated and contributed (Olson 1965; Putnam 2000).

question serves as the basis of this dissertation, which examines factors that influence individual participation in non-contentious forms of collective action on the island of Carriacou, the largest of the Grenadine Islands in the southern Caribbean.

In sociology, the collective action literature has traditionally focused on goal-oriented social movements and protests that challenge existing systems (Sampson et al. 2005). Since the 1980s social science theory related to collective action has seen significant refinement as the specific conditions under which citizens participate and the outcomes associated with such forms of civic engagement have drawn considerable attention from scholars and policy-makers (Lelieveldt 2004; Lyson and Tolbert 2003; Putnam 1993, 2000; Putnam and Feldstein 1999; Roberts 2004; Sharp et al. 2002). This interest in the antecedents of civic engagement has provided the opportunity to include less visible goal-oriented events that do not involve disruptive protests, long the focus of the sociological literature (McAdam et al. 2005). These consist of cooperative, and often routine, efforts to address community concerns such as those mentioned in the opening paragraph.

One of the driving forces behind the shift in collective action inquiry is the growing reliance upon communities to address their own needs in development research and policy. This renewed interest in community capacity has occurred largely as a result of devolution--the decentralization of state services to local governments and private firms (Lobao and Hooks 2003), which leaves these communities with little outside support for local development. In this context, community-centered development efforts rely heavily upon the capacity of community organizations and local citizens to mobilize resources, face challenges, and accomplish collective goals (e.g., Chaskin 2001; Jicha et al. 2011; Krishna

2002). Accordingly, twenty-first century development policy agendas have shifted from previous top-down approaches towards bottom-up, or participatory, ones that encourage collective action and self-determination in more integrated, community-based or driven development (Campfens 1999; Classen et al. 2008). Such strategies emphasize the notion of individual and community responsibility and the empowerment of the local community (Herbert-Cheshire 2000; Zekeri et al. 1994).

The shift towards community-driven development, coupled with the failure of state-led efforts in many less-developed countries, has also created an inroad for the concept of social capital in the development literature and related policy discussions (Krishna 2002). The belief that social relationships matter is at the heart of social capital, defined by Robert Putnam (1995: 66) as “features of social life, such as networks, norms and social trust and reciprocity that enable participants to act together more effectively to pursue shared objectives.” The recent interest in the concept of social capital and the idea that embedded social relationships among community residents are a valuable and even necessary resource for both individuals and communities has served as a second catalyst behind current collective action research (Portes 1998; Wilkinson 1991).³ Social capital has come to play an increasingly significant role in academic and policy debates pertaining to economic and social well-being at individual (Coleman 1988; Woolcock 1998) and collective (community,

³Participation in groups and the positive consequences of such involvement for individuals, communities, and the broader society has been a “staple notion in sociology” (Portes 1998: 2) dating back to Tocqueville’s “Democracy in America,” Marx’s theoretical focus on the eradication of “self-alienation,” and Durkheim’s (1938 [1895] and 1951 [1897]) emphasis on the mechanisms that hold societies together and the role of group life as an antidote to anomie. Consequently, many of the general propositions behind the concept of social capital and associated outcomes can be seen in long-standing traditions of notions of civil society and social solidarity research.

state, and even national) levels (Flora 1998; Folland 2007; Putnam 2000).

Social scientists have widely used the concept of social capital to examine how social and structural factors contribute to community development. This application of attributes of individuals and communities stems largely from the shortcomings of previous theoretical traditions that favored an exclusively economic approach toward the achievement of basic development goals (Portes and Landolt 2000).

The role of social relationships in development research represents an important departure from earlier theoretical approaches and therefore has important implications for contemporary development research and policy. The appeal of social capital theory is that it entails a more inclusive approach towards collective action that considers the participation of all members of society, including marginalized and impoverished populations. In fact, the involvement of these groups is considered to be an indispensable component of successful development strategies (Classen et al. 2008). This is an invaluable contribution as the literature related to community capacity has been written primarily for more-developed countries and corresponding development and collective action theories are based almost exclusively on the experiences of European and North American nations (Frank 1969; McMichael 1996). As a result, theory has largely failed to incorporate the historical experiences and current circumstances of less-developed countries (Frank 1969). This is especially problematic when theory constructed in developed settings is applied to studies in developing regions of the world. To amend this bias, theory must account for the particular histories, conditions, resources, and capabilities of developing countries. Social capital research provides a potential means of addressing this deficiency.

The literature on social capital represents one of the most comprehensive attempts to address the multiple structural and social psychological dimensions involved in the health and well-being of individuals, communities, states, and entire nations.⁴ The intrinsic value of social capital lies in the belief that involvement in social networks characterized by trust can help provide solutions to many of the problems encountered by communities in countries at all levels of economic development (Putnam 1993, 2000). An additional strength of social capital is that it is enhanced, rather than diminished, with use (Ostrom 2000), a characteristic that is particularly appealing among development policymakers.

Focus of Study and Guiding Perspectives

This dissertation is designed with three specific objectives in mind. First, it addresses methodological weaknesses in the social capital literature regarding the lack of a precise definition of this concept and the application of generalized measures of social capital across countries at different levels of development. Second, this study investigates factors that influence the formation of each of the dimensions of social capital. Third, given the importance of social-capital theory in explaining and facilitating civic engagement, I test the effects of its multiple dimensions on individual participation in civic collective action events

⁴ Interest in social order and the well-being of societies dates back to Durkheim's discussion of the "collective conscience," the term he used to refer to "participation in a shared system of beliefs and values, which mold and control individual behavior" (McGee and Warms 2000: 84). According to Durkheim (1947 [1893]), shared moral beliefs served as the basis of the collective conscience which generated a sense of mutual trust within society that individuals would uphold their obligations. Earlier, Ferdinand Tönnies (1963 [1887]) distinguished between two types of social groups, *Gemeinschaft* (community) and *Gesellschaft* (society), with the former being maintained through feelings of togetherness and mutual trust and the latter through individual self interest.

using a case study of 114 residents on the island of Carriacou, Grenada.⁵ The timing of the study is particularly important given the island's recent experiences with natural disasters in the form of Hurricanes Ivan (2004) and Emily (2005) which pose an additional challenge to community well-being.

Objective One: Addressing Weaknesses in the Literature

The concept of social capital is widely used across multiple disciplines. As a result of this popularity, it has drawn criticism due to the lack of a consensus as to what constitutes social capital and how the different dimensions operate (Fulkerson and Thompson 2008). Further complicating matters, social capital is highly context specific. This has contributed to additional inconsistencies across studies in terms of the definition, how best to measure it, and how to separate the definition of the concept from its "alleged effects" (Portes 1998: 21).

Due to differences in opinion over how to measure the concept, social capital is viewed from two separate perspectives, one structural and the other normative (Fulkerson and Thompson 2008). The structural perspective measures social capital in terms of social networks and involvement in formal organizations (Burt 1992; Edwards and Foley 1998; Portes 1998; Woolcock 1998). In contrast, the normative approach, while also considering the importance of social networks, adds civic attitudes such as interpersonal trust and norms

⁵ While the use of the concept of social capital is relatively new, the study of the localized conditions that enhance the ability of communities to act has a rich background in rural sociology. For example, Young and Young (1973) refer to "structural solidarity," Luloff and Wilkinson (1979) view it as "community activeness," and Moxley and Proctor (1995) as "community solidarity." More broadly, the importance of "locality-based social interaction" in local development efforts is driven by interactional theory (Luloff and Bridger 2003: 209; Wilkinson 1991).

of reciprocity (Brehm and Rahn 1997; Hardin 2002; Knack and Keefer 1995; Levi and Stoker 2000; Paxton 2002; Putnam 1993, 2000; Stolle and Rochon 1998).⁶ Here, trust is seen as socially learned and confirmed expectations that people have of each other and of the natural and moral social orders that set the fundamental understanding for their lives (Barber 1983) and norms of reciprocity are mutual obligations that form between individuals. According to Putnam (2000: 21) it follows the idea that: “I’ll do this for you without expecting anything specific back from you, in the confident expectation that someone else will do something for me down the road.” Regardless of which perspective is adopted, the structural or the normative, most agree that involvement in voluntary associations is a necessary component of social capital.

Given this ambiguity, I use Putnam’s conceptualization of social capital as my point of departure because he (Putnam 1993, 1995, 2000) is most often credited with the transformation of social capital into a multidimensional concept with the addition of norms of reciprocity and interpersonal trust. He (1995) argues that social networks and trust, along with norms of reciprocity, enable citizens to act together more effectively in pursuit of common goals. As a result, Putnam was one of the more recent scholars to firmly situate social capital as a theoretical precursor to collective action.

Using a case study approach examining communities in a developing country, this dissertation provides the opportunity to test the contention of some scholars (e.g., Cook, Hardin, and Levi 2005) that normative measures of social capital work best at the

⁶ The normative perspective of social capital is also referred to as the “attitudinal,” “cognitive,” or “social psychological” dimension as it involves trust, norms, and values (Lelieveldt 2004).

interpersonal level and within small communities. In accordance with Putnam's definition, this study views social capital as comprised of both structural and normative dimensions. Norms of reciprocity and trust are each elements of the normative perspective. The main argument for considering all three measures of social capital is that examining one dimension without the others is insufficient as social interaction, through involvement in social networks, can enhance the formation of trust and reciprocity, while trust can also influence involvement in social networks (Putnam 2000).

The complex nature of social capital is most evident in instances where measures and conclusions drawn from studies in developed nations are applied to studies in developing countries (Krishna 2002; Woolcock and Narayan 2000). The generalization of social capital measures across studies fails to account for the historical and social contexts of different populations. As a result, statistical evidence drawn from surveys employing universal indices of social capital lose out on the "subtlety, richness, and enormous variation gleaned from case studies of individual countries and communities" (Woolcock and Narayan 2000: 235).

Providing and testing additional theoretical insights into the concept of social capital in developing regions of the world is essential considering the growing practice of devolution (Krishna 2002; McMichael 1996; Stiglitz 2002) and tendency of social capital research to concentrate on more developed countries (Krishna 2002; Woolcock and Narayan 2000). Many researchers have treated social capital as if it were context independent, yet not all social capital is alike in its impact on individuals or collective outcomes (Edwards and Foley 1998). Obvious social, cultural, and economic differences between more-developed and less-

developed countries indicate that general measures of social capital are insufficient for identifying the mechanisms behind social capital across studies. This study draws upon both qualitative and quantitative data derived from field observations and key informant interviews to provide contextually relevant measures of social capital.⁷ This is an important contribution to social capital and collective action research because of the current deficiency of research measuring and investigating social capital in developing regions of the world.

Carriacou's marginalized position in the world system (as a small island within the island nation of Grenada) combined with its recent experience with devastating natural disasters offers areas of potential progress in social capital research. This is an important addition to the social capital and collective action literature because of the relative lack of research directly measuring and empirically testing the potential benefits of social capital in a peripheral setting.

Objective Two: Factors that Account for Variability in Social Capital

In addition to the shortcomings in the literature mentioned above, most of the scholarly and development policy interest in social capital have focused on the consequences (both good and bad) of the concept with considerably less attention being paid to the factors that contribute to variability in indicators of social capital. As a result, an essential component of any theoretical attempt to speak to the individual and structural processes through which

⁷ Different cultures permit and promote different expressions of social capital, so its observable aspects will vary contextually. Developing an independent and locally appropriate index of social capital is thus the necessary first step toward verifying the claims associated with this concept.

social capital is formed and contributes to individual and collective outcomes remains in need of further development and testing.

This study examines indicators of social capital at the individual level since the concept has its basis in individual behavior and attitudes. “After all, it is not a community that participates or builds trust, but the people who comprise the communities who belong to civic organizations and acquire positive feelings towards others” (Brehm and Rahn 1997: 1003). The decision to examine social capital at the individual level was based on this view and the contention that community, or group level, indicators can mask variability in measures of social capital across individuals (Edwards and Foley 1998). In addition, studies that rely upon measures of social capital such as the number of community organizations fail to capture the contributions of members of society who do not participate in formal civic groups. This study argues that group level measures that are used to indicate a community’s level of social capital are not sufficient for determining community capacity. Researchers should also consider individual-level measures of social capital, not just for the potential to provide benefits for the individuals themselves, but for how it can be directed to the pursuit of collective goals. Thus, individual-level analysis can inform broader community-level discussions, an approach that has been largely ignored in the literature.

The second objective of this study is to examine potential factors that contribute to variability in the multiple dimensions of social capital. Relatively few studies treat social capital as a dependent variable, electing instead to focus on identifying differences in levels of social capital and various outcomes associated with it. Considerably less attention has been invested in determining the causes or sources of social capital. This notable lack of

research on the determinants of social capital has limited its use as an economic and social development policy tool (Glaeser 2001).

For example, government effectiveness has frequently been linked to the concept of social capital. Alexis de Tocqueville (1969 [1835]) believed that America's voluntary associations had important implications for the nation's political structure in that active association, be it political, civil, or otherwise, enabled citizens to promote democratic institution building. Since his observations, much of the research on associational life has focused on social capital's ability to influence democracy. In particular, Putnam's (1993) examination of civic traditions in Italy found that community civic associations were positively associated with good governance and economic prosperity. However, he failed to test the relationship between the normative dimensions of social capital (trust and reciprocity) and government effectiveness.

While Putnam had over-time data to back his conclusions, some studies argue that an opposite connection (from confidence in government to social capital) is possible (Brehm and Rahn 1997; Hall 1999; Levi 1996; Paxton 2007; Rosenstone and Hansen 1993; Verba et al. 1995). This dissertation tests the hypothesis that government stability and effectiveness may influence individual decisions to participate in civic organizations and may have consequences for levels of trust in one's fellow citizens. The justification for this rests in the circular evidence in the literature and the argument that civil society thrives to the extent that the state actively encourages it (Skocpol 1995, 1996). Put simply, strong supportive governments are more respectful of civil liberties and uphold the rule of law, thus increasing the capacity of social groups to act in their collective interests (North 1990).

Objective Three: Social Capital and Participation in Collective Action

The final objective of this dissertation is to empirically test the relationship between the multiple dimensions of social capital and individual participation in collective action. Most theory related to social capital contends that it is vital to the production of collective action. However, this hypothesis has rarely been tested, especially in developing countries. One of the most important hypotheses in social capital theory is that it enables individuals to work together in pursuit of common goals. This extends the conceptualization of cooperative action beyond the traditional focus on contentious social movements and protests, permitting a more nuanced focus on more common, yet less noticeable, forms of “civic” collective action. In this study, “civic” forms of collective action refer to events designed to address community affairs and collective well-being, not events that are intended to promote immediate social change. The focus is on purely non-contentious forms of collective action that involve a substantial portion of the resident population on a more frequent basis. This stands in contrast to general view in the collective action literature that instances of collective action can involve as few as two individuals (Sampson et al. 2005).

Sampson and colleagues (2005: 680–81) recently expanded the traditional view of collective action to include everyday forms of collective action, referred to as “blended collective action” that combines “common types of civic participation, such as festivals or neighborhood association meetings, with a stated claim and an organized public event that seeks change.” Drawing on this expanded view of collective action, I examine individual participation in collective action in the form of everyday acts of community engagement and cooperation that are purely civic in nature. These events involve the voluntary actions of

residents in community improvement projects that address the well-being of the collectivity. They are non-contentious efforts to attain certain collective goals using cooperation and consensus-based approaches and are not conducted with the intention of directly challenging government or any other social institutions. This results in a type of “community building” collective action that is of particular interest to development policymakers.

The focus of this study on purely civic forms of collective action was, in large part, informed by previous research on social capital, community capacity, and collective action. Qualitative observations on the island during the summer of 2005 also revealed that the villages are highly integrated, while also spatially confined. “These boundaries simulate Gemeinschaft-type relations where conflict-oriented approaches to social change could be damaging, and existing dense networks can serve to facilitate collective action” (Jicha et al. 2011: 230).⁸ Qualitative interviews and field observations also revealed that community events such as school-sponsored productions, sporting events, festivals, and the opening of small businesses often served the dual purpose of raising funds for community projects. These seemingly mundane everyday gatherings served a vital role within the communities and are one of the primary means of raising capital to address development needs. Such informal give-and-take in the form of communitywide events are important ways of fostering social connections and serve as critical indicators of underlying stocks of social capital in developing countries (Woolcock and Narayan 2000).

⁸ The focus on forms of collective action that address community well-being without involving disruptive protests is also informed by Durkheim’s (1947 [1893]) concept of mechanical solidarity in which social order in more traditional or homogenous societies is maintained solely through the collective conscience. For Tönnies, individuals in Gemeinschaft tend to develop a “generalized bond” as they interact over common issues (Luloff and Bridger 2003).

Case Study Approach

This study addresses the three objectives using a case study conducted on the island of Carriacou, the largest of the Grenadine Islands in the southern Caribbean and part of the sovereign Commonwealth state of Grenada. Carriacou serves as a particularly relevant study site as providing new insights into measuring social capital and empirically testing its relationship with participation in collective action in a peripheral country is an important addition to both social capital and collective action research. In addition, it may be hazardous to assume that the processes in developing settings would mirror those of a developed setting, and the only way to sort this out is through empirical investigation.

Carriacou provides a rare example of a developing region of the world that has recently undergone unprecedented growth despite its traditionally marginalized global status and stable population density.⁹ Carriacou is highly sensitive to the macroeconomic and political changes around the world that affect job opportunities for its exported workers (Richardson 1974). The reduced reliance upon money, in the form of remittances, sent from family members working abroad has posed a particular challenge to the island's economy with new immigration restrictions passed by countries that have long served as destinations for the island's labor-migration system, along with the increased cost and requirements for passports and visas (Richardson 1974).

While comparative analyses are usually preferred, case study findings can serve to illustrate examples of existing theory. At the same time, they sometimes run contrary to

⁹ The island had a long history of control by colonial powers until gaining independence in 1974. Many of the current residents are direct descendants of plantation slaves who provided the labor for the production of sugarcane and cotton (Richardson 1974).

theoretical generalizations and can suggest new hypotheses and phenomena (Kuhn 1957; Popper 1934). This dissertation contends that case studies such as this one can play a valuable role in the development of community theory and serve as a critical starting point that can help drive comparative analysis.

The choice of Carriacou as the site for this study is based largely on the island's recent history of natural disasters along with the tendency of social capital studies to focus on more developed countries, often referred to as "core" nations by world-systems theory (Wallerstein 1974). Responding to the effects of a natural disaster is challenging for countries at any level of economic development. However, it can prove especially difficult in economically marginalized nations. While international relief efforts have played a significant role in reconstruction efforts on Carriacou, local residents and community organizations have proven to be a most valuable asset in the rebuilding process, providing financial support, labor, and assisting in project planning.

Study Contributions

The research project on Carriacou was designed for the specific purpose of identifying context-specific indicators of social capital that could be used to provide insight into individual participation in collective action events. This dissertation theoretically delineates and tests the relationship between these multiple dimensions of social capital and participation in collective action in the context of a developing country. The focus on forms of collective action that are purely civic in nature and that are designed to address specific community development goals is a unique characteristic of this study and one that could

provide findings of particular relevance to development research and policy as the needs of communities in developing regions of the world cannot always be met through conflict-oriented approaches.

This study takes a comprehensive approach towards examining the relationship between social capital and participation in collective action and provides insight into the factors influencing variability in the structural and normative dimensions of social capital and civic participation. It attempts to provide conceptual clarity to the concept of social capital and the process through which it operates by independently testing both the direct and indirect relationships between the multiple dimensions of network involvement, interpersonal trust, and reciprocity, as well as testing hypothesized predictors of each dimension.

A key contribution of this study is that it directly examines whether communities in a peripheral country with a legacy of exploitation and oppression can maintain the same capacity for collective action compared to communities in more central or core nations. While this study consists of a single case study, the results could be interpreted within the context of the broader literature on social capital, civic participation, and development. A popular belief of neoliberalism (Cheshire and Lawrence 2005; Plehwe 2007) and resource mobilization theory (Marwell, Oliver, and Prahl 1988; McAdam 1986; McCarthy and Zald 1977; Tilly 1978) is that all communities can be leaders in their own social and economic development in the absence of heavy government regulation of business activities and involvement in social programs. This belief underlies the general pattern of devolution occurring across the globe, yet is rarely tested empirically. Contrary to this expectation, Stiglitz (2002) found that a number of countries, primarily those in East Asia, were able to

experience economic growth largely as a result of heavy market regulation by government. However, in countries where government resources or commitment may be lacking, other avenues to development have to be pursued and much of the responsibility may fall back onto the communities themselves.

Organization of the Dissertation Chapters

This dissertation consists of six chapters constituting the theoretical, site history, methodological, findings, and implications of my research on the island of Carriacou over the summers of 2004-2006. Chapters one and two comprise the research focus and theoretical components. Chapter one provides an introduction to the study, relevance of the topics examined, and statement of research objectives. The second chapter provides a review of the literature examining collective action and social capital, a discussion of the link between the two, the theoretical basis of the predictors of each, and the hypotheses to be tested. Chapter three contains a short overview of the history of the island of Carriacou and how the research questions examined in this study are of particular relevance to the context of the study site. Chapter four provides a detailed explanation of the research procedures used to select the case study sites. This chapter also discusses the respondent characteristics and the measures and analytical methods used to test the hypotheses proposed in the second chapter. The fifth chapter discusses the results of the analyses employed in this study. The sixth chapter provides a summary of the study findings with an emphasis on their implications for community development research and policy. This final chapter also discusses the theoretical and methodological contributions of the study, its limitations, and directions for

future research. Comments from key informant interviews are included to provide additional insight into the study findings.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter provides a review of the collective action and social capital literature. It begins with a discussion of the evolution of collective action theory from a focus on contentious social movements to contemporary perspectives that examine involvement in less visible forms of everyday civic engagement that lend themselves more directly to development theory and policy. The purpose of this review is to present the theoretical basis for testing the relationship between social capital and participation in collective action, one of the primary objectives of this study. A discussion of the factors that account for variability in individual-level measures of social capital is presented in order to establish a basis for the second study objective, which is to elaborate on the antecedents of social capital in developing regions of the world.

The third objective of this dissertation is to address methodological weaknesses in the social capital literature. Thus, a case is made in this chapter for the importance of measuring and investigating indicators of social capital that are specific to developing countries. The research design of this study identifies and measures indicators of social capital that are specifically applicable to developing countries and these are expanded upon in Chapters 4 and 5. The chapter concludes with the specific hypotheses that are tested in this study.

Approaches to the Problem of Collective Action

Collective action is defined as concerted efforts by individuals or groups to attain

certain objectives, with such objectives representing the common or shared interests of the group (Tarrow 1994). Generations of social scientists, dating back to Thomas Hobbes (1651 [1651]) have sought to explain what makes collective action possible and have proposed a number of cultural, interactional, and institutional mechanisms that lead individuals to forgo their own narrow self-interests in favor of the concerns of the broader collectivity (Hardin 1982; Hechter 1987; McCarthy and Zald 1977; Olson 1965; Smelser 1959; Tilly 1978; Willer 2009).¹⁰ In sociology, theories directly addressing purposeful collective action began with Marx (1847 [1847]) and class struggle. “The Marxist problem of collective action is often stated as that of turning a class-in-itself into a class-for-itself; a class organized for collective action” (Udehn 1996: 298). Marx’s discussion of collective action through class struggle generated a long-standing interest within sociology in social movements that challenge the existing power structure.

Prior to the 1960s, there was a commonly held view that people with shared interests had a natural tendency to act together in pursuit of those interests (Oliver 1993). In the social sciences, and sociology in particular, this notion led to an enduring tradition of research on the role collective action plays in generating social change. Theories related to collective

¹⁰ Hobbes examined the underlying social and structural forces that lead to mutual consent and the acceptance of common rules among a nation’s citizens. He was one of the first scholars to suggest that coercion was needed to prevent individuals from pursuing interests that ran counter to, and could potentially harm, the interests of the collective, assuming that individuals would pursue their self-interest without such constraints (Hardin 1982). His book *Leviathan* (1651) has served as the basis of much of Western political philosophy and social contract theory. John Locke (1689) and Jean-Jacques Rousseau (1762 [1762]) added their own unique, and divergent, views on the willingness of individuals to come together under a single political entity. Their examination of social contracts provided early insight into collective action theory. Economist Adam Smith (1776 [1776]) spoke to the free-rider problem when he referred to the self-regulating “invisible hand” of the market, a social mechanism preventing price collusion, thus ensuring that individual self-interest does not jeopardize the needs of society.

action have tended to concentrate on more contentious forms of social movements (e.g. rebellion, collective violence, protests, and riots). In line with this focus, participation in collective action was generally explained in terms of class conflict (Marx and Engels 1967 [1848]; Weber 1968), or by structural functionalist theories as resulting from social strain and structural breakdown.

Social strain and structural breakdown theories dominated collective action research until the 1970s (Useem 1998) as many sociologists identified these factors as primary causes of collective behavior (Blumer 1951; Geschwender 1968; Gurr 1970; Kornhauser 1959; Park 1972; Smelser 1962).¹¹ The central argument behind these theories was that social movements arose as direct responses to exploitation, economic crises, or structural disorder. For example, Ted Gurr (1970: 24) contended that collective violence (riots, rebellions, revolutions, etc) occurred when a group of people experienced “relative deprivation,” which is the discrepancy between what people have and what they think they deserve. Herbert Blumer (1951) saw collective behavior as resulting from social unrest arising from disruptions in standard routines of daily life. Robert Park (1972) argued that collective behavior occurred in crowds where people lost rational control over their behavior in what he referred to as “mob mentality.” While strain and breakdown theorists endorsed social order, their work tended to portray the collapse of order and forms of collective action that arose in response in a negative light, as a form of social deviance (Buechler 2008). Thus, these

¹¹ Theory related to social breakdown and collective behavior is heavily rooted in the earlier works of Gustave LeBon (1896) and Durkheim (1951 [1897]). LeBon examined crowd psychology, while Durkheim was concerned with the weakening of collective beliefs and morality as society grew in size and complexity (Buechler 2008). Durkheim (1938 [1895]) was also interested in how participation in a crowd could shape individual behavior, particularly in a negative manner.

theories reinforced the practice of treating contentious social movements as the focus of sociological research on collective action.

Beginning in the 1960s, traditional explanations for collective action came under fire with the work of Mancur Olson (1965: 2), who argued that “rational, self-interested individuals will not act to achieve their common or group interests.” Rather than collectively pursuing common interests, rational individuals will instead be motivated to free ride on the contributions of others (Olson 1965). Rational choice theories of collective action attempted to address the “free-rider” problem with such explanations as the provision of selective incentives that increase participation (Olson 1965), exclusion from collective (jointly produced) goods (Hechter 1987), and turning individual authority over to a collective and the threat of sanctions for carrying out actions as individuals (Coleman 1973, 1990).

In the 1970s, following rational choice theory, advocates of the resource mobilization perspective provided a more nuanced approach to collective action than that previously espoused by strain and breakdown explanations with their focus on purely contentious forms of collective action. A variant of the conflict perspective of social change in sociology, resource mobilization theorists explained collective action in terms of collective interests and the access to resources, focusing on goal-oriented social movements often designed to take political action (Marwell, Oliver, and Pahl 1988; McAdam 1986; McCarthy and Zald 1977; Tilly 1978). The mobilization theory of collective action saw the ability of a movement’s members to acquire resources and to mobilize people in the pursuit of collective goals as vital to successful social movements.

Sociological theory has continued to focus on the role of social movements in promoting social change and many theorists continue to adhere to a Marxist conflict approach. One of the most important contributions of rational choice and resource mobilization theories is that they marked an important break with classical social movement theories by also considering routine, non-contentious, forms of collective action. This shift in theorization helped set the foundation for more contemporary explanations of collective action that include social capital theory. These perspectives are more comprehensive in that they can also account for everyday forms of “civic” collective action that are not designed to alter existing economic and social arrangements. Instead, these forms of community action could be undertaken to resolve pressing problems or help improve the well-being of the collectivity.

One such example of a more civic-oriented approach is provided by Sampson and colleagues (2005: 680-81) who argue that research and theory should consider “blended social action,” that combines “common types of civic participation, such as festivals or neighborhood association meetings, with a stated claim and an organized public event that seeks change.” According to Sampson and colleagues (2005: 676), everyday forms of civic participation could include “blood drives, community festivals, fund-raisers, or community watches against crime.”

Drawing on this expanded view of collective action, this dissertation examines individual participation in collective action events in the form of everyday acts of community engagement. However, this study departs from the work of Sampson and colleagues in several important ways. First, I only look at forms of “community building” collective action

that are purely civic in nature such as fund-raisers, school productions, sporting events, and other gatherings designed to promote the well-being of the community. In their study, Sampson and colleagues (2005) found that it is the density of nonprofit organizations, rather than social ties, group membership, and neighborly exchange, that predict collective action. While these findings are important, they are limited for comparative analyses involving developing countries as the authors examined collective action in an urban setting (Chicago) in a developed nation. This dissertation explores the possibility that social capital is more consequential for involvement in collective action in developing settings with few, if any, nonprofit organizations.

Community Agency and Social Capital

Following World War II, theories of community development paid relatively little attention to the influence of community characteristics on economic development and social well-being. Many sociologists proposed that modernization and urbanization were eroding long-lasting communal relationships characteristic of smaller and rural communities (Putnam 2000; Warren 1978). According to this argument, the increasing reliance upon outside institutions and sources of income has resulted in the loss of local ties that previously connected all parts of the community into a system (Warren 1978).

“By the 1970s, the local community had become largely incidental to the study of other phenomena, often serving as the physical setting for what were presumably more important topics” (Luloff and Bridger 2003: 203). Most theories focused on the decline of community, relating this phenomenon to such factors as modernization and urbanization and

the increasing reliance upon extra-local institutions and sources of income (Warren 1978). In response to such arguments, many community sociologists argued that the community was still a salient concept.¹²

In the post-war era, development theory relied upon individual rational actors and proved limited in their ability to achieve basic development largely due to their neglect of the role of social networks, norms, and values (Edwards and Foley 1998; Woolcock and Narayan 2000). In the 1950s and 1960s, traditional social relationships and ways of life were viewed as impediments to development according to modernization theorists (e.g., Lerner 1958; Levy 1967; Rostow 1964; Smelser 1964). Later in the 1970s, dependency theory and world-systems theorists made little mention of the potential of mutually beneficial relationships in development, focusing instead on the influence of relations among national corporate and political elites, as well as the military sector (Cardoso 1973; Dos Santos 1971; Evans 1983; Frank 1967; Wallerstein 1987).

While the sweeping social and technological changes in the post-World War II era have undoubtedly influenced and reshaped the structural and cultural dimensions of even the most remote communities, reliance upon such theoretical trends, to the neglect of community-level factors, has drawn mounting criticism from community sociologists (Luloff

¹² Skepticism of development theories that touted purely economic-based approaches was voiced as early as the 1950s by Harold Kaufman (1959) who argued that “persons in a community should not only be able to, but frequently do act together in the common concerns of life.” Less than two decades later, Charles Tilley (1973) proposed that communities can act and their ability to do so depends upon the extent to which they are able to mobilize (hold collective control over resources), whether they have similar amounts of power relative to other power centers in the region or nation, and are in the beginning stages of urbanization. Such counterarguments to traditional approaches represented a beginning, but it would still take time to bring community characteristics as important independent variables back into community research.

and Bridger 2003). The failure of these theories to adequately address development needs meant that a more sophisticated appraisal of the virtues of community capacity, social relations in particular, was required. The need to find ways to explain community bonds that contribute to local development led a few researchers in the direction of social capital theory.

Before embarking on a review of the social capital literature, it is important to give credit to some of the more influential community theories that help inform discussions of community capacity and the importance of social interaction in enhancing individual and community well-being. Since the early 1970s, a considerable body of literature related to community sociology has turned its focus towards the influence of community agency on local development and well-being. The study of the localized conditions that enhance a community's ability to act has a rich background in rural sociology in particular. For example, Young and Young (1973) refer to "structural solidarity," as one dimension of community structure that helps to explain differences in development between communities. Luloff and Wilkinson (1979) view the ability of communities to act as "community activeness." Wilkinson (1991) later elaborated on this in his "interactional theory of the community." Moxley and Proctor (1995) refer to the ability of communities to function as a collective as "community solidarity."

Much of the current research investigating the importance of community involvement in development efforts is grounded in interactional theory (Luloff and Bridger 2003; Wilkinson 1991). Wilkinson's (1991) interactional theory of the community examines the persistent features of local life and how they contribute to positive community outcomes. Wilkinson (1991: 13) addresses this relationship by stating that "social interaction provides

the associations that comprise the local society; it gives direction to processes of collective action; and it is the source of community identity.” While he does not specifically refer to social capital, Wilkinson’s discussion of the role of social networks for community action and well-being is directly applicable to any discussion of social capital. This dissertation is largely influenced by this theory as it examines community interaction and collective action at the individual-level.

Central to Wilkinson’s theory is the concept of the “community field” which represents the capacity of local residents to work together for their own well-being. This includes not only interactions between people, but also interactions among associations and organizations, with all parties oriented towards the overarching community interest (Sharp et al. 2003). Attributes of the community field that improve capacity for achieving community-oriented goals include improved capacity to coordinate action among diverse institutions and organizations, increased capacity to mobilize resources, and an ability to plan and act strategically to balance diverse community goals (Sharp, 2001; Wilkinson, 1970).

Theoretical Trends in the Social Capital Literature

While the term itself was first introduced into the literature in 1916 by Lyda Hanifan, the concept of social capital did not gain widespread scholarly acceptance until the works of Pierre Bourdieu (1983), James Coleman (1988, 1990), and Robert Putnam (1993, 1995, 2000). The noticeable gap between the first mention of social capital in the literature and its widespread use more than six decades later is likely due to Hanifan’s position as state supervisor of rural schools in West Virginia, not as a social science theoretician, and the lack

of conceptual development in his work (Putnam 2000). To credit his early work on the concept of social capital, Hanifan (1916) saw community involvement as critical for the success of rural schools. Hanifan (1916:130) defined social capital as:

“those tangible substances [that] count for most in the daily lives of people: namely good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit.... The individual is helpless socially, if left to himself.... If he comes into contact with his neighbor, and they with other neighbors, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community. The community as a whole will benefit by the cooperation of all its parts, while the individual will find in his associations the advantages of the help, the sympathy, and the fellowship of his neighbors.”

Much later, Bourdieu (1983) and Coleman (1988) viewed social capital primarily as an attribute of individuals or families by virtue of their ties with others. Bourdieu saw it as important for determining social mobility and the ongoing reproduction of class relations.

Bourdieu defined social capital as:

“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.” (1983: 248-49)

By accumulating social capital, individuals are able to access other forms of capital (economic and cultural) allowing them to move up in social class. At the same time, social mobility is not an option to those portions of populations who lack social capital. In turn, this serves to maintain class divisions within society. Viewed in this light, social capital was seen primarily as a manifestation of social structures or resources inhering in institutional arrangements and the relationships between individuals (Coleman 1990).

Coleman employed the concept of social capital to explain differences in educational achievement, or human capital. Departing from Bourdieu's work, Coleman saw social capital primarily as "the set of resources that inhere in family relations and in community social organization that are useful for the cognitive or social development of a child or young person" (Coleman 1990: 300). Still viewing social capital at the individual level, Coleman (1990) paid considerable attention to the role of social networks and argued that parents who spend considerable time with their children and who are actively involved in their children's networks (e.g. attend PTA meetings) will enhance the human capital of their children.

Coleman viewed social capital as:

"defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure." (1990: 302)

Coleman's view that social capital is located in the relations between people and that it is often the byproduct of various activities, such as taking part in voluntary organizations, has had an enduring influence in the literature and in the measurement of the concept.

Putnam's (1993) work on democratic institutions in Italy directed the emphasis on social capital away from individuals and placed it instead as an attribute of communities. Putnam's work (1993) showed it was useful to view social capital as a resource possessed by communities and even nations. He provided evidence linking community-level social capital, measured in terms of civic engagement (associational life, newspaper readership, and voter turnout), with successful regional governments and economies in Italy. Later, in *Bowling Alone: The Collapse and Revival of American Community*, Putnam (1995, 2000)

expanded his measures of civic engagement to include various forms of civic participation such as political and religious participation and workplace and informal social connections.

As mentioned in Chapter 1, Putnam (1993, 1995, 2000) is credited with the transformation of social capital into a multi-dimensional concept. While Putnam (1993: 167) concentrated on structural measures of networks of civic engagement as a dependent variable, he also discussed social capital in terms of trust and norms of reciprocity, although he did not actually test the impacts of these dimensions of social capital at the time. Since his study in Italy, Putnam has placed normative measures at the heart of his research and came to formally define social capital as “features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives” (1995: 664). Putnam’s multi-dimensional approach towards social capital helped to trigger the recent explosion in the concept’s popularity both in the social sciences and in the field of international development.

Due in large part to the widespread acceptance of the concept of social capital across disciplines, two separate traditions have emerged in the way that social capital is viewed and measured. Scholars are often divided between those who favor structural indicators of social capital and those who focus on Putnam’s normative indicators (Portes 1998). The former tend to examine social capital at the macro-level (e.g., communities, entire nations), while the latter concentrate on individual-level social interaction. The structural approach, favored by many sociologists, views social capital as a social structural variable measured in terms of

social networks and involvement in formal organizations.¹³ The normative approach, guided largely by the work of Robert Putnam (1993, 1995, 2000), added the social psychological dimensions of trust and norms of reciprocity as measures of social capital that stimulate people to engage in collective action. This addition has not been unanimously accepted as a number of scholars argue that while trust plays a role in producing micro level social order, cooperative exchanges outside the realm of small communities can take place in the absence of trust. Here, institutions and other social arrangements are required for making cooperation possible (Cook and Cooper 2003; Cook, Hardin, and Levi 2005; Raymond 2006).

As a result of this divide, there is virtually endless debate as to what exactly social capital is and how best to define it. Most definitions tout networks, norms and trust as having resource potential for individuals or groups, yet there is little consensus in general as to which dimension should be focused on. Since Bourdieu, Coleman, and Putnam laid the groundwork for contemporary research on social capital (Wall et al. 1998), a number of scholars, sociologists in particular, have chosen to concentrate on the structural network dimension of social capital (Portes 1998; Woolcock 1998). Other scholars focus solely on the effects of perceived trust on various outcomes (Fukuyama 1995; Inglehart 1997; Knack and Keefer 1995). The most comprehensive measures of social capital have incorporated both structural and attitudinal dimensions of social capital, looking at both involvement in social networks and interpersonal trust (Brehm and Rahn 1997; Krishna and Shrader 2000; Lelieveldt 2004; Narayan and Cassidy 1999; Onyx and Bullen 2000; Putnam 2000). This

¹³ Social capital itself is a resource linked to involvement in such networks and broader social structures (Bourdieu 1985; Coleman 1988).

dissertation empirically tests Putnam's definition by examining both the structural and normative (also referred to as the "attitudinal" or "social psychological") dimensions and their association with collective action.

Outcomes Associated with Social Capital

Theories utilizing the concept of social capital predict that higher levels of social capital will lead to fewer actual or potential problems while making it easier to solve any remaining problems on the other hand. In its simplest form, social capital is derived from the quality of relationships among people within a group or community (Krishna 2000). The broadest argument made on behalf of SC is summarized as: "Persons bound together in dense social networks, infused with norms of reciprocity and trust, are better able and more inclined to act collectively for mutual benefit and social purposes. Compared to persons not so well endowed with norms and networks, those possessed of these features can more efficiently restrain opportunism and resolve problems of collective action" (Putnam 1993: 173).

Among individuals, high levels of social capital has been linked to psychological benefits such as well-being and reduced personal stress (John 2005), educational attainment (Coleman 1988), job seeking behavior (Granovetter 1974; Green, Tigges, and Browne 1995), status attainment (Lin 1999), exposure to new information and the adoption of new technologies (Jicha, Moxley, and Librero 2009; Warriner and Moul 1992), and ethnic entrepreneurship (Portes and Sensenbrenner 1993). At the community level, it has also been shown to be positively associated with collective well-being (Putnam 2000; Woolcock 1998; Flora 1998; Wall et al. 1998), lower crime and juvenile delinquency (Halpern 2005; Portes

1998), economic development (Flora 1998; Knack and Keefer 1995; Schafft and Brown 2000; Whiteley 2000), and other community and regional development activities (Flora and Flora 1993; Ostrom 2000; Putnam 1993, 2000; Woolcock 1998).¹⁴ The intrinsic value of the concept lies in the belief that involvement in social networks characterized by trust can help provide solutions to many of the problems encountered by communities in countries at all levels of economic development. These findings suggest that there is a logical link with collective action. This relationship, while frequently assumed in the literature, has rarely been tested (Jicha et al. 2011).

The Link between Social Capital and Collective Action

Impediments to development in less-developed countries can be attributed to a number of structural factors. Distance to markets and the shortage of human and physical capital, can limit the ability for rural regions to manage their own development efforts (Swanson and Brown 2003). Locations which are heavily dependent upon natural resource extraction or that lack the potential for industrial development are at a particular advantage.

As a result of the processes of devolution, the trend in development policy now favors the increasing involvement of NGOs and the rise of social and co-operative movements

¹⁴ Although most of these outcomes are positively associated with development and individual or community well-being, a number of scholars have also identified potential negative effects associated with social capital. Many of these relate to cases of particularly close-knit and trusting groups. When access to voluntary associations is blocked, non-members are denied associated benefits (Levi 1996; Waldinger 1995). Additionally, excess claims on members of associations may restrict individual freedoms and create a downward leveling of norms (Portes 1998). Other concerns involve voluntary associations that are inherently “uncivic,” such as organized crime or the Ku Klux Klan (Fukuyama 2000; Portes and Landolt 1996; Schulman and Anderson 1999; Stolle 2003). Despite such criticisms, empirical studies of social capital still treat associational membership as the key form of community involvement and focus on more “civic” forms of associational membership.

(Campfens 1999). The inability of governments to successfully address a number of essential social problems and the increasing dependence upon community assets is addressed by Krishna's (2002: 1) discussion of this process as it applies to the developing world:

“...five decades and more of state-led development in many less developed countries have failed to make any considerable dent on poverty. As the state is beginning to retreat after having failed to fulfill its promises and as markets are only just beginning to penetrate the rural areas (and then hardly always to the advantage of the poor), many analysts are calling for civil society solutions for dealing with the enduring problems of poverty and powerlessness. Concerted action made possible by civic associations enables citizens to engage state and market agencies more effectively, it is contended: service delivery is improved, accountability and transparency are enhanced, and the pool of resources is enlarged when organized groups of citizens engage constructively with the state. Development is promoted in this manner, and governance is made transparent and more efficacious.”

To help increase the capacity of local citizens to mobilize resources and act as a collective, policymakers have sought new ways to revitalize community bonds that emphasize social and structural influences that contribute to community development (Krishna 2002). In line with this, the World Bank (1999) has adopted the concept and views community-level social capital as critical for economic prosperity and sustainable development, offering its own definition of the concept as:

“the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions... Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together.”

Prior to Putnam's seminal (1993) research on civic traditions in Italy, little credibility was given to the ability of communities to improve their lot (Woolcock and Narayan 2000). The failure of purely economic models to address development issues helped create a demand for a more sophisticated appraisal of different social and structural dimensions of human societies that contribute to development. “Social capital stresses several factors that

are not new but have often been ignored during the heyday of neoclassical economics and rational choice theories: trust and norms of reciprocity, networks and forms of civic engagement, and both formal and informal rules or institutions” (Ostrom and Ahn 2003: 155).

Social capital is an asset, a functioning propensity for mutually beneficial collective action, with which communities are endowed in varying degrees. Communities possessing large amounts of social capital are able to engage in mutually beneficial cooperation over a wide front (Fukuyama 1995; Putnam 1993, 1995, 1996). Thus, social capital represents the propensity for mutually beneficial collective action, and the ability to act is derived from the quality of relationships among people. The real value of the concept for the social sciences and policymakers rests in its ability to call attention to various features of social interaction that impinge upon economic and political life as economic development, community safety, and democratic participation can all be promoted by investing in a community’s stock of social capital. It helps to provide a “bottom-up” view of civic life, development and social outcomes by arguing that democratic institutions and social well-being must be built up in the everyday traditions of trust and civic virtue among citizens (Laitin, 1995). The bottom-up approach to development proposed by social capital theory provides an alternative approach to those failed efforts that were intended to deliver economic and social benefits from the top down. Instead of considering macro-economic policy, attention needs to also be directed toward community capacity for civic action.

In support of Putnam’s assertion that communities endowed with large amounts of social capital are more capable of engaging in collective action, a number of studies indicate

that social capital is a vital resource that can be drawn upon to help address numerous community objectives (e.g., Flora 1998; Flora and Flora 1993; Knack and Keefer 1995; Krishna 2002; Naryan 2002; Narayan and Pritchett 1996; Ostrom 2000; Woolcock 1998). In the context of developing countries, social capital in the form of participation in social networks (exchanges with neighbors, participation in civic organizations, etc.) allows individuals and communities to have access to more information enabling them to coordinate activities for mutually beneficial collective action, while trust generated through repeated social interaction reduces opportunistic behavior (Dasgupta 1988; Krishna 2002). Other studies indicate that social capital also enables people to participate collaboratively in effective local decision making, to better monitor government agencies and market operations, to lobby for improved services, and in the event government services fail to obtain informal insurance from their social networks (Krishna 2002; Narayan 2002; Narayan and Pritchett 1996; Woolcock 1998; World Bank 2001).

Criticisms of Social Capital

Much of this chapter has concentrated on the benefits of social capital and its potential for bettering the human condition, particularly in developing regions. This section examines some of the major criticisms of the concept and discusses how this study addresses each.

In spite of the recent popularity of this concept among both scholars and development policymakers, there remains little consensus in the literature as to a precise definition of the concept (Fulkerson and Thompson 2008). Earlier in this chapter, I discussed the conceptual divide between definitions that relate to the structural dimension of social capital and those

that utilize both structural and normative measures. Perhaps the most comprehensive definition is provided by Putnam (1993). While he introduced the normative dimensions of trust and reciprocity to formal definitions of social capital, he concentrated on the structural measure of networks of civic engagement in his research on civic communities and democracy in Italy, failing to actually test the impacts of trust and norms of reciprocity.¹⁵ Since Putnam's work in Italy, a number of studies have examined both the structural and normative dimensions of social capital, focusing primarily on involvement in social networks and interpersonal trust (Brehm and Rahn 1997; Krishna and Shrader 2000; Lelieveldt 2004; Narayan and Cassidy 1999; Onyz and Bullen 2000; Putnam 2000).

The inability to arrive at a single definition of social capital that can be applied across studies has obscured many of the theoretical implications of this concept. This study uses Putnam's definition of social capital and empirically tests its distinct structural and normative dimensions, including the often ignored normative dimension of reciprocity. The main argument for doing so is that while cognitive (norms, values, attitudes, beliefs) elements of human groups can predispose them toward mutually beneficial collective action, structural dimensions facilitate such action (Krishna 2000; Uphoff and Wijayaratna 2000). Furthermore, social interaction can enhance the formation of trust and norms of reciprocity while the normative dimensions also govern interactions within networks (Putnam 2000). By

¹⁵ Putnam (1993) measure social capital as a Civic Community Index (factors related to networks) and norms are not separately considered since it is believed that an effective norm of generalized reciprocity is likely to be associated with dense networks of social exchange. Norms form part of the definition of social capital, but they have no part within Putnam's measure of this concept at the time of his work in Italy.

testing the effects of the multiple dimensions of social capital on participation in collective action, this study attempts to provide some measure of conceptual clarity to the concept.

Another criticism of social capital stems from the tendency of scholars to use different levels of measurement (individual, community, state, national levels). This study examines social capital and collective action at the individual-level of analysis as the former has its basis in individual behavior and attitudes. Consequently, any attempts to increase levels of social capital must account for the multitude of factors that impact individual-level participation in formal and informal social networks as well as variability in the social psychological dimensions of trust and norms of reciprocity. In addition, collective action is dependent upon the involvement of individual citizens, making it vital to examine the factors that contribute to individual participation.

Criticisms of social capital also arise from the generalization of indicators of social capital across studies and the failure to pay attention to the historical and social context of different study populations (Schafft and Brown 2003). This is most evident with the generalization of indicators of social capital from studies in more developed countries to one in developing nations. Social capital is very context specific (Edwards and Foley 1998). Not all social capital is alike in its impact on individuals and groups and it is important to identify distinct, contextually-relevant, dimensions of social capital (Schafft and Brown 2000). Thus, indicators of social capital need to be found among specific features of community life that promote cooperation for mutual benefit. Only then is it possible to apply measures across multiple settings that have experienced similar historical and contemporary social, cultural,

political, and economic circumstances. This argument provides support for the case study approach taken in this dissertation.

A final criticism of social capital is that most studies focus on levels of social capital and outcomes associated with this concept, treating it as an independent variable. As a result, considerably less attention has been invested in examining the causes or sources of social capital (Rupasingha et al. 2006). This is particularly relevant for policymakers, as achieving a better understanding of variability in social capital, and the factors that are attributed to any differences, is critical for informing community-level policies designed to promote civic engagement and collective community action. This study empirically tests not only the relationship between social capital and participation in collective action, but also theoretically-driven predictors of the multiple dimensions of social capital.

Social Capital in Developing Countries:

If the concept of social capital is to have any relevance in development theory and policy discussions, more studies must examine indicators and potential benefits of the concept within the context of developing countries. Applying measures and speculative processes formulated in more-developed countries to a developing setting may be an unproductive exercise since the two have entirely different resource bases, priorities, and social, economic, and political arrangements. For example, research conducted predominantly in Europe and America has regarded levels of social capital to be high among communities where a larger number of residents register for membership in a number of civic associations. This is a poor measure of social capital in many developing regions of the

world as many less-developed countries lack formal community organizations, particularly in rural areas (Woolcock and Narayan 2000). Such theses derived from studies in developed countries clearly do not always apply equally well for the developing world (Krishna 2002).

This provides support not only for the argument that researchers and policymakers should look at contextually relevant measures of social capital for the developing world, but that they should also consider other dimensions aside from network involvement. Normative measures of social capital may be exhibited even in the absence of strong formal community organizations (Krishna 2002). What may matter more are attitudes and behaviors of different kinds that might be exhibited even without the support of any formal organization. “A person might trust her neighbors implicitly and she might engage with them in collective efforts to clean and improve their neighborhood—without the help of any formally registered association of neighbors” (Krishna 2002: 4-5). As there may be few formal organizations, a scale of social capital which measures the density of such organizations to the neglect of all these other indicators will grossly underestimate social capital in these contexts.

Research Questions and Hypotheses

The remainder of the chapter focuses on a discussion of the literature linking social capital to collective action and the related hypotheses to be tested in this study. A review of the literature pertaining to factors that account for variability in measures of social capital is also provided. A number of potential predictors of social capital have been largely neglected in the literature and this study tests the impact of additional variables. Hypotheses regarding their association with social capital are also included at the end of the chapter.

Social Capital and Participation in Collective Action

This study investigates three separate hypotheses about the effects of the structural and normative dimensions of social capital on individual participation in collective action. Individual participation in collective action events is operationalized as the number of voluntary community events a respondent has participated in over the past six months. The structural dimension of social capital is measured as the number of community groups the respondent is a member of. Interpersonal trust is measured as a three-item index based on responses to three questions estimating the perceived trustworthiness of one's neighbors and other members of the community. The third dimension of social capital, norms of reciprocity measures activities that involve actual give-and-take interactions between the respondent and other members of their local community. A more detailed discussion of these measures is provided in Chapter 4.

According to social capital theory, perhaps the most important outcome associated with this concept is that it facilitates collective action (Putnam 1993, 1995, 2000). However, this remains very much an assumption in that it has rarely been tested. The study on Carriacou was designed for the specific purpose of testing this relationship. However, the lack of empirical research testing this relationship means that there is little theory elaboration on the processes through which social capital can increase participation in collective action.

One potential explanation for the relationship between social capital and participation in civic forms of collective community action resides in the literature on volunteering. Most of these studies suggest that involvement in social networks increases the likelihood of volunteering (Wilson and Musick 1997). This is particularly the case when it comes to

participating in community collective action which tends to involve community well-being (Wilson 2000). The main argument behind the role of social networks in volunteering is that social ties “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 (Wilson and Musick 1997: 695). Thus, the decision to participate in collective action involves not only the individual, but others within their social network (Gould 2003). In this study, the number of community groups which one is a member of is viewed as a structural measure of social capital as it is both evidence of social network involvement and an indicator of the presence of civic organizations within the community.

An argument for the relationship between the normative dimensions and participation in collective action revolves around Putnam’s (2000) contention that social networks have value and that trust and norms of reciprocity arise from these shared interactions. Trust and norms of reciprocity can result from regular interactions within social networks and can promote a sense of cooperation that becomes part of the social fabric, essentially serving to promote involvement in collective community action (Marwell, Oliver, and Pahl 1988). Trusting relationships also reduce opportunistic behavior, which further lends itself to participation in collective action if the participant is not seeking to pursue their own self interests or is concerned about others doing the same.

At the same time, recent scholarly work has argued against the role of trust in the production of cooperation at the societal level. Some scholars have argued that the role of trust in producing cooperative exchange and social order is overrated in mass society where

strong institutions and other organizational (structural) arrangements play a significantly more important role in facilitating joint efforts (Cook, Hardin, and Levi 2005; Raymond 2006).

Cook and colleagues (2005) argue that while trust can play a role in producing micro-level social order and can be important for informal social exchange, institutions and other social arrangements substitute for trusting relations outside of these contexts where trust may be lacking or, when present, may create boundaries that restrict cooperative exchange with others outside of the group.¹⁶ Thus, “the role of trust is most active in the realm of personal relationships and in some settings as a complement to (not a substitute for) organizational arrangements that make cooperation possible” (Cook, Hardin, and Levi 2005:1). Institutions and organizational arrangements can produce ongoing cooperation between multiple parties by ensuring commitments, enforcing contracts, and providing sanctioning and monitoring for deviating from mutual obligations (Hardin 1999; Luhmann 1988). At the same time, and without completely reducing trust to irrelevancy, institutional arrangements that successfully establish ongoing cooperation can also serve to build trust and social capital between participants, which can lead to greater future cooperation (Cook, Hardin, and Levi 2005; Raymond 2006).

¹⁶ This idea is related to Peter Blau’s conceptualization of exchange theory. Based on rational choice theory, Blau (1975) argued that direct exchanges can serve to unite individuals within small groups. However, within larger groupings where direct interaction is not always possible, social norms play a vital role in these exchanges as conformity to group values by individuals contributes to group cohesion. Cook, Hardin, and Levi (2005) and Raymond (2006) extend this idea beyond group norms as they argue that other mechanisms, such as strong institutions and other organizational arrangements, are required to coordinate exchanges at the macro level.

Proponents of the perspective provided by Cook and colleagues (2005) view trust as playing more of a complementary role, a causal force encouraging cooperation that is distinctively separate from institutional factors (Raymond 2006). In support of Cook and colleagues (2005), Raymond (2006) found that institutional mechanisms and political leadership are more important in promoting collective action than is trust among cooperators. This study provides a timely opportunity to test the competing arguments surrounding the role of trust in promoting participation in collective action.

Based on the review of the literature provided above, the following hypotheses will be tested in this study:

Hypothesis 1: Respondents who are more actively involved in village civic organizations will be more likely to participate in civic collective action.

Hypothesis 2: Respondents who report higher levels of interpersonal trust will be more likely to participate in civic collective action.

Hypothesis 3: Respondents who report the presence of higher levels of norms of reciprocity in their interactions with others within their village will be more likely to participate in civic collective action.¹⁷

¹⁷ The terms community and village are used interchangeably in discussions of the case study site provided in this dissertation. The dependent variables are all examined at the village level and community will often be used in place of village since it is the more common term used in the literature.

The Factors that Influence Variability in Social Capital

The second objective of this study is to expand on the body of research that investigates the antecedents of social capital. As previously stated, this is a much neglected area of the literature as social capital is generally treated as an independent variable. This study tests many of the relationships supported in the literature and introduces additional predictors of social capital that have been neglected in empirical studies. Hypotheses related to these new insights are also provided.

Of the limited number of studies that have examined the determinants of social capital, most of them have been conducted in the United States (Alesina and La Ferrara 2000; Brehm and Rahn 1997; Glaeser, Laibson, and Sacerdote 2002; Putnam 1995). This dissertation addresses the theorized antecedents of social capital provided here and will explain how a number of these relationships cannot be generalized across countries with widely divergent levels of economic, political, and social development.

I. Ascribed Characteristics

Several studies have identified ascribed characteristics such as gender and racial and ethnic identity as influences on social capital. Putnam (1995) suggests that higher levels of social capital are found among women as wives and mothers are more likely to participate in church groups and PTA meetings and to visit with friends and family. This relationship is tested here, but a different finding is expected considering the context of this study. Field observations and a review of previous studies on the island (Hill 1977; Smith 1962) indicate that Carriacou is a patriarchal society where the opportunity for participation in community

affairs by women has been traditionally limited. Consequently, males tend to be more active in the public sphere and would likely have more opportunities to engage in daily social interactions with others.¹⁸ Counter to Putnam's results for the directionality of this relationship, this study tests the hypothesis that male respondents will report higher levels of each dimensions of social capital than do female respondents.

The other measure of ascribed status that has received attention in the literature, racial and ethnic identity, has been found to be negatively associated with social capital. Putnam (2000) expresses concern that racial differences have played a role in the erosion of social capital in the United States over the last generation, and Alesina and La Ferrara (2000) support this argument in their finding that civic participation is lower in ethnically fragmented communities. However, the relationship between racial/ethnic identity and social capital is not examined in this study the island's population is largely racially homogenous

II. Socioeconomic Status

Recent studies have reported that socioeconomic status, measured in terms of income, employment, and education, influences the formation of social capital. For example, Alesina and La Ferrara (2000) found that participation in associational activities is significantly lower in localities with greater income inequality. Brehm and Rahn (1997) argue that income inequality and levels of unemployment diminish interpersonal trust as the lack of resources

¹⁸ This does not mean that women are completely absent from public affairs. A number of key ministry positions are held by women as are a large number of waged occupations on the island. However, field observations clearly indicated that many traditional expectations regarding gender roles continue to persist on the island.

can lead to a less favorable view of others, who may become viewed as competitors. The strongest evidence for the relationship between socioeconomic status and social capital has been found for the impact of human capital (education) on associational membership and interpersonal trust (Putnam 1995). Education increases tolerance of dissimilar others and provides greater exposure to current information, including the importance of involvement in civic organizations. It has also been argued to increase interpersonal trust by increasing exposure to different cultures, resulting in individuals who are more tolerant and less suspicious of difference (McClosky 1967; Sullivan et al. 1982).

This study tests the relationship between employment and education with each of the dimensions of social capital. Income is excluded from the analysis as many respondents were hesitant to report their annual income.

III. *Socio-demographic Variables*

Socio-demographic characteristics such as age and marital status have been linked to social capital. Putnam (1995) suggests that higher levels of civic engagement are reported among older people and the breakdown of the traditional family unit has been cited as negatively affecting the production of social capital. According to Putnam (1995), married men and women rank slightly higher on measures of social capital, and single people are significantly less trusting and less engaged in civic activities than married people. In line with this, I include both of these measures in my analysis and expect to find similar relationships between both variables and the dimensions of social capital examined here.

Another established predictor of social capital that has received considerably less attention than those discussed above is technological infrastructure. Toqueville (1969 [1835]) first produced the argument that the transmission of current news through newspapers is essential to the production of civic participation. Much later, Putnam (2000) found that information technologies are essential in building social capital. This predictor of civic participation has generally been linked to developed nations with little consideration for populations in developing countries and their unique circumstances. For example, not all societies in developing countries have access to local or regional newspapers, televisions in every household, and access to other forms of electronic media such as the internet. Thus, this predictor of social capital is also excluded from this analysis.

Additional Predictors Tested in this Study

This study proposes several additional predictors of social capital that have often been neglected in the literature. Field observations and interviews with key informants indicated that church attendance and resident perceptions of government performance are powerful influences on attitudes towards individual and community responsibility. These two predictors of social capital are particularly relevant given that this study was conducted in a developing country where government infrastructure and public services were central to human well-being in the absence of a highly modernized and wealthy economy.

Church attendance as a predictor of social capital is most often treated as a measure of associational membership and has also been argued to contribute to the formation of social networks and foster a sense of community (Park and Smith 2000). Not only does church

attendance build ties to one's congregation members, but emotional attachment to those of the same faith can also generate interpersonal trust. The central argument behind this is that religion functions in a socially inclusive way and fosters trust and confidence in other members of society and "faith is often closely associated with a sense of solidarity, altruism, charity and humane values, all of which can result in a positive attitude towards other groups (Strømsnes 2008:482)." However, there is also the possibility that a strong sense of religious involvement can lead to the exclusion of groups different from one's own and result in religious fanaticism (Strømsnes 2008). In accordance with the former view, this study tests the following hypothesis:

Hypothesis 4: Regular church attendance is positively associated with associational membership, norms of reciprocity, and interpersonal trust.

Compared to other individual or structural attributes associated with social capital, the link to government performance has been debated in the literature. Since Alexis de Tocqueville's (1969 [1835]) observations of civil society in America, there has been a long standing interest in the relationship between associational life and democracy within the social sciences. The traditional view of the relationship between social capital and democracy is that good governance is an outcome of former.¹⁹ In line with Tocqueville,

¹⁹ This is based on the competing hypothesis that social capital leads to institutional performance as what matters instead of structures reaching downward from the apex of society is the nature of social relations existing at its base. Consequently, democratic institutions must be built up in the everyday traditions of trust and civic virtue among its citizens (Laitin 1995: 172).

Putnam (1993) argues that social capital, in the form of membership in community organizations and voluntary associations, has important implications for democracy.

While the literature has focused on the importance of social capital in promoting democracy, less attention has been paid to the ability of government institutional performance to influence the formation of social capital, particularly in developing nations. Contrary to Putnam's central argument, some researchers suggest that an opposite connection (from confidence in government to interpersonal trust) is possible (Brehm and Rahn 1997; Hall 1999; Levi 1996). Similarly, several studies indicate that there is a positive relationship between perceived government effectiveness and civic participation (Rosenstone and Hansen 1993; Verba et al. 1995). Such findings support the proposition that government can and does play a significant role in fostering social capital.

It is possible that stocks of social capital may be low in countries with a legacy of an authoritarian past and representative government could foster the formation of social capital and civic engagement (Abom 2004). Several studies indicate that beliefs pertaining to the responsiveness of political authorities contribute to higher voter turnout and political participation (Rosenstone and Hansen 1993; Brady, Verba, and Schlozman 1995).

Perceptions of government performance, the most common measure of confidence in democratic institutions, may also have consequences for the normative dimensions of social capital. Several studies have reported that government institutional performance is a precursor to social capital, capable of restoring or even undermining levels of interpersonal trust (Edwards and Foley 1998; Levi 1996). It is conceivable that the ability of government

to adequately meet the needs of the resident population could lead to greater civic participation, trust and reliance upon one's fellow citizens.

The study seeks to examine the role of government performance as an antecedent to social capital in developing regions of the world. It is entirely possible that historical context and government stability and effectiveness influence decisions to participate in civic organizations and can contribute to the formation of trust and norms of reciprocity. Thus, this study tests the following hypothesis:

Hypothesis 5: Favorable perceptions of government performance is associated with increased associational membership, and more positive indications of norms of reciprocity and interpersonal trust.

In addition to the two additional relationships discussed above, this study tests the effects of three additional potential predictors of social capital that were similarly identified by field observations and key informant interviews. One of these, "ties within the community," is a measure of community attachment. Strong ties to the villages on Carriacou is viewed as a contributing factor in individual decisions regarding membership in formal organization and can influence individual attitudes towards other residents. The justification for this, as proposed in this study, is that individuals with strong ties to others within the broader island-community will have a greater investment in their village's affairs. As a result, they will demonstrate a greater willingness to participate in community associations. The following hypothesis related to community attachment is tested here:

Hypothesis 6: The stronger one's ties are to the community, the more likely they are to participate in community associations and to report higher levels of trust and norms of reciprocity.

The final two predictors measure the extent to which residents will voice their concern over community problems and perceptions of the performance of community organizations in grappling with village problems. The former is solely linked to the structural dimension of social capital as community organizations are viewed as a potential outlet for civic-minded residents who are concerned with the welfare of their community. The latter is viewed as being positively related to both involvement in community associations and participation in collective action as positive perceptions of the efficacy of community groups might lead individuals to become more active participants in both. The hypotheses related to the final two predictors are:

Hypothesis 7: Respondents who are more vocal in expressing their concern over community well-being will be more apt to participate in community organizations.

Hypothesis 8: Respondents who report more favorable perceptions of community organizations on the island will be more likely to participate in said community groups.

Three additional hypotheses tested in this study examine the interrelationship between the three dimensions of social capital. This is an important, an often neglected, task in the social capital literature that could provide insight into the processes through which the

concept operates. Putnam (2000) argues that involvement in social networks can enhance the formation of trust and reciprocity. Brehm and Rahn (1997) also contend that greater participation within the community will lead residents to become more trusting of one another. In accordance with this, the following two hypotheses are tested:

Hypothesis 9: Involvement in formal social networks, in the form of associational membership, will increase levels of interpersonal trust.

Hypothesis 10: Involvement in formal social networks, in the form of associational membership, will increase reported levels of norms of reciprocity.

The social capital literature provides few instances where norms of reciprocity are actually measured and tested. This study attempts to remedy this by constructing an index of respondent perceptions of the daily give-and-take that takes place between residents. A final relationship that remains to be examined is that between the two normative dimensions of social capital. This study hypothesizes that interpersonal trust is generated through the daily routine interactions and exchanges that take place between residents. In line with this argument, the following hypothesis is tested:

Hypothesis 11: Norms of reciprocity, measured as routine exchanges of assistance reported by residents, generate interpersonal trust.

The Theoretical Model

A path model of the relationships discussed here is provided in Figure 1. Each of the theoretically-driven causal pathways is indicated with a one-directional arrow. There are

additional arrows leading from ascribed status, the socioeconomic and socio-demographic measures, perceptions of government performance, frequency of church attendance, community attachment, and the perceived efficacy of community organizations to participation in collective action. This study hypothesizes that any potential effect of these variables on participation in collective action is mediated by the multiple dimensions of social capital.

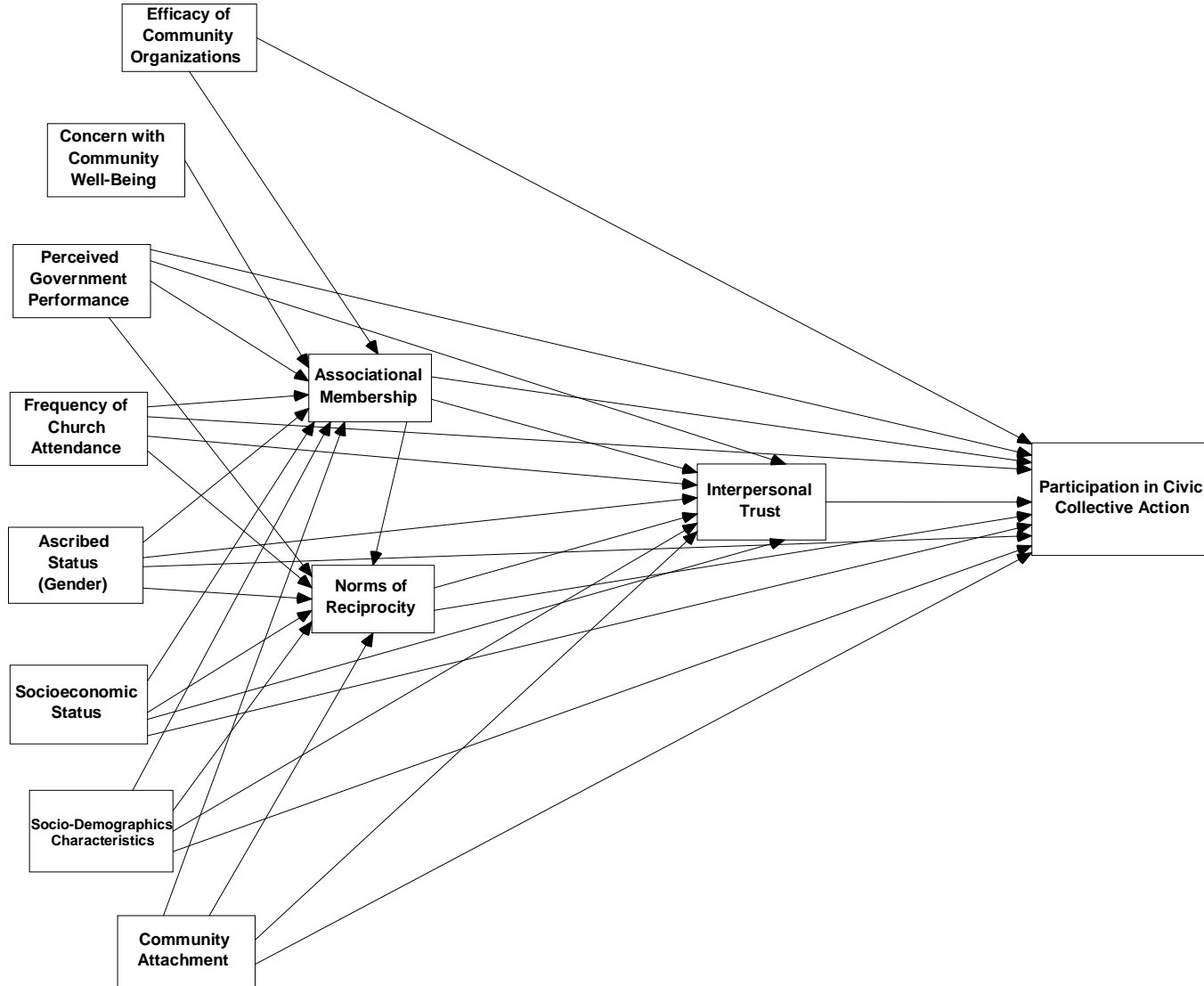


Figure 1. Path Model Predicting Social Capital and Individual Participation in Collective Action Events

CHAPTER 3

CASE STUDY: CARRIACOU, GRENADA

This study examines social and structural influences on individual-level indicators of social capital and participation in civic collective action using data drawn from a case study conducted on the island of Carriacou, Grenada. Carriacou provides an intriguing opportunity to study collective action in an island nation with a colonial past. Further compounding their marginalized status as part of a developing country is Carriacou's recent experiences with natural disasters, having suffered considerable damage during the 2004 and 2005 hurricane seasons.

The largest of the Grenadine Islands, an archipelago in the Windward Islands chain in the Eastern Caribbean, Carriacou rests 20 miles north of Grenada and just over 100 miles north of Venezuela (See Figure 2). Carriacou, along with the island of Grenada and five smaller islands (several of which are not continuously inhabited) at the southern end of the Grenadines, form the island country of Grenada.²⁰ Formally recognized as an independent nation in 1974, Grenada joined the United Nations in 1975. Maintaining its ties to its colonial past, Grenada remains a Commonwealth, with the United Kingdom serving as the formal head of state. The prime minister and central government offices are located on Grenada, with branch office for Carriacou and Petite Martinique located in Hillsborough, the capital of Carriacou.

²⁰ While politically part of the country of Grenada, the smaller islands, Carriacou and Petite Martinique in particular, are viewed as dependencies by the central government on the island of Grenada.



Figure 2. Map of the Caribbean Islands

Carriacou has a total area of thirteen square miles (32 km²) and a population of approximately 6,750 (UNDP CWIQ 2005). Carriacou's population is characterized as largely culturally and socially homogenous as many of the residents are direct descendants of slaves brought to the island by the French to provide colonial sugarcane plantation labor near the turn of the eighteenth century.²¹ Today, the island's economy is based primarily on subsistence agriculture, fishing, animal husbandry, boat building, government and consumer services, and a small tourist industry revolving primarily around sailing and yachting.

The next section of this chapter provides a short discussion of the island's post-Columbian history that will help shed some light on their experiences as a population that contributed to their current standing as a peripheral nation according to world-systems theory (Wallerstein 1974).²² I begin by providing a brief history of the island prior to 1974 tying in the role that its colonial roots have to the potential for development on the island. This is followed by a summary of some of the current challenges being faced by Carriacou's residents since gaining independence. The chapter concludes with a more detailed explanation of the relevance of this study within the context of Carriacou and potentially other developing regions with similar historical experiences and current circumstances.

²¹ The people of Carriacou are predominantly of West African descent with the exception of Windward village where people have some northwest European racial characteristics (Hill 1977).

²² World-systems analysis argues that capitalism, as a historical social system, has always integrated a variety of labor forms within a functioning division of labor (Wallerstein 1984). Countries do not have separate economies, but are part of a broader inclusive world-economy. This world-economy manifests a tripartite division of labor with core, semi-peripheral, and peripheral zones. The *core* countries (economies) dominate the economic system. At the *semi-periphery* of the system are countries with marginal economic status, such as Israel, Ireland, and South Korea. The poor developing countries of Asia, Africa, and Latin America are on the *periphery* of the world economic system. The world-system approach proposes that the poverty and backwardness of poor countries are caused by their peripheral position in the international division of labor.

Colonial Control, the Collapse of the Plantation Economy

The pre-Columbian inhabitants of Carriacou were Amerindians who settled the island around A.D. 400, somewhat later in time than other larger, nearby island such as Grenada and St. Vincent (Fitzpatrick et al. 2009). The Carib Amerindians inhabited the island when it was discovered by Christopher Columbus in 1498. The last remaining Carib people on the island perished shortly after the French purchased neighboring Grenada from England in 1650. Carriacou was originally settled by the French who brought the first slaves to the island in order to establish a colony with cotton as the major export. Like most other West Indian landscapes, the population on Carriacou is largely the result of the direct of economic manipulation of European powers that “introduced inputs of African slaves, Old World cash crops, and European technology that traditionally benefitted England more than the Caribbean” (Richardson 1974: 391). The island was later ceded back to the British in 1763. Once Grenada came under British control, Carriacou became a parish of the colony of Grenada and specialized in the cultivation and processing of sugar-cane and Key limes for export (Smith 1962).

The emphasis on plantation production subsided shortly after the 1830s as many of the smaller Caribbean islands were unable to compete with larger sugar-producing countries. These market difficulties coincided with the timing of an act passed by the British Parliament abolishing slavery in all its possessions in 1833 (Hill 1977). Prosperous land owners made a brief attempt to employ former slaves into an apprenticeship system. However, the inability to compete in the sugar and cotton markets left little opportunities for profit on the island. As a result, many former slaves and plantation owners left the island, leaving many behind on

the island to survive on their own devices and with few opportunities for wage labor (Smith 1962).

Carriacou has been mired in a position of extreme disadvantage since the end of the colonial period. Its size and limited resources have left Carriacou unable to compete on the world market with larger Caribbean islands. Further adding to these difficult economic circumstances, the plantation system left its permanent mark on the island's physical landscape. It is estimated that more than 80 percent of the island's vegetation had been cleared by the end of the 1800s (Richardson 1974). In the modern era, subsistence farming, overgrazing, and the dredging of beaches for use in construction materials have further degraded an already heavily-taxed ecosystem. Bonham Richardson (1974) provides a detailed discussion of what he refers to as the "overdevelopment" of Carriacou. He focused on the impact of the plantation economy on Carriacou's physical environment and how the population has managed to cope with the consequences of European colonization. Published in 1974, his work depicts a bleak picture of the future of the island. In contrast to Richardson's conclusions, this dissertation provides a contemporary glimpse into problem-solving mechanisms employed by the island's residents to counter economic, environmental, and social problems.

The prolonged economic depression that followed the emancipation of slavery forced many former elites to leave the island, taking with them the plantation form of economy (Smith 1962). Carriacou's position in the world-system following the economic collapse on the island is best depicted by M. G. Smith (1962: 3):

"While the natives of Carriacou were developing their society and culture in

splendid isolation, new racial and cultural elements were being introduced to the larger possession nearby (Grenada and larger surrounding islands), which were too important to be abandoned. Instead, they were continuously subject to economic and political stimuli designed to promote their viability. During the present century these external stimuli have increased in range and intensity. Autonomy, federation, industrialization, university development, and communications are only the principal foci of current programmes. Carriacou, abandoned in the last century, remains quite outside this stream of activity.”

The lack of wage labor opportunities on Carriacou following the collapse of the plantation economy led many of the island’s male inhabitants to migrate to Grenada and Trinidad in pursuit of seasonal jobs on sugar plantations (Richardson 1974). Money was sent back to their families on Carriacou and this remittance system accounted for the bulk of the island’s economy. Most of those who remained behind remained engaged in fishing, sailing, ship-building and the care of cattle. Subsistence farming, a practice that has survived to the present day, was largely carried out by women. Although the island provided little financial benefit as a colony, it remained under British influence through the few elites and civil servants who remained on the island. Sugar production on the island was abandoned entirely in 1871 and key-lime production served as the primary cash crop on the island along with cotton and corn (Hill 1977). By the 1990s, these no longer played a focal role in the Carriacou economy and the Key lime processing plants on the island had closed (key informant interview). Grenadian journalist and historian Alister Hughes summarized the decline of this sector of the island’s economic base in the following statement:

“Through the years, Carriacou vessels have transported a variety of cargoes. Traditionally, the island produced and exported crops of cotton and limes but, mirroring a regional problem, producers of these commodities have been handicapped by their inability to control or cope with conditions in the international markets.”

At the start of the 20th century, only a small portion of the island was held by the former slave population. However, beginning in 1903 with the Carriacou Land Settlement Scheme, the colonial government began to disperse allotments of land holdings to settlers (Hill 1977). By 1938, the total acreage of small land holdings was nearly twice that of estates (Hill 1977). The estates concentrated on lime cultivation and export and employed a small number of part-time laborers.

Traditionally, most residents on Carriacou are engaged in some degree of subsistence farming. Despite this, much of the food consumed by the island's population is imported. This further contributes to an already fragile economy as revenue brought in from the export of crops grown on the island and from the sale of fish and poultry on Grenada and St. Vincent is not sufficient enough to balance out the cost of imported products (Richardson 1974). This supports the increasing trend in food import dependency among peripheral nations since the collapse of the Bretton Woods agreement in the early 1970s (McMichael 2008).²³ The loss of preferential trade agreements and the inability to compete in the global economic market have reinforced the peripheral status of many Caribbean nations since gaining independence from their former colonizers (Weis 2007). This is a common trend among many poor countries as the developed nations of the world have largely failed to open their markets to agricultural goods that form the basis of many developing countries'

²³ The July 1944 conference in Bretton Woods, New Hampshire, set the stage for the development of an international banking system that led to the formation of the World Bank and the International Monetary Fund (IMF) (McMichael 2008). "Bretton Woods maintained stable exchanges of currency between trading states. Stabilization was accomplished by the American dollar's role as the international reserve currency...fixed currency exchanges stabilized domestic interest rates and, therefore, national economies" (McMichael 2008: 123). In 1971, the United States terminated the convertibility of the dollar to gold, officially ending the Bretton Woods system.

potential exports (Stiglitz 2002). On Carriacou, the decline of their agricultural-based economy has resulted in an economy that is heavily reliant upon the service sector and remittances as many residents have been left with few alternatives other than emigration in search of opportunities for work abroad to help support their family members who remain on the island.

Throughout the 20th century, larger Caribbean islands, the eastern United States and England became popular destinations for many of the island's male residents seeking wage-labor opportunities. However, a number of restrictive immigration policies in the first half of the century had a significant impact on seasonal labor opportunities and the prospects to live abroad on a permanent basis.²⁴ Heavy migration resumed when many of these restrictions were lifted in the latter half of the century, but they never again matched earlier numbers as more stringent requirements and costs for visas, passports, and other travel documentation served as a new barrier to emigration or seasonal labor outside of Carriacou.²⁵ The historical dependence upon its labor-migration system has had a significant impact on the island's population numbers (Table 1). Carriacou has maintained a remarkably stable population over the past century as a substantial number of the men were forced to seek work elsewhere to support their families and, more recently, many young people leave to pursue an education or employment opportunities abroad.

²⁴ The United States passed the Immigration Act of 1924 (Johnson-Reed Act) that reduced the annual number of immigrants who could be admitted from any country to two percent of the number of the number of people from that country already living in the United States in 1890. Venezuela, Trinidad, the Netherlands Antilles, and England followed with similarly restrictive immigration acts over the next four decades (Richardson 1974).

²⁵ In 1965, the United States Immigration and Nationality Act Amendment eliminated nationality origin quotas.

Post-Independence Carriacou

Since Grenada gained its independence in 1974, Carriacou has experienced some degree of economic development that has brought more opportunities for wage labor. The opening of government ministry offices on the island has generated government jobs and the island's gradually increasing reputation as a tourist destination for travelers seeking the

Table 1. Population Statistics for Carriacou (1851-2005)

Year	Population	Increase or Decrease
1851	4,461	■
1891	6,031	+1,570
1911	6,886	+855
1921	7,104	+218
1951	6,771	-333
1961	6,958	+187
1971	6,052	-906
1981	■	■
1991	5,726	-326
2001	6,081	+343
2005*	6,750	+687

*Population estimate provided by the UNDP CWIQ Survey.

Other population statistics are from the Grenada Population and Housing Census

unique and rustic beauty of a more remote Caribbean island has provided a modest boost to the economy (based on key informant interviews and participant observation). In addition, a number of native-born residents have returned to the island after working abroad for a number of years. Many of these residents, referred to as JCBs ("Just Come Backs"), have invested their pensions from working abroad back into the local island economy, opening businesses of varying sizes and frequently providing small business loans to other residents.

Combined, these factors have all contributed to the rise of the service sector on Carriacou and have provided a number of new salaried and hourly-wage positions.²⁶ According to a UNDP Core Welfare Indicators Questionnaire (CWIQ) Survey conducted in Grenada in 2005, 40.9 percent of employed activities on Carriacou were comprised of transportation, consumer service, and education/health/social work jobs.²⁷ This number is actually far below the 60-90 percent range for many of the larger Caribbean island for that same year and slightly below other developing nations with a heavy reliance upon agriculture (World Bank 2011). This potentially reflects Carriacou's ongoing reliance a number of traditional economic activities including agriculture, fishing, and animal husbandry.

Conditions on Carriacou have improved considerably in recent decades. Much smaller than the mainland of Grenada (estimated population of 102,000 according to the UNDP CWIQ 2005) and considerably larger than Petite Martinique (900), Carriacou is noted as having a lower rate of poverty and an unemployment rate (16.7%) comparable to the mainland of Grenada (UNDP CWIQ 2005).²⁸ The adult literacy rate is 97.1 and that for youths is near 100 percent, which mirror literacy rates for much of the Southern Caribbean

²⁶ The author found it interesting that, while the island has traditionally depended upon wages earned abroad by the male members of society, a substantial number (if not the majority) of occupations in the service sector are filled by female residents. Most senior and managerial positions are held by men, but many women own their own businesses and hold prominent positions in the government ministry offices. Meanwhile, many of the younger men on the island remain unemployed or struggle to fill limited wage opportunities created by construction on the island.

²⁷ The UNDP's CWIQ Survey Report documented the social and economic conditions in Grenada in 2005 and included an assessment of the damage caused by Hurricane Ivan along with an analysis of initial reconstruction efforts.

²⁸ The unemployment rate on Carriacou may appear to extremely low in comparison to other developing regions of the world. One explanation for this is that 32.7 percent of those who indicated in the UNDP Core Welfare Indicators Survey that they were employed were actually self-employed.

and approaches those for developed regions of the world. In addition, residents and absentee owners (former residents and foreign national living abroad who own property on the island) are in possession of 95 percent of the land on Carriacou, with the Grenadian government holding rights to the remainder. At face value, these statistics might suggest that Carriacou suffers few of the challenges encountered by other developing regions of the world.

However, the island is far from self-sufficient, reliant upon Grenada and other neighboring islands not only for many import products, but until recently, for health services and post-secondary education opportunities as well. The island's size and remote location limit any limits the potential for industrial development.

The next section of this chapter provides a brief look at efforts to recover from recent hurricane damage and further demonstrates why Carriacou serves as a valuable and timely context for examining the factors that influence citizen involvement in collective action events that are designed to improve the well-being of the collective.

Relevance of this Study to Current Conditions on Carriacou

In 2004, Hurricane Ivan hit the Eastern Caribbean islands causing catastrophic damage and loss of life on Grenada. Hurricane Emily passed through the Windward Islands the next year. These were the first hurricanes to hit the region since Hurricane Janet in 1955.

Although Carriacou was spared the worst effects of Ivan, it suffered significant damage from Emily, leaving the local government offices and resident population with the difficult task of rebuilding with limited resources. The combination of the island's peripheral status with its recent vulnerability to hurricane disasters makes the collective action problem a critical one

that requires more consideration. Parks and Roberts (2006) argue that this has become a matter of environmental justice among nations with a colonial past and who stand on the fringes of the world economy as they are more vulnerable to climate change and resulting natural disasters. In the case of Carriacou, one of the most important resources in the rebuilding process has proven to be the island's resident population. Their participation in collective action designed to benefit entire communities on the island serves as the basis of this dissertation.

Confronting disasters, such as hurricanes, proves especially difficult for communities in economically marginalized countries. To put the extent of the damage on Carriacou into perspective, 55.6 percent of households surveyed by the 2005 UNDP CWIQ suffered damage from Hurricane Ivan. The numbers were considerably higher in the wake of Hurricane Emily the following year as several hundred homes on the island experienced significant damage (CDERA 2005).

International relief efforts have played a significant role in reconstruction efforts on Carriacou as several of the development projects undertaken since the hurricanes hit the island are supported by the United States, Canada, China, Taiwan, and international non-profit organizations such as USAID, UNICEF, and the American Red Cross. At the same time, local residents and community organizations on Carriacou have proven to be some of the most valuable assets in the reconstruction process, providing financial support, labor, and assisting in project planning. For instance, community-driven efforts on Carriacou have assisted with restoring local businesses, constructing hurricane shelters, rebuilding schools, and cleaning up the destruction inflicted by these natural disasters. Individuals and

community organizations have collaborated with ministry officials and international aid organizations to develop disaster preparedness plans and provide training for residents who lost their jobs in the aftermath of the hurricanes.

In the midst of the recovery efforts addressing the hurricane damage, Carriacou has undertaken a level of community development that is unmatched by any other period in the island's history. At the time of this study, a new modern full-service health center (Carriacou Health Service) had been built on the island, along with an additional health clinic, the first public library on the island, a new produce, a fish market, a marina, an athletic complex, several new hotels and grocery stores, a radio station, and a branch of the T.A. Marryshow Community College based in Grenada. The residents of Carriacou were frequently involved in the development efforts, often playing very influential roles. Much of the progress has come about as a result of extensive ties—bridging social capital—between individuals and organizations on the island and international assistance organizations, groups of former residents living abroad, and other network ties external to the island.

Carriacou provides a rare example of a community that has undergone recent unprecedented growth despite its colonial history and ongoing marginalized status as a small island within a peripheral island state. This effectively places Carriacou on the periphery of a peripheral country in the world system (Hall 2001). Such a position of extreme disadvantage could categorize Carriacou as a hinterland (Hall 2001; Wallerstein 1974). Carriacou exports natural resources and human labor to Grenada, yet they have experienced little economic penetration by market forces in the core nations of the world system and they have struggled to find a niche in the global economic market. The selection of Carriacou as a case study

also provides a unique opportunity to study community-driven efforts in a developing setting following a devastating natural disaster. While villages on the island did receive international aid and assistance from the central government on Grenada, residents had to assume much of the responsibility for rebuilding damaged homes and businesses. A number of villages also took it upon themselves to construct hurricane shelters, to develop hurricane preparedness plans.

CHAPTER 4

DATA AND METHODS

Survey Design and Construction

The variables used in this study are part of a larger residential survey questionnaire conducted on the island of Carriacou during the summer of 2006. The survey instrument was designed to collect information related to community capacity and development efforts on the island. The timing of this study coincided with reconstruction efforts on Carriacou in response to extensive residential and commercial damage inflicted by Hurricane Emily the previous summer. As a small island and a dependent of Grenada, also undergoing reconstruction following Hurricane Ivan in 2004, civic participation played a pivotal role in Carriacou's ability to successfully rebound from the natural disasters. These community-based efforts, coupled with other instances of locally-driven development, had a strong impact on the survey design and the topics incorporated into the questionnaire.

This project was initiated in 2005 by a research team from the Department of Sociology and Anthropology at North Carolina State University. After obtaining permission from our university's Institutional Review Board, we initiated a series of meetings with ministry officials on Carriacou to define the project and obtain permission to proceed with the research. At the conclusion of these meetings, and after receiving consent from the Ministry of Carriacou Affairs, we began with the first phase of the project. The residential survey instrument used in this study is based on field observations, key informant interviews,

and a pilot residential survey conducted that summer. This phase of the study concluded just one week before the full force of Hurricane Emily reached the island.

Research during the summer of 2005 involved in-depth, structured interviews with 25 government officials and influential members of the island community—i.e., church elders, business owners, and community group leaders—and the small residential pilot study (N=40). We selected key informants based on their positions within the ministry offices and within the broader island-community. The selection process of influential community leaders was aided by personal referrals from several ministry officials. The interviews with officials and community leaders consisted of a key informant questionnaire consisting of 33 questions that addressed community development projects on Carriacou and the involvement of government officials, non-profit and non-governmental organizations, and community civic organizations in development efforts. The key informant questionnaire also examined the extent and cooperative nature of interactions between government ministry offices, civic groups, and international aid organizations. The structured interviews were supplemented with a follow-up interview designed to gather qualitative data. I incorporate data from the key informant interviews into Chapter 6 to provide a more in-depth understanding of the findings of this study and to emphasize the importance of local involvement in community development efforts on the island of Carriacou.

The residential pilot study consisted of 98 items asking residents from the capital town of Hillsborough and the neighboring villages of Top Hill and L'Esterre (Figure 3) questions about family interaction, civic participation, the accessibility of health services,

employment, education, and natural and cultural resource preservation. The purpose of this instrument and the key informant questionnaire was to enable the construction of a more

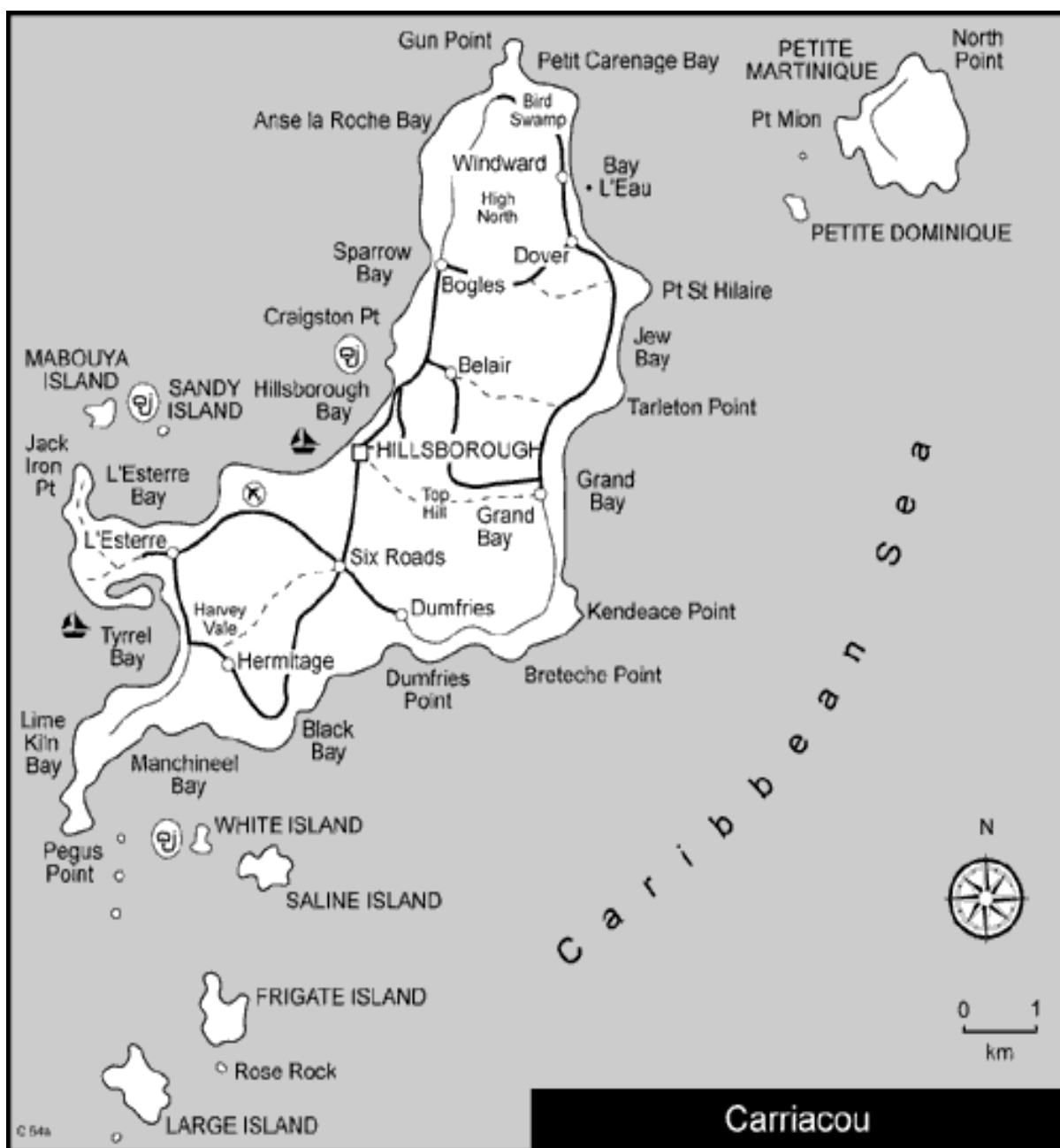


Figure 3. Map of the Island of Carriacou, Grenada

refined residential survey that was sensitive to local historical, cultural, and contextual nuances and that incorporated the most pressing social and economic concerns as identified by the local population.

This final survey instrument, used in the summer of 2006, focused primarily on structural and normative/attitudinal indicators of social capital, participation in collective action events, ties to the community, perceived government institutional performance, experiences living abroad, agricultural practices, and knowledge of environmental sustainability issues. Ten in-depth interviews were also conducted in the summer of 2006. The participants in these interviews were identified by the residents as being influential leaders in the villages. A question was included in the residential survey asking respondents: “If your village was electing a committee to seek help in case of a catastrophe (for example, a hurricane), what person would you most likely pick to head up that committee?” The purpose of the key informant interviews was to provide detailed information related to community organizations. The information sought in these interviews included the types of projects undertaken within the five villages, the level of residential involvement, the role played by community groups within the villages, and the extent of their involvement with government ministry offices and individuals and organizations off the island. Themes that emerged from the in-depth key informant interviews will be introduced in the discussion section to provide insight into the findings of the analyses of the residential survey data.

Site Selection

Carriacou's culture and economy is primarily based on a long and rich history of shipbuilding, fishing, farming, and animal husbandry. Since gaining its independence in 1974, Carriacou has witnessed a transition in which the magnitude of these traditional practices has diminished somewhat. This is the result of an increase in the island's service sector and a substantial portion of the economy is now centered on government, commercial, and public services. Based on current cultural and economic practices on the island, I selected five villages that represented each of these sectors to serve as my study site.

Hillsborough

The capital town of Hillsborough, located on the western side of the island, serves as the main hub of commercial activity and location of the government ministry offices. Surprisingly, only about 150 permanent residents live there despite the fact that the town is located adjacent to the island's largest port and serves as a designated station for the ferry (known as the "*Osprey*") that runs between Carriacou, Grenada and Petite Martinique. Most of the residents are local business owners, government officials, retirees who were born on the island but lived and worked abroad during much of their adult lives—referred to as “just come backs” or JCBs)—and expatriates from the United Kingdom, United States, and Canada. Hillsborough has experienced considerable development over the past seven years with the construction of the island's first full-service hospital, several markets, a community college, and the island's first public library. The hospital is staffed year-round by nurses, has a full equipped rehabilitation center, and provides surgical procedures that were previously

unavailable on the island. Prior to the opening of the new hospital, residents with serious injuries or who required major surgery were forced to seek treatment on Grenada.

Carriacou's two secondary schools are located in Hillsborough and a new primary school is currently under construction. The school that previously stood on those grounds was completely destroyed by Hurricane Emily in 2005.

L'Esterre and Harvey Vale

L'Esterre, located on the southwest edge of the island, is a close-knit community of close to 300 residents, and most of the male members of the village are engaged in the island's fishing industry. The neighboring village of Harvey Vale, with its considerably smaller population of approximately 150 permanent residents, is also home to a number of part-time (seasonal) residents from Europe and the United States. Harvey Vale relies heavily upon the island's small, but steadily increasing, tourism industry and has the island's second largest port. Construction is currently underway on a marina in Harvey Vale which should dramatically increase commercial activity around this small village.

Mt. Pleasant/Grand Bay and Windward

Of the other two villages included in this survey, one, Mt. Pleasant/Grand Bay, is located on the eastern side one, Windward, is on the northern tip of Carriacou. Mt. Pleasant and Grand Bay have a combined population of approximately 300 permanent residents, a substantial number of which are engaged in agriculture and animal-husbandry. These two villages were combined for interviewing purposes as they share a number of key public

services, and qualitative interviews and observations indicated that most of the residents identified with both and viewed them as one community.

Windward has a long shipbuilding history that was first introduced by Scottish immigrants, who later married former slaves, resulting in a largely multiracial and multiethnic population. Home to between 300-350 permanent residents, Windward is one of the most remote villages on the island and access to the capital town is limited and dependent upon the availability of privately owned automobiles and mini-bus transportation.²⁹

Respondent Selection

During the summer of 2006, residences were randomly selected using stratified random sampling from the five villages that were deemed representative of the island's primary cultural and economic characteristics. It is generally recommended that large sampling ratios of approximately 50 percent be drawn from populations under 500 and the majority of the villages on Carriacou fall within this range (Ruane2005). However, the sample examined in this study is used to test hypotheses for the island as a whole rather than for the five separate villages. Stratified sampling was used in this case as it often requires a smaller sample since precision can still be achieved if the researcher has considerable information about the research population in advance and respondents are drawn from

²⁹ The people of Carriacou travel mainly by privately run 15 seater buses. Rental cars and taxis are also available and a small number of residents own cars and trucks. Hillsborough serves as the terminus for the mini-buses and access is readily available to most of the island's residents during the daylight hours. L'Esterre and Harvey Vale are regular routes for most of the mini-buses, while trips through Mt. Pleasant/Grand Bay and Windward are less frequent as they are further away from Hillsborough and separated from the capital by a mountain. Road access to these two villages also poses a problem for regular bus traffic.

homogenous subsets of the total population (Babbie 1989; Ruane 2005).³⁰ The main advantage with stratified sampling is that increases the likelihood of capturing key population characteristics in the sample. Similar to a weighted average, this method of sampling produces characteristics in the sample that are proportional to the overall population. Furthermore, the population characteristics of the sample used in this study closely match those indicated by census data obtained from the Grenadian government. This greater degree of representativeness helps to decrease the probable sampling error (Babbie 1989). Overall, 114 interviews were completed over a period of four weeks. Descriptive statistics for the sample population are provided in Table 2.

A total of 58, or 50.9 percent, of the respondents are males. The mean age is 50.5 years, and 53 percent of the sample had lived off the island at some time in their life. Residents who were born on Carriacou but spent a considerable portion of their lives living and working abroad are commonly referred to as the JCBs (“just-come-backs”).³¹ Slightly over 58 percent of the respondents have at least a secondary education, and just over 10 percent have a college degree. Wage labor is not readily available on Carriacou as indicated by the fact that only 58 percent of respondents reported that they were employed on a regular, full-time basis at the time the survey was taken. Many of these are self-employed, operate small farms, tend to animals, or work in one of the island’s other traditional

³⁰ For example, to collect a stratified sample of college students, you organize the student population by college class and then draw the appropriate samples from each individual class (Babbie 1989).

³¹ The term JCB is used in reference to individuals born on the island who later moved abroad to pursue an education or permanent employment. These individuals typically reside abroad for much of their lives and return to the island after retiring from their profession. Many who come back to the island and live off their pensions, supplementing their incomes by opening small local businesses or by taking positions in local government or the ministry offices. Some particularly influential JCBs assume roles within community groups and help to organize civic projects.

Table 2. Descriptive Statistics of Independent Variables in the Analyses

Variable	Range	Mean	Std. Dev.
<i>Ties to the Community Measure:</i>			
Frequency of visits with friends and family in other villages.	0-30	4.56	8.23
<i>Concern with Community Welfare Measure: (Yes = 1)</i>			
Discussed village problems or issues with others in their village.	0,1	0.50	0.50
<i>Efficacy of Civic Organizations Measure (1 = None at all; 4 = A lot)</i>			
Perceived efficacy of village civic organizations.	1-4	3.15	0.91
<i>Perceived Government Performance Measure: (1 = None at all; 4 = A lot)</i>			
Perception of how much the central government helps their village.	1-4	2.63	0.93
<i>Frequency of Church Attendance Measure: (1 = None; 4 = 4 or more times a month)</i>			
Frequency of church attendance on a monthly basis.	1-4	2.20	0.93
<i>Ascribed Status Measure:</i>			
Gender (male = 1)	0,1	0.51	0.50
<i>Socio-Demographic Characteristics:</i>			
Employment status (employed = 1)	0,1	0.58	0.50
Level of education (1 = less than primary; 6 = has a college degree)	1-6	3.61	1.32
Age (in years)	19-80	50.54	20.12
Marital status (married/cohabitating = 1)	0,1	0.39	0.49

occupations. Slightly fewer than 40 percent of respondents are married or cohabitating with someone as if married. Most respondents are embedded in very large friend and family networks, both on and off the island, and over 80 percent of respondents voted in the most recent election. Due to little variation in the density of these ties among islanders, my network measure of social capital does not capture the often-defined informal networks of

friends and family (Bourdieu 1983; Coleman 1988; Fukuyama 1999; Putnam 1995).

In the next section, I discuss each of the variables in the theoretical model in Figure 1. This is followed by a description of the methods of analysis used to test the predicted relationships in the model, including direct, indirect, and total effects.

Measurement of Variables

Dependent Variable

Participation in collective action serves as the outcome variable in the theoretical path model. I focus on individual participation in everyday collective action events, both formal and informal, that do not seek radical social change. This represents purely civic forms of collective action that are more inclusive and are designed to promote community well-being. Events were identified based on previous key informant interviews and field observations. To measure participation in collective action events, I used factor analysis techniques to establish an index based on a summed score of participation in six different community activities designed to bring community members together. These included events specifically organized to raise funds for community schools and services, to address hurricane preparedness, to help direct construction project efforts, and to promote civic pride.

Descriptive statistics for each measure of participation in collective action are shown in Table 3. These measures include participation in village improvement projects, village and island-wide festivals, village and island-wide sporting events, school activities, and ad hoc meetings with an emphasis on community building and village development projects. The number of respondents who indicated that they participated in any of these six events

ranges from 32 to 74 percent. Respondents were least frequently involved in ad hoc village meetings, 32 percent, and most often reported attending school sponsored activities, 71 percent, and sporting events, 74 percent.

Principal axis factoring revealed that the six items characterize a single underlying dimension, or factor, of participation in collective action.³² The factor loadings and reliability statistics for the index of participation in collective action events are reported in Table 4. The reliability scores and a Cronbach's alpha of 0.767 provide support for the index's construct validity and factor loadings range from 0.501 to 0.765 (Garson 2009; Hair et al. 1998). The lone factor accounts for nearly 47 percent of the variance in the data.

Mediating Variables

Social capital serves as the mediating variable in the theoretical model in Figure 1 and consists of three separate components—associational membership, trust, and reciprocity—in accordance with Putnam's (1993, 2000) definition. Descriptive statistics for each dimension

³² I conducted confirmatory factor analyses since the indicators were selected on the basis of prior theory and field observations. Principal axis factoring, the most common form of factor analysis, was used to determine if the variables loaded as predicted on the expected number of factors (indexes). The six measures of participation in community events were run separate from the items in the other two indexes as they are collectively viewed as an outcome variable and their measurement was not consistent with that of the other six variables. A single factor representing participation in collective action was extracted from the six measures of involvement in community activities. As a result, the solution could not be rotated. Furthermore, there was only one eigenvalue larger than 1 (Guttman-Kaiser rule), determining that only one factor should be extracted (Field 2000). Some researchers contend that, in confirmatory factor analysis, loadings should be .7 or higher to confirm that independent variables identified a priori are represented by a particular factor (Garson 2009). However, the .7 standard is a high one as real-life data may not meet this criterion, and it is common social science practice to use a minimum cut-off of .3 or .35 (Garson 2009). Hair et al. (1998) consider loadings above .6 to be "high" and those below .4 as "low". Garson (2009) also points out that factor loadings must be interpreted in the light of theory and not by arbitrary cutoff levels. This study uses the more liberal cutoff points as these collective action events serve a vital function for communities on the island and cannot be neglected, particularly in exploratory factor analysis.

Table 3. Descriptive Statistics for Social Capital and Participation in Collective Action

Variable	Range	Mean	Std. Dev.
Dependent Variable			
<i>Participation in Collective Action (in past six months): (Yes = 1)</i>			
Participated in village improvement project.	0,1	0.43	0.50
Participated in village ceremonies or festivals.	0,1	0.54	0.50
Participated in island-wide ceremonies or festivals.	0,1	0.56	0.50
Participated in ad hoc meetings to discuss village issues.	0,1	0.32	0.47
Attended any school-sponsored activities.	0,1	0.71	0.46
Attended village or island sporting events.	0,1	0.74	0.44
Participation in collective action events index	0-6	3.30	1.95
Mediating Variables			
<i>Associational Membership:</i>			
Number of organization, club, or group memberships.	0-3	0.68	0.92
<i>Norms of Reciprocity: (1 = Never; 5 = As often as possible)</i>			
How often in the past month people in village helped respondent with day-to-day tasks.	1-5	1.69	1.24
How often in the past month the respondent helped others in their village with day-to-day tasks.	1-5	2.22	1.36
In general, how often people in the village help each other.	1-5	3.12	1.21
Norms of reciprocity index	3-15	7.03	3.07
<i>Interpersonal Trust: (1 = None or very few of them; 5 = All of them)</i>			
In general, how many of the people in the respondent's village they think can be trusted.	1-5	3.24	1.27
How many neighbors the respondent could count on if they encountered a problem and needed assistance.	1-5	3.47	1.40
How many of the respondent's neighbors would ask them or help if they were in the same situation	1-5	3.30	1.45
Interpersonal trust index	3-15	10.01	3.44

Table 4. Factor Loadings and Reliability Statistics for Participation in Collective Action

Item	Participation In Collective Action
Participated in village improvement projects.	.575
Participated in village ceremonies or festivals.	.501
Participated in island-wide ceremonies or festivals.	.579
Participated in ad-hoc village meetings.	.534
Attended school-sponsored activities.	.641
Attended village or island-wide sporting events.	.765
Chronbach's alpha	.767
Eigenvalue	2.806
% of Variance	46.767

of social capital are included in Table 2. The associational membership component in the theoretical model is measured as the total number of community organizations and voluntary associations to which one belongs. A total of 51 respondents, or 44.7 percent, reported that were members of a civic group. Thirty-two, or 28.1 percent of respondents, claimed they belong to one group, eleven, or 9.6 percent, belong to two, and eight, or 7.0 percent, belong to three. These numbers are higher than those reported for the United States by Putnam (2000) a little more than a decade ago when he expressed concern over the dwindling involvement by Americans in local and national civic associations.

Carriacou has formal civic organizations in each village that are accessible to both males and females and key informant interviews indicated that few of these organizations had any restrictions on membership. Groups that do restrict membership are usually very specialized groups that perform a specific function within the community such as historic preservation societies or groups where exclusion is based on ascribed status such as in the

case of women's groups. Previously mentioned in this section, most of the respondents in this sample are embedded in large friend and family networks, resulting in too little variability to consider these informal networks in the analysis.³³

The reciprocity component of social capital measures activities that demonstrate instances involving actual give and take in everyday interactions. Norms of reciprocity in the theoretical path model is measured as a three-item additive index based on the summary score of three five-point ordinal scale items measuring how often residents help one another with day-to-day tasks such as repair work, tending a garden, or watching children. Survey respondents were asked to indicate the degree to which they helped other residents, how often they received help from other residents in return, and, in general, how often people in their village help each other. All three items are measured on a scale of 1 for "never," 2 for "rarely," 3 for "occasionally," 4 for "often," and 5 for "as much as possible."

I initially ran all six measures of reciprocity and interpersonal trust together in one confirmatory factor analysis to see if they collectively captured two underlying latent variables (Table 5). The findings indicated that they represented two distinct factors, or dimensions of social capital. After rotating the factor solution using the promax rotation method, the analysis indicated that the six items were distributed between two distinct factors. Thus, based on extant social capital theory and the fact that only two factors had eigenvalues greater than 1 (Guttman-Kaiser rule), I extracted two factors, one representing

³³ Krishna (2002) argues that many communities in developing countries, in rural areas in particular, often lack substantial numbers of formal organizations and, in such contexts, it is important to consider other forms of informal social interaction such as networks consisting of family and friends. Measurements which encompass participation in informal community-wide activities are very important indicators of stocks of social capital in developing regions of the world (Krishna 2000; Woolcock and Narayan 2000).

norms of reciprocity and another signifying interpersonal trust. Together, the two factors account for 70 percent of the variance in the data. One item, “In general, how often do people in the village help each other,” had a weak to moderate cross-loading across the two factors. I elected to place this item in norms of reciprocity as this item’s factor loading with interpersonal trust did not exceed .40 (Garson 2009).³⁴ In addition, this measure also captures actual interactions between villagers as opposed attitudes or feelings of trust captured by the interpersonal trust index.

Using SPSS Statistics 17.0, the index’s reliability scores for norms of reciprocity reveal that the three indicators are represented by a single factor with a Cronbach’s alpha of .742 and factor loadings, i.e., standardized regression weights, range from 0.494 to 0.808. The determinant of the correlation matrix was 0.110 indicating multicollinearity is not an issue for the items in either factor (Field 2000). To create the norms of reciprocity index, the three items were summed as a single construct and range from 3 to 15.

The trust component of social capital is measured as a three-item index of interpersonal trust based on the summed score of how many people in their village can be trusted, how many of their neighbors can be counted on for assistance with a problem, and how many of their neighbors would ask the respondent for help if they were in need of assistance.

³⁴ Ideally, the researcher wants a factor structure with all main loadings greater than .70 (Garson 2009). As previously stated, it is common social science practice to use a minimum cut-off point as low as .3 (Garson 2009). However, a factor loading as low as .4 is considered low (Hair et al. 1998). The decision to place the cross-loading indicator into the norms of reciprocity index, as opposed to interpersonal trust, is based on Garson’s (2009) argument that cross-loadings must be greater than .40 to be considered part an indicator of multiple factors.

Table 5. Factor Loadings and Reliability Statistics for Norms of Reciprocity and Interpersonal Trust

Item	Factor 1 Norms of Reciprocity	Factor 2 Interpersonal Trust
How often people in village helped you with day-to-day tasks.	.808	.026
How often you helped others with day-to-day tasks.	.704	-.139
In general, how often people in the village help each other.	.494	.380
In general, how many people in the village can be trusted.	.093	.465
If encountered a problem and needed assistance, how many neighbors could be counted on to help.	-.088	.925
How many neighbors would ask for help if they encountered a problem and needed assistance.	-.068	.877
Chronbach's alpha	.742	.780
Eigenvalue	1.369	2.837
% of Variance (combined) = 70.101		

While norms of reciprocity involve actual give and take in everyday interactions between individuals, these are measures of emotion or feelings designed to capture notions of interpersonal trust in both everyday interactions and in specific times of need such as the aftermath of a natural disaster or coping with a lack of drinking water during the dry season in the Caribbean. The second and third measures of interpersonal trust are not to be confused with indicators of reciprocity. Rather, these indicate individual attitudes towards how many neighbors could be counted on (trusted to help under dire circumstances).

Responses for each of the questions measuring interpersonal trust are recorded on a scale of 1 for “none or very few of them,” 2 for “less than half of them,” 3 for “about half of them,” 4 for “more than half of them,” and 5 for “all of them.” Reliability scores for the summed index of interpersonal trust are acceptable given a Cronbach's alpha of .780 and

factor loadings ranging from 0.465 to 0.925. To create the interpersonal trust measure, the three items were summed as a single index and range from 3 to 15.

Independent Variables

The descriptive statistics for the independent variables included in the analyses are reported in Table 2. Predictors of both the mediating and outcome variables include perceptions of central government performance and frequency of church attendance. The traditional view of the relationship between social capital and democracy is that good governance is an outcome of social capital (Putnam 1993; Tocqueville 1969 [1835]). While the literature has focused on the importance of social capital for democracy, less attention has been paid to the ability of government institutional performance to influence the formation of social capital, particularly in developing nations. This study will test the hypothesis that representative government, especially in countries with a legacy of an authoritarian past, could foster the formation of social capital and norms of community and civic engagement (Abom 2004). Perceptions of government performance, the most common measure of confidence in democratic institutions, may also have consequences for normative dimensions of social capital. Respondent confidence in central government performance is measured as a five-point item with responses ranging from “none at all” to “a lot” on how effective the respondent thinks the Grenadian government is in meeting their village's needs.

Church attendance as a predictor of social capital has received relatively little attention in the literature and is often treated as a measure of associational membership. I view church attendance as an antecedent of social capital as it has also been argued to

contribute to the formation of social networks and foster a sense of community (Park and Smith 2000). Not only does church attendance build ties to one's congregation members, but emotional attachment to those of the same faith can also generate interpersonal trust. Church attendance is measured in this study as the frequency of the respondent's monthly church attendance. Overall, 95, or 83.3 percent, of the respondents indicated that they belonged to a church, with 72, or 75.8 percent, of respondents claiming membership in either an Anglican or Catholic Church, the two churches on the island with the largest congregations. Considering the influence of religion on the island, I created a measure of church attendance based on how frequently respondents attended any church.³⁵ The frequency of attendance is measured as four-point ordinal responses based on monthly attendance with no attendance coded as a 1, less than weekly attendance assigned a 2, weekly assigned a 3, and more than once a week assigned a 4.

Gender, the two measures of socioeconomic status (employment and education), and the socio-demographic variables (age and marital status) are also included in the analysis as control variables. Males serve as the baseline measure of gender and respondents who are employed provide the baseline for employment status. Level of education is measured based on a seven-point ordinal response representing the respondent's level of educational attainment (1 = less than primary school education to 7 = graduate degree). Overall, 67 respondents, or 58.8 percent, had at least a secondary education and 12, or 10.5 percent, had a college degree. Age is measured as the respondent's year of birth and is converted to actual

³⁵ A total of 33 respondents, or 28.9 percent, stated that they did not attend church services. Thirty-two, or 28.1 percent, reported attending at least once, but fewer than four times, in the average month. Forty-nine, or 43.0 percent, attended church services at least once a week.

years in the analysis. The final control variable, marital status, is measured with “married” serving as the baseline.

The independent variables are hypothesized to be linked to each of the mediating and outcome variables through causal paths in the theoretical model in Figure 1. There are three additional exogenous variables in the model that are proposed to influence one or more of the three dimensions of social capital and participation in collective action. Ties within the community are viewed here as an indicator of community attachment. This variable is based on responses to a question that asked, “Within the past month, how many times have you visited friends or family who live outside your village but on the island of Carriacou?” Responses are scored as the actual number of visits within that time frame. Table 2 shows that respondents visited friends or family in other villages between four and five times (4.56) per month on average. Responses are seen as an indicator of the extent of a respondent’s investment in the broader island community. This measure is hypothesized here as causally linked to all three components of social capital and participation in collective action as a greater sense of attachment to the island community should translate into a greater willingness to participate in civic affairs and enhance interpersonal trust.

Concern with community well-being is hypothesized to be causally linked to both associational membership and participation in collective action and is based on responses to the question, “Have you discussed any village or island-community problems or issues with anyone in your village.” In all, 57, or exactly half, of the respondents reported that they had voiced concern over various issues to other residents within their village during the past half year. This exogenous variable is hypothesized to be causally influencing associational

membership as group membership provides a civic outlet for village residents to voice their concerns related to village or community welfare.

Lastly, perceived efficacy of community organizations is included in the analysis and is hypothesized to be causally linked to associational membership and participation in collective action. Respondent views on the efficacy of community civic organizations is based on responses to how much good they think community groups have done for their village. The argument for these proposed relationships is that favorable views towards the role community organizations play within a village will likely increase the likelihood that a resident will elect to join a group. More favorable views of the effectiveness of community organizational involvement in community affairs is also seen to enhance individual involvement in collective action events designed to address community well-being.

Analytic Techniques

The analysis proceeds in three stages. First, the study examines bivariate correlations between all of the variables in the theoretical model. This is followed by ordinary least squares (OLS) regression examining the individual predictors of the three dimensions of social capital and participation in collective action. Finally a path analysis consisting of the significant relationships from reduced-form OLS models is estimated.

Several different analytical techniques are required to test the relationships in the theoretical model in Figure 1. This study inspects the bivariate correlations between the variables in the model to identify significant relationships which are then used to guide the construction of the OLS regression models. Because social capital is theorized and measured

as having three main components—networks (measured as associational membership in this study), trust, and reciprocity—and since this theory of individual participation in collective action events necessitates mediating variables, the study also estimates the comprehensive path model using Amos 17.0 structural equation modeling (SEM) software.

OLS Regression Analysis

SPSS Statistics 17.0 is used to run a series of OLS regression models that test the hypothesized antecedents of each dimension of social capital—associational membership, norms of reciprocity, and trust—and the relationship between each dimension and participation in collective action. Due to limitations related to the sample size (N=114), a full path model incorporating every variable in the analyses simultaneously cannot be very accurately estimated using structural equation modeling.³⁶ In order to test these relationships, the study conducts separate multiple regression analyses for associational membership, norms of reciprocity, interpersonal trust, and participation in collective action events. A series of OLS regression models are conducted for each of the four variables in order to examine how the relationships proposed in this study are influenced by the inclusion of other predictors and when controlling for socio-demographic variables. Since the dissertation tests theoretically-driven antecedents of social capital and collective action, variables, or sets of variables, are added in relation to their projected causal order in the path

³⁶Structural equation modeling relies on tests which are sensitive to sample size as well as to the magnitude of differences in covariance matrices (Garson 2009). In the literature, sample sizes commonly run 200 - 400 for models with 10 - 15 indicators. Most researchers recommend at least 100 cases for the analysis to be justifiable in SEM and to ensure the power of significance tests (Hoyle 1995, Kline 1998, Loehlin 2004, Schumacker and Lomax 2004). One rule of thumb is that there should be 10-20 times as many cases as variables in the model (Mitchell 1993).

model in Figure 1. The first models examine the effects of each component of social capital on one another and on participation in collective action. Ensuing models add the other predictors in the model, i.e., efficacy of civic organizations; government performance; concern with community well-being; ties within the community; frequency of church attendance; ascribed status; and socio-demographic characteristics. This analysis technique establishes reduced models that exclude non-significant relationships and maximize parsimony, which can then be integrated into a path analysis using structural equation modeling (SEM).

Structural Equation Modeling (SEM)

Structural equation modeling (SEM), unlike multiple regression modeling, takes into account “the modeling of interactions, nonlinearities, correlated independent variables, measurement error, correlated error terms, multiple latent independent variables, and one or more dependent variables (Garson 1999).” SEM analysis allows the researcher to compare alternative models to test relative fit, providing more theoretically robust interpretations, and is generally considered to be a more powerful statistical modeling technique and an extension of general linear modeling (Bollen 1989; Garson 2009; Tomarken and Waller 2005). Another advantage of SEM is the ability to model mediating variables rather than additive models only (Bollen 1989). This function is particularly advantageous in this study as the multiple dimensions of social capital are seen as mediating variables in the theoretical model.

I also use AMOS 17.0 to estimate the direct, indirect, and total effects of the variables in the analysis. This is an improvement over traditional linear regression models that only

test direct effects. Furthermore, SEM allows for confirmatory modeling in which the hypothesized relationships between the concepts in the model can be tested and the overall fit of the model against the data can be determined. Because of the relatively small sample size used in this study, I do not include latent constructs in the SEM analysis, but rather use the indexes for norms of reciprocity, interpersonal trust, and participation in collective action. Thus, I use SEM to conduct a path analysis predicting individual participation in collective action as the final outcome variable.

CHAPTER 5

Analysis and Results

Stage 1: Bivariate Analysis

One of the primary purposes of this study is to test theoretically-driven predictors of associational membership, trust, and reciprocity in accordance with Putnam's multi-dimensional definition of social capital. This dissertation also assesses their relationship to one another and examines their separate effects on individual participation in collective action events. To accomplish this, this study first examines the bivariate correlations between the variables in the model. The results of the bivariate analysis are presented in Table 6.

The bivariate correlations reveal significant positive relationships between membership in formal organizations and the other two dimensions of social capital and participation in collective action. As proposed in the theoretical model, there are also significant positive relationships between norms of reciprocity and trust and between these two measures of social capital and participation in collective action. The degree of difference in the effects of associational membership, norms of reciprocity, and interpersonal trust on participation in collective action suggests that they do indeed represent different dimensions of social capital. The link between associational membership and collective action is the strongest of the three dimensions of social capital, followed by norms of reciprocity and then interpersonal trust. Clearly, a single dimension of social capital is not sufficient for explaining participation in

Table 6. Predictors of Social Capital and Participation in Collective Action: Bivariate Correlations

	Associational Membership	Norms of Reciprocity	Interpersonal Trust	Participation in Collective Action
	Correlation	Correlation	Correlation	Correlation
<i>Social Capital</i>				
Associational Membership	1	.356***	.175*	.421***
Norms of Reciprocity	.356***	1	.370***	.314***
Interpersonal Trust	.175*	.370***	1	.241**
<i>Independent Variables</i>				
Times visited family and friends in other villages	.269**	.302***	.100	.181*
Discuss village concerns with others	.289***	.169*	-.114	.118
Perceived efficacy of community organizations	.279**	.245**	.234**	.323***
Confidence in central government	.057	.260**	.320***	.040
Frequency of church attendance	.158*	.134	.163*	-.131
Employed	.153	.258**	.144	.306***
Gender (male)	.045	.227**	-.078	.269**
Level of education	.284***	.426***	.322***	.201*
Age	-.127	-.207*	-.032	-.402***
Married/cohabitating	.018	-.031	.056	.129

*p<.05, **p<.01, ***p<.001 using a one-tailed test

collective action, although associational membership does appear to have the strongest influence and also is significantly related to the two normative dimensions of social capital.

The bivariate, zero-order correlation analysis reveals a number of variables that have significant relationships with associational membership. The frequency of visits with friends and family outside of one's village, discussing village concerns with others, perceptions regarding the efficacy of community organizations, more frequent church attendance, and higher levels of educational attainment are all significant positive predictors of this network measure of social capital. Of these, the willingness to discuss village concerns with others had the strongest tie. The other independent variables in the theoretical model fail to have significant relationships with associational membership. However, the influence of each of these variables is considered in the OLS regression analysis as they were included in the theoretical model. This allows for the determination of any changes in their effects when estimated together and controlling for the influences of the other variables in the model.

Significant positive relationships exist between norms of reciprocity and frequency of visits with family and friends in other villages, confidence in government performance, employment, and education. While relationships with both the perceived efficacy of community organizations and discussing village concerns with others were not proposed in the theoretical model, both are significantly associated with norms of reciprocity. The bivariate analysis also indicates that males are more likely to engage in reciprocal exchanges. Of these, education had the strongest link with norms of reciprocity. The frequency of church attendance and marital status were the only variables in the theoretical model that fail to have a significant relationship with this dimension of social capital. All of these variables

are included in the OLS regression analysis in order to examine the interactive nature of the proposed relationships in the theoretical model.

In addition to its association with the other two dimensions of social capital, interpersonal trust is significantly associated with perceived efficacy of community organizations, confidence in the performance of the central government, frequency of church attendance, and educational attainment. Of these, the relationship with level of education was the strongest after the link with norms of reciprocity. Judging by the findings of the bivariate analysis, education, an indicator of human capital, has an important relationship with all three dimensions of social capital. This connection will be explored in greater depth in the next two stages of the analysis. No other significant relationships with the remaining variables in the analysis are indicated.

In addition to its significant positive association with the three dimensions of social capital, participation in collective action also has significant positive links with the frequency of visits with friends and family in other villages, the perceived efficacy of community organizations, employment, and level of education. Males are also significantly more likely to engage in collective action than women. Aside from the ties to each dimension of social capital, the strongest of the positive relationships appears to be with the “beliefs regarding the effectiveness of community groups.” The second strongest link to collective action in the bivariate analysis is age, which has a negative association with this outcome variable.

The next stage of the analysis consists of a series of OLS regression models for each of the four dependent variables. Separate models are utilized to assess the effects of key influences contributing to the three dimensions of social capital and participation in

collective action. Using multiple models in the analysis of each dependent variable allows for the introduction of key predictors, or sets of predictors, in stages. This contributes to an understanding of how significant relationships hold up when other potential influences are accounted for and when controlling for the respondents' socio-demographic characteristics.

Stage 2: OLS Regression Analysis

In the next stage of the analysis, I ran a series of regression models to test the effects of each of the predictors of the three measures of social capital and participation in collective action. I first examine the effects of individual variables or sets of variables hypothesized to have the greatest impact on the dependent variable and then sequentially add other predictors in ensuing models while controlling for the respondent's socio-demographic characteristics. The purpose of this is to examine the relationships between dependent variables and their hypothesized predictors when controlling for other potential influences. I conclude the analysis for each dependent variable by estimating relationships in a reduced, best-fit, model containing only the independent variables with significant effects.

A statistical issue arose at the beginning of the analysis which required that I run two separate sets of models when controlling for the socio-demographic predictors of each of the four dependent variables. The first model (a) controls for education and the second (b) controls for age. The presence of a strong negative relationship ($\text{Chi-square} = 20.471, p < .01$) between these two variables indicates potential multicollinearity. Multicollinearity is an issue that arises when there is excessive correlation between two or more independent variables. While multicollinearity does not necessarily reduce the predictive power or

reliability of the model as a whole, it can make it difficult to determine which independent variable is producing the effect on the dependent variable (Garson 2009).³⁷

The presence of multicollinearity in this instance indicates that younger respondents tend to have more years of formal education than older members of the sample population. This is not surprising as many developing countries have witnessed increases in government allocations for higher education in recent decades and school enrollment has increased among both males and females (see review in Buchmann and Hannum 2001).³⁸ The significant negative relationship between education and age, coupled with the fact that they have widely divergent influences on the dependent variables, negated the ability to create an interaction effect. Thus, I run separate analyses for each in order to determine their separate effects on each dimension of social capital and participation in collective action.

Predictors of Associational Membership

Tables 7 and 8 present the results of five OLS regression models for associational membership. The unstandardized coefficients are reported in Table 7 and the standardized coefficients are provided in Table 8. Model 1 tests the effects that the frequency of visits with friends or family in other villages and discussing village concerns with others have on membership in formal community organizations independent of the other variables in the

³⁷ Collinearity diagnostics indicated that there was a potential collinearity problem when both education and age were included in the analysis simultaneously. While the VIF (Variance-inflation factors) were far less than the cut-off point of 4 (Garson 2009), the condition was reported as 20.928. While the condition index is below the cut-off point of 30, which indicates serious collinearity problems, it was still considerably higher than 15, which indicates that collinearity may be a problem (Garson 2009). This was the only evidence of potential multicollinearity in the analysis.

³⁸ In 2000, the UN Millennium Development Summit established goals to promote university access and enrollment in primary education by 2015.

Table 7. Ordinary Least Squares (OLS) Regression Models Predicting Associational Membership (Unstandardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 5 (Reduced)
Intercept	.331** (.119)	-.430 (.348)	-.628* (.367)	-1.078** (.422)	-.513 (.472)	-.859** (.335)
Times visited friends or family in other villages	.026** (.010)	.024** (.010)	.024** (.010)	.016 (.010)	.018* (.010)	.017* (.010)
Discuss village concerns with others	.468** (.162)	.424** (.160)	.451** (.160)	.493** (.159)	.475** (.163)	.462** (.155)
Perceived efficacy of community organizations		.218** (.088)	.190* (.090)	.172* (.091)	.194* (.093)	.202** (.085)
Confidence in central government		.048 (.086)	.033 (.087)	-.021 (.089)	.009 (.090)	
Frequency of church attendance			.129 (.087)	.143 (.093)	.156 (.098)	
Employed				.106 (.183)	.181 (.197)	
Gender (male)				.001 (.183)	-.046 (.186)	
Level of education				.157** (.066)		.165** (.060)

Table 7. continued

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 5 (Reduced)
Age					-.004 (.005)	
Married/cohabitating				.039 (.164)	.018 (.173)	
Adjusted R-Square	.122	.159	.167	.195	.156	.212

*p<.05, **p<.01, ***p<.001 using a one-tailed t-test. Standard errors are reported in parentheses

Table 8. Ordinary Least Squares (OLS) Regression Models Predicting Associational Membership (Standardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 5a (Reduced)
Times visited friends or family in other villages	.235	.214	.212	.141	.163	.156
Discuss village concerns with others	.257	.233	.248	.270	.261	.254
Perceived efficacy of community organizations		.218	.190	.172	.194	.202
Confidence in central government		.048	.039	-.021	.009	
Frequency of church attendance			.130	.145	.159	
Employed				.057	.098	
Gender (male)				.000	-.025	
Level of education				.227		.239
Age					-.082	
Married/cohabitating				.021	.010	

analysis. The results reveal that both are significantly associated with associational membership. The frequency of visits one has with his/her friends and family in other villages has a significant effect on associational membership as those who report more frequent visits are more likely to be members of community organizations. Table 7 shows that each additional visit reported is associated with a 0.026 standard deviation increase in the number of community groups in which one is a member of. Likewise, respondents who discuss concerns related to the well-being of their village are more likely to be members of community groups. Discussing village concerns with others was associated with a 0.468 standard deviation increase in associational membership.

These relationships remain significant but decrease slightly in their magnitude when the perceived efficacy of civic organizations and confidence in central government performance measures are added in Model 2. In addition to the two significant relationships reported in Model 1, the perceived efficacy of community organizations is also significantly associated with associational membership. All three predictors maintain their significant relationships with associational membership when the frequency of church attendance is included in Model 3. Church attendance does not have a significant effect on associational membership and has little impact on the relationships between frequency of visits with family and friends, discussing village concerns with others, and perceptions of the efficacy of community organizations with associational membership. Combined, all of the variables in Model 3 explain 16.7 percent of the variance in associational membership.

Models 4a and 4b in Tables 7 and 8 include the socioeconomic and ascribed status measures while controlling for socio-demographic variables. Model 4a (testing for level of

education) shows that only two of the previous significant predictors—discussing village concerns with others and the perceived efficacy of community organizations—maintain their role as key predictors of associational membership when controlling for employment status, gender, level of education, and whether the respondent is married or cohabitating. The effect of perceived efficacy of community organizations on associational membership decreases. However, the effect of discussing village concerns with others on membership in civic groups actually increases. Level of education also has a significant effect as a one unit increase in educational attainment is associated with a .157 standard deviation increase in associational membership.

Removing level of education produces slightly different results. The significant effects from the three predictors in Model 3 remain. However, education clearly has a more powerful impact on associational membership as the model controlling for this predictor raises the amount of variance explained in associational membership to nearly 19 percent, while controlling for age actually decreases the variance explained by 1.1 percentage points. This suggests that more educated members of the population are more likely to participate in community organizations, while age does not serve as a significant deterrent.

The reduced model 5 explains 21.2 percent of the variance in associational membership as the frequency of visits with friends and family in other villages, discussing village concerns with others, the perceived efficacy of community organizations, and level of education all prove to be significant predictors of this network measure of social capital. Thus, the analysis indicates that respondents who have more frequent face-to-face contact with friends and family outside of their village, who voice their concerns related to

community issues or problems, who hold favorable views of community organizations, and who have a higher level of educational attainment tend to be more likely to participate in one or more community groups. Clearly, education plays a critical role in associational membership.

The direct effects are reported as unstandardized coefficients in Tables 7 so that the relationships are directly interpretable. The standardized estimates in Table 8 produce a comparable metric for all of the variables allowing for an interpretation of the degree of influence of each. The standardized coefficients are provided for both the full (4a and 4b) and reduced models. Table 8 shows that discussing village concerns with others has the largest overall impact on associational membership in the full model controlling for level of education. The influence of this predictor remains in the reduced model, followed by level of education, then the perceived efficacy of community organizations. The frequency of visits with friends and family in other villages has the smallest impact of the four significant predictors of associational membership. Similarly, discussing village concerns with others also has the strongest influence in the model controlling for age. However, when education is excluded from the analysis, the frequency of visits with friends and family in other villages increases in importance, followed by the perceived efficacy of community organizations.

Norms of Reciprocity

The results of the regression analysis for norms of reciprocity are presented in Tables 9 and 10. Model 1 estimates the effect of the associational membership measure of social capital on reciprocal exchanges. The influence of associational membership is undeniable as

Table 9. Ordinary Least Squares (OLS) Regression Models Predicting Norms of Reciprocity (Unstandardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4	Model 5a	Model 5b	Model 6 (Reduced)
Intercept	6.210*** (.337)	5.833*** (.404)	2.528* (1.129)	2.273* (1.209)	-1.239 (1.305)	1.277 (1.467)	-.078 (1.017)
Associational Membership	1.194** (.296)	.940** (.312)	.769** (.309)	.743** (.313)	.456* (.293)	.670* (.303)	.574* (.273)
Times visited friends or family in other villages		.081** (.034)	.087** (.032)	.087** (.032)	.048* (.031)	.056* (.033)	.053* (.030)
Discuss village concerns with others		.360 (.553)	.351 (.531)	.399 (.539)	.510 (.499)	.326 (.523)	
Perceived efficacy of community organizations			.393 (.292)	.361 (.298)	.185 (.278)	.246 (.293)	
Confidence in central government			.820** (.276)	.808** (.278)	.790** (.267)	.926*** (.279)	.800*** (.258)
Frequency of church attendance				.173 (.286)	.616* (.284)	.630* (.306)	.633* (.271)
Employed					.092 (.551)	.450 (.612)	
Gender (male)					1.935*** (.550)	1.726** (.576)	2.024*** (.512)

Table 9. continued

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4	Model 5a	Model 5b	Model 6 (Reduced)
Level of education					.714*** (.204)		.714*** (.189)
Age						-.013 (.015)	
Married/cohabitating					-.397 (.494)	-.524 (.534)	
Adjusted R-Square	.119	.153	.221	.216	.354	.282	.365

*p<.05, **p<.01, ***p<.001 using a one-tailed t-test. Standard errors are reported in parentheses

Table 10. Ordinary Least Squares (OLS) Regression Models Predicting Norms of Reciprocity (Standardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4	Model 5a	Model 5b	Model 6 (Reduced)
Associational Membership	.356	.280	.230	.222	.136	.200	.171
Times visited friends or family in other villages		.218	.234	.235	.128	.151	.142
Discuss village concerns with others		.059	.058	.065	.084	.053	
Perceived efficacy of community organizations			.117	.108	.055	.073	
Confidence in central government			.249	.246	.240	.281	.243
Frequency of church attendance				.053	.188	.192	.193
Employed					.015	.073	
Gender (male)					.317	.283	.331
Level of education					.308		.307
Age						-.086	
Married/cohabitating					-.063	-.084	

it alone explains nearly 12 percent of the variance in norms of reciprocity. The effect of associational membership declines in magnitude yet remains significant across all models in this analysis as respondents who participate in one or more formal organizations on the island are also more likely to report cooperative exchanges between themselves and other community members. Models 2, 3, and 4 show that the frequency of visits with friends and family in other villages and confidence in government performance also have significant positive effects on norms of reciprocity. Model 5a, which controls for education and the other socio-demographic measures, reveals that frequency of church attendance, gender, and level of education also have positive effects on norms of reciprocity. Combined, all of the variables in the full model explain 35.4 percent of the variance in this dimension of social capital. Model 5b, which omits level of education and controls for age, results in a much smaller increase in the amount of variance explained, providing additional evidence for the impact of human capital on the formation of social capital.

In both analyses, associational membership, frequency of visits with friends and family in other villages, confidence in the central government, frequency of church attendance, and gender all maintain their significant effects in the reduced model and, together, they account for 36.5 percent of the variance in reciprocity. The standardized coefficients reported in reduced model in Table 10 indicate that gender is the most prominent predictor of norms of reciprocity. Education has the second strongest influence, with the social interaction measure of social capital having the least when controlling for education. The reduced importance of associational membership when controlling for other variables is not surprising as influences on reciprocal exchanges between village residents clearly extends beyond participation in

civic groups. Thus, the findings indicate that male residents are more likely than females to engage in interactions involving reciprocal exchanges. Residents who are more highly educated, more embedded in the island-community, attend church on a more regular basis, and who have greater confidence in the ability of the central government to meet the needs of their village also exhibit a higher tendency to engage in reciprocal exchanges.

Interpersonal Trust

The results of the OLS regression for the third dimension of social capital, interpersonal trust, are presented in Tables 11 and 12. Model 1 estimates the effects of the other two measures of social capital on trust and reveal that reciprocity has a significant and positive effect, meaning that where respondents report higher levels of reciprocal norms in routine exchanges they also report higher levels of trust in their fellow village residents, suggesting that repeated exchanges build trust over time. Taken together with the significant effect of associational membership on norms of reciprocity, these findings highlight the interactive effects of the three dimensions of social capital, and suggest that it is not sufficient to model social capital as a one-dimensional construct. This is especially important in community development research, in which it is necessary to identify every potential pathway to collective action.

Models 2 and 3 reveal that, in addition to reciprocity, confidence in government performance also has a significant relationship with interpersonal trust. This evidence supports the hypothesis that government institutional performance is related to and may serve as a precursor to trust capable of restoring or undermining levels of interpersonal trust (Abom

Table 11. Ordinary Least Squares Regression Models Predicting Interpersonal Trust (Unstandardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 5a (Reduced)
Intercept	7.097*** (.758)	5.235*** (1.003)	4.606*** (1.153)	3.898** (1.486)	4.491** (1.629)	4.311*** (1.106)
Associational Membership	.188 (.355)	.225 (.345)	.178 (.347)	.057 (.353)	.155 (.353)	
Norms of Reciprocity	.396*** (.106)	.321** (.106)	.313** (.107)	.277* (.122)	.350** (.117)	.266** (.107)
Confidence in central government		.897** (.328)	.872** (.328)	.702* (.348)	.721* (.351)	.824** (.325)
Frequency of church attendance			.354 (.322)	.309 (.357)	.218 (.368)	
Employed				.111 (.680)	.633 (.732)	
Gender (male)				-.485 (.725)	-.774 (.716)	
Level of education				.438* (.270)		.458* (.245)
Age					.010 (.018)	

Table 11. continued

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 5a (Reduced)
Married/cohabitating				.504 (.623)	.296 (.648)	
Adjusted R-Square	.124	.172	.174	.176	.158	.195

*p<.05, **p<.01, ***p<.001 using a one tailed t-test. Standard errors are reported in parentheses.

Table 12. Ordinary Least Squares (OLS) Regression Models Predicting Interpersonal Trust (Standardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4a	Model 4b	Model 5a (Reduced)
Associational Membership	.050	.060	.047	.015	.041	
Norms of Reciprocity	.352	.286	.279	.246	.311	.237
Confidence in central government		.243	.236	.190	.195	.223
Frequency of church attendance			.096	.084	.059	
Employed				.016	.098	
Gender (male)				-.071	-.113	
Level of education				.168		.176
Age					.056	
Married/cohabitating				.072	.042	

2004; Edwards and Foley 1998; Levi 1996). In this case, greater confidence in the ability of the central government to meet village needs is associated with an increase in interpersonal trust between residents. This suggests that the ability of good governance to maintain order and to protect the interests of the residents, in turn, may generate a higher level of trust in others.

Of the two models introducing the socioeconomic variables and controlling for sociodemographic measures, only the one introducing level of education increases the amount of variance explained in interpersonal trust. Model 4a indicates that education has a significant positive effect on trust. Again, this provides support for the position that human capital, in the form of education, may be an important antecedent of social capital, serving as a key predictor for all three dimensions. Contrary to point of view, Coleman (1988) argued that social capital within the family, in the form of parents' obligations and expectations, information channels, and social norms, aids in the formation of human capital (reduced high school dropout rates among the children). However, the direction of the relationship between education and the multiple dimensions of social capital proposed in this study is well supported in the literature (e.g., McCloskey 1967; Putnam 1995; Sullivan et al. 1982). Putnam argues that education is important for associational membership as it provides individuals with skills, resources, and the inclination to participate. Higher levels of education has also been found to increase trust and tolerance of others through greater exposure to dissimilar others (McClosky 1967; Sullivan et al. 1982).

The reduced model controlling for education also shows the greatest predictive power as it explains 19.5 percent of the variance in interpersonal trust. Norms of reciprocity and

confidence in central government performance also retain their significant associations with interpersonal trust. The standardized coefficients for both sets of analyses in Table 12 show that norms of reciprocity has the greatest influence on interpersonal trust, followed by confidence in government performance and then by education.

Participation in Collective Action

The results of the OLS regression for the outcome variable in the theoretical model, participation in collective action, are presented in Tables 13 and 14. The results of Model 1 indicate that, of the three dimensions of social capital proposed here, associational membership has the strongest effect on collective action. When the three are estimated together, associational membership is actually the only one of the three dimensions to maintain a significant effect on participation in collective action. Trust becomes significant with the inclusion of frequency of church attendance in Model 4 and retains this effect through the remainder of the models. Norms of reciprocity is not significantly related to collective action in any of the models. Thus, while reciprocity may build trust and is an important dimension in the formation of social capital, it is not directly essential in the decision to participate in collective action in this study.

The second and third models add the measures of frequency of visits with friends and family in other villages, and confidence in government performance. The influence held by associational membership is not affected by the introduction of these variables and neither of the new variables has a significant effect on participation in collective action.

Model 4 adds the frequency of church attendance, which has a rather large and

Table 13. Ordinary Least Squares Regression Models Predicting Participation in Collective Action (Unstandardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4	Model 5a	Model 5b	Model 6a (Reduced)	Model 6b (Reduced)
Intercept	1.445** (.548)	1.450** (.550)	1.650** (.627)	2.439*** (.672)	1.689* (.822)	3.331*** (.839)	2.590*** (.579)	2.905*** (.633)
Interpersonal Trust	.072 (.051)	.073 (.051)	.082 (.053)	.097* (.052)	.097* (.052)	.106* (.048)	.116* (.048)	.101** (.043)
Norms of Reciprocity	.089 (.061)	.083 (.062)	.092 (.064)	.099 (.062)	.061 (.368)	.035 (.061)		
Associational Membership	.742*** (.192)	.727*** (.196)	.724*** (.196)	.788*** (.192)	.770*** (.191)	.733*** (.178)	.897*** (.179)	.709*** (.162)
Times visited friends or family in other villages		.009 (.021)	.006 (.022)	.005 (.021)	-.004 (.021)	-.014 (.020)		
Confidence in central Government			-.128 (.192)	-.110 (.186)	-.095 (.192)	-.102 (.180)		
Frequency of church attendance				-.488** (.176)	-.305* (.192)	-.152 (.183)	-.482** (.175)	
Employed					.589 (.371)	-.032 (.368)		
Gender (male)					.519 (.390)	.642* (.358)		.788** (.297)

Table 13. continued

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4	Model 5a	Model 5b	Model 6a (Reduced)	Model 6b (Reduced)
Level of education					-.028 (.146)			
Age						-.034*** (.009)		-.034*** (.007)
Married/cohabitating					.290 (.335)	.609* (.322)		.592* (.306)
Adjusted R-Square	.200	.194	.190	.237	.260	.351	.237	.372

*p<.05, **p<.01, ***p<.001 using a one tailed t-test. Standard errors are reported in parentheses

Table 14. Ordinary Least Squares (OLS) Regression Models Predicting Participation in Collective Action Events (Standardized Coefficients)

Independent and Control Variables	Model 1	Model 2	Model 3	Model 4	Model 5a	Model 5b	Model 6a (Reduced)	Model 6b (Reduced)
Interpersonal Trust	.128	.128	.144	.171	.172	.187	.204	.179
Norms of Reciprocity	.140	.131	.145	.155	.097	.056		
Associational Membership	.349	.342	.340	.371	.362	.345	.422	.333
Times visited friends or family in other villages			.027	.019	-.018	-.058		
Confidence in central government			-.061	-.052	-.046	-.049		
Frequency of church attendance				-.234	-.146	-.073	-.231	
Employed					.150	-.008		
Gender (male)					.134	.166		.203
Level of education					-.019			
Age						-.352		-.354
Married/cohabitating					.073	.153		.149

negative effect on participation in collective action events. Considering the importance of religion on the island, this was a surprising finding and is likely not due solely to the measures of collective action that were considered in the index of community activities. Adding to the perplexity behind this finding is the fact that more than 40 percent of respondents reported attending church on a weekly basis. Table 2 shows that the mean score for participation in collective action events was 3.30. Further analysis of the relationship between church attendance and participation in collective action reveals that respondents who reported that they did not attend church on a monthly basis participated in 3.36 events on average over the past six months. Respondents who attended church on a less than weekly basis averaged 3.78 events. There was a marked drop down to 3.05 among those respondents who said they attended church on a weekly basis and this dropped even further down to 2.29 for the seven respondents who indicated that they attended church several times a week. It is possible that more frequent church attendance left less time for other forms of community involvement. It is also possible that those who are more involved with the church may only participate in certain activities that are directly related to the interests and goals of the church.

Model 5a tests the effects of employment and the human capital measure of level of education while controlling for the socio-demographic measures. None of these four variables has a significant effect on participation in collective action. The effects of the two significant social capital measures experienced little change with the inclusion of the controls, while the effects of frequency of church attendance was reduced but remained significant. Surprisingly, education is not significantly linked to participation in collective

action. Education's influence on the outcome variable in the theoretical model appears to be indirect as it serves instead as an important antecedent of all three dimensions of social capital, which, in turn, mediate its effect on the final outcome variables. Overall, the combined direct effects in Model 5a account for 26.0 percent of the variance in participation in collective action.

Much stronger results are indicated for Model 5b which tests the effects of age while excluding the effects of education. Together, the variables in this model explain 35.1 percent of the variance in participation in collective action. The effects of interpersonal trust and associational membership remain significant. Among the control variables in the model, age has a strong negative effect and gender and marital status also have significant positive effects.

The reduced models indicate that age does indeed have a strong influence on the participation in collective action events as involvement drops by 3.4 percentage points with each additional year of age. Model 6b has the strongest predictive power of the two, explaining 37.2 percent of the variance. When controlling for age, the findings indicate that younger married males who are involved in one or more community organizations and that report a relatively high degree of trust in their fellow residents engage more frequently in collective action events on the island. Church attendance has a negative influence on participation when controlling for age.

Overall, the findings of the analyses for collective action indicate that social capital, in the form of trust and associational membership, is important for facilitating involvement in purely civic forms of collective action. In the context of Carriacou, this indicates that these

two dimensions of social capital are significantly associated with participation in various village improvement projects, village festivals, sporting events, and school events that are frequently designed to raise money, and village meetings held to address community concerns. The standardized coefficients in Model 6b in Table 14 reveal that age and associational membership have effects of nearly equal magnitude on participation in collective action. Gender, in Model 6b, and frequency of church attendance, in Model 6a, fall noticeably behind in terms of their influence, followed by interpersonal trust and being married or cohabitating.

The first two stages of the analysis provide an estimation of the factors that influence the formation of social capital and the likelihood of participating in collective action. In addition, they help shed light on a potential process through which individual-level measures of social capital contribute to participation in collective action events that engage a substantial portion of the resident population and that are designed specifically to address community well-being. However, more explanation is required as linear regression models do not tell the whole story. A more in-depth analysis is needed to identify the indirect and total effects of the variables in the theoretical model while estimating an overall model that takes all of the significant relationships into consideration concurrently. Structural equation modeling (SEM) serves this purpose while generating additional measures of overall model fit in a single path model.

Stage 3: Path Analysis

Establishing the Path Model

Because social capital is measured and theorized as having three main dimensions and since my theoretical model necessitates the use of mediating variables, I estimate a path model using Amos 17.0 structural equation modeling (SEM) software. Since limitations related to sample size prevent the ability to estimate a full path model consisting of all of the variables and identified parameters in the theoretical model, I estimate a more parsimonious, or reduced, path model consisting of only the significant causal relationships identified in the OLS regression analyses. The parsimonious path model that is estimated in this stage of the analysis is pictured in Figure 4.

The advantage of using SEM to analyze a path model is that it is possible to simultaneously estimate direct, indirect, and total effects, thus more correctly specifying the model. This is an improvement over traditional linear regression models that only test direct effects. SEM also allows for the construction of a confirmatory model in which concepts can be operationalized to allow tests of the relationships between the concepts in the model (Smith and McMillan 2001). AMOS provides a set of model fit indices that allow the researcher to determine how well the proposed model fits the data. According to Smith and McMillan (2001: 3), “Overall fit is evaluated by how well the model explained all of the data in the entire analysis.”

Results of the fit indices and other SEM restrictions often require that the proposed structural model be adjusted. In this case, I removed one variable from the analysis in order to remain close to the proposed limit of 10 cases per variable in the model (Mitchell 1993). Being married or cohabitating had a weak, yet significant, association with participation in

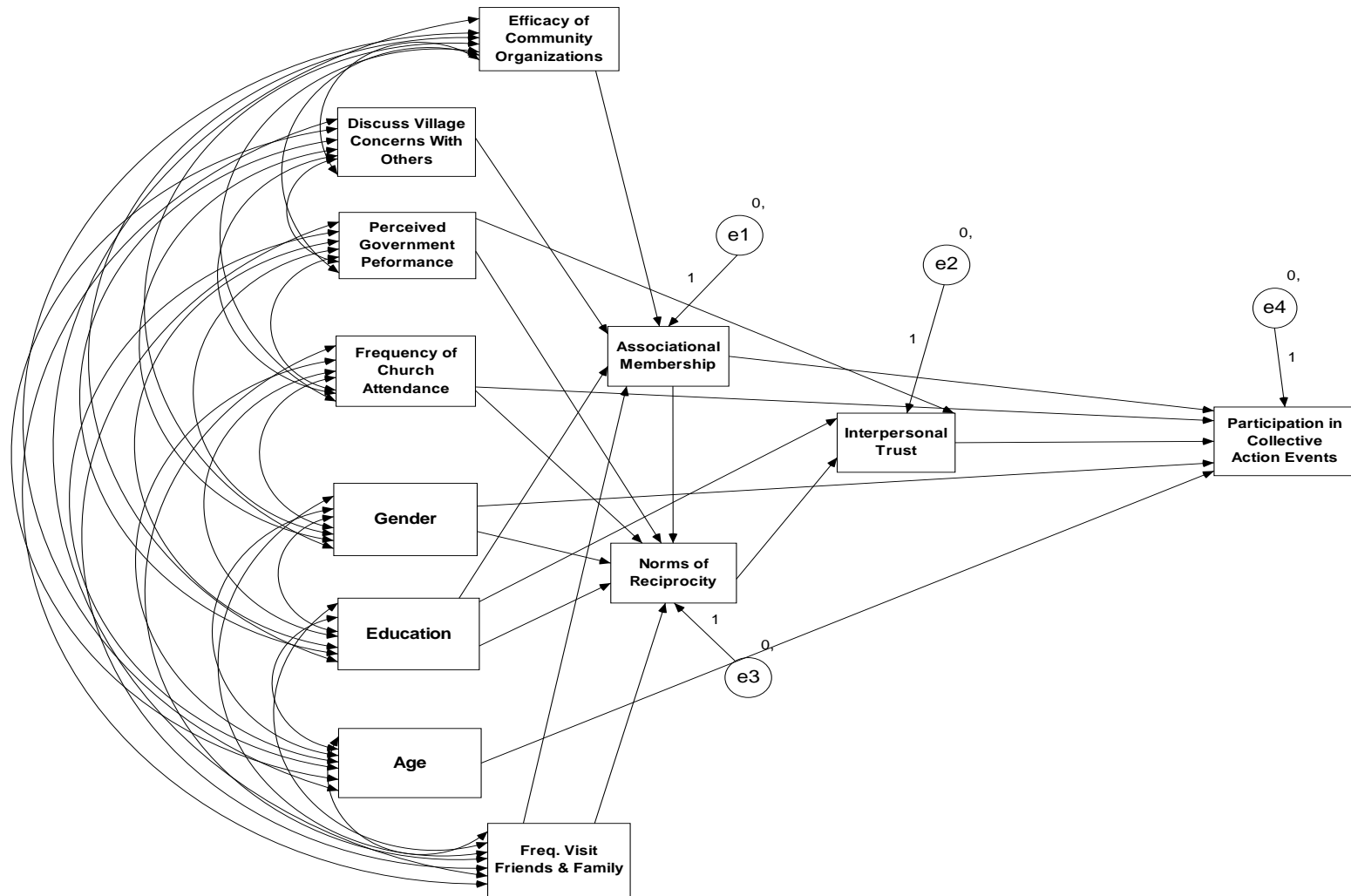


Figure 4. Structural Path Model Predicting Social Capital and Individual Participation in Collective Action

collective action in the OLS regression model controlling for age. I estimated an initial path model containing this measure and it failed to maintain a significant relationship with participation in collective action. Removal of this variable from the SEM analysis had little influence on the overall model fit. However, reducing the number of variables in the model helps to maintain the integrity of the analysis and ensure the robustness of the findings.

Estimating the Path Model and Model Fit

A number of model fit statistics were used to assess the overall fit of the path model. The most generally recognized fit index is the chi-square statistic that tests the null hypothesis that there is no difference between the proposed model and the data structure. A Nonsignificant chi-square supports the null hypothesis and indicates a good-fitting model. However, the use of the chi-square statistic has received some criticism as it is heavily impacted by sample size (Smith and McMillan 2001). In the case of small sample sizes, this test may lack power and may not be able to discriminate if the model is adequate. Thus, the chi-square test alone is not a sufficient measure of model fit and additional fit indices that retain their descriptive power across various sample sizes are required.

In addition to the chi-square test, I selected the most preferred model fit indices to test the path model, the Comparative Fit Index (CFI) and the Root Mean Square Error of Approximation (RMSEA) (Tanaka 1993; Garson 2009). The CFI fit measure was used here instead of the more commonly reported Incremental Fit Index (IFI) as it is less sensitive to sample size than other baseline fit measures (Fan, Thompson and Wang 1999). The summary fit statistics (Chi-square, CFI, and 1-RMSEA) presented in Table 15 indicate that

the path model is a very good to excellent fit to the data structure (Schumacker and Lomax 2004). In accordance with SEM fit index requirements, the results of the chi-square test ($P=0.449$) retain the null hypothesis and a CFI (0.982) and 1-RMSEA (0.958) support this conclusion.

In accordance with Putnam's definition of social capital, and guided by the results of the OLS analyses, I test theoretically driven predictors of associational membership, reciprocity, and trust. The path analysis also estimates the relationships between participation in collective action and the significant predictors identified in the OLS models in Stage 2. The direct and indirect effects of the proposed antecedents of each of the dimensions of social capital and of participation in collective action are provided in Table 15. A graphic representation of the estimated model is depicted in Figure 5.

Social Capital: Direct Effects

The results of the SEM analysis indicate little variation in terms of the direct effects of the significant predictors of associational membership. When all of the significant predictors from the reduced OLS Model 5 are included, the direct effects of times visited family and friend in other villages, discussing village concerns with others, the perceived efficacy of community organizations, and level of education were significant and the same as reported in the reduced OLS model. Together, the predictors from the two reduced OLS models explain 23.9 percent of the variance in associational membership.

The direct effects of associational membership on norms of reciprocity as well as the effect of reciprocity on trust are reported as unstandardized estimates in Table 15. The

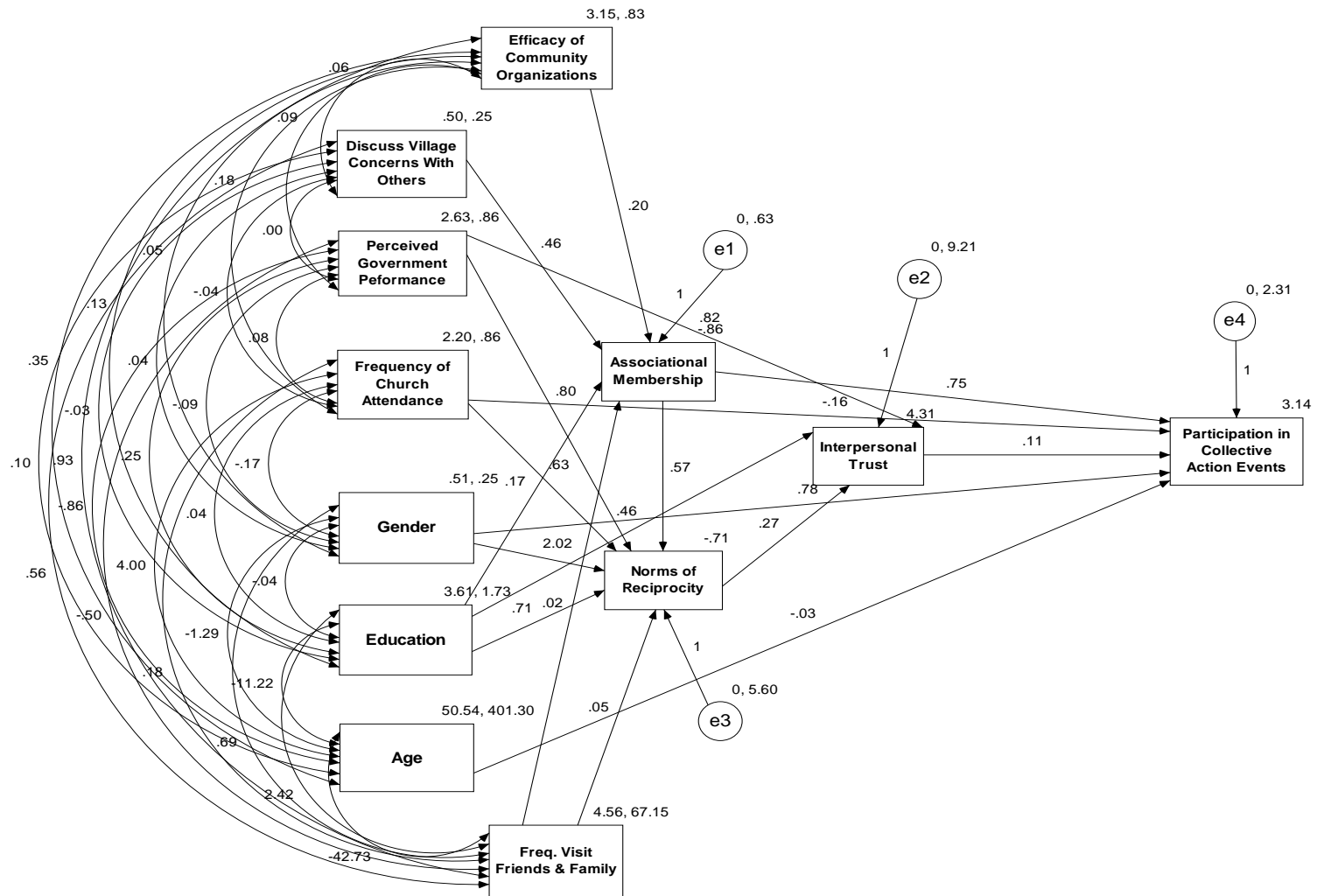


Figure 5. Analytic Structural Path Model of Social Capital and Individual Participation in Collective Action with Standardized Regression Weights

Table 15. SEM Path Analysis Results Predicting Social Capital and Participation in Collective Action Events: Direct and Indirect Effects

	Direct Effects				Indirect Effects			
	Associational Membership	Norms of Reciprocity	Interpersonal Trust	Participation in Collective Action	Associational Membership	Norms of Reciprocity	Interpersonal Trust	Participation in Collective Action
Associational Membership	--	0.573* (0.266)	--	0.746*** (0.164)	--	--	.153	.017
Norms of Reciprocity	--	--	0.266** (0.105)	--	--	--	--	.030
Interpersonal Trust	--	--	--	0.112** (0.043)	--	--	--	--
Times visited friend or family in other villages	0.017* (0.009)	0.053* (0.029)	--	--	--	.010	.017	.015
Discuss village concerns with others	0.462*** (0.152)	--	--	--	--	.265	.071	.352
Perceived efficacy of community organizations	0.202* (0.084)	--	--	--	--	.116	.031	.154
Confidence in central Government	--	0.801*** (0.251)	0.824** (0.321)	--	--	--	.213	.116
Frequency of church Attendance	0.129 (0.082)	0.632** (0.264)	--	-0.162 (0.174)	--	--	.168	.019

Table 15. cont.

	<u>Direct Effects</u>				<u>Indirect Effects</u>			
	Associational Membership	Norms of Reciprocity	Interpersonal Trust	Participation in Collective Action	Associational Membership	Norms of Reciprocity	Interpersonal Trust	Participation in Collective Action
Gender (male)	--	2.022*** (0.498)	--	0.776* (0.311)	--	--	.539	.060
Level of Education	0.165** (0.059)	0.714*** (0.184)	0.458* (0.241)	--	--	.093	.215	.199
Age	--	--	--	-0.030*** (0.007)	--	--	--	--
R-Square	0.239	0.397	0.216	0.402				
Chi-square (df)	23.902(20)							
P	0.247							
CFI	0.982							
1-RMSEA	0.958							

*p<.05, **p<.01, ***p<.001 using a one tailed t-test. Standard errors are reported in parentheses.

results indicate that membership in formal civic groups has a positive and significant effect on reciprocity. A one unit, or standard deviation, increase in associational membership produces a corresponding 0.573 unit, or standard deviation, increase in reciprocity; this is identical to that reported in the reduced OLS model controlling for education. Since a significant direct effect between age and norms of reciprocity was not identified in the OLS regression analyses, this relationship was not included in the path model. As a result, the remaining direct effects on norms of reciprocity are approximately the same as reported in Model 6 of Table 9. The number of times respondents visited with friends or family in other villages, confidence in central government, frequency of church attendance, gender, and level of education all remained significant predictors of norms of reciprocity. Overall, the six predictors explain 39.7 percent of the variance in norms of reciprocity.

As in the OLS regression analysis, reciprocity has a significant and positive effect on trust, meaning that respondents who reported higher levels of reciprocal norms in routine exchanges also reported higher levels of trust in their fellow village residents. The direct effects of confidence in central government performance and level of education are the same as reported in the OLS regression analysis.

These findings highlight the interactive effects of the three dimensions of social capital, and suggest that it is not sufficient to model social capital as a one dimensional construct. Of the three, it is evident that associational membership and interpersonal trust are the two strongest predictors of participation in collective civic action. According to the direct effects estimates in Table 15, associational membership ($p < .001$) was one of the strongest predictors of collective action. Trust was also significantly and positively related to

collective action. After accounting for all of the predictors from the reduced OLS models, gender and age maintained their significant associations with participation in collective action. However, the significant effect of church attendance disappeared after controlling for age. Similarly, in the OLS regression analysis, frequency of church attendance was not related to participation in collective action events in the model (5b) that excluded the respondent's level of education. A potential explanation for this is that removing the respondent's level of educational attainment (argued to increase tolerance of others) from the analysis reveals that individuals who are more involved with their church may be more insulated from other community affairs (Moxley and Lang 2006). Together, these variables explained 40.2 percent of the variance participation in collective action in the path model.

Indirect Effects

As reported in Table 15, the path model interestingly reveals that education has a strong indirect effect (.199) on collective action via social capital. In bivariate analyses, education was significantly related to participation in collective action ($p < .05$). However, this significant relationship did not endure the introduction of the social capital measures into the OLS regression models. The significant direct effects between education and all three components of social capital indicate that the effects of education on participation in collective action are mediated through social capital. Not a significant predictor of collective action in the bivariate analysis, discussing village concerns with others had a rather large indirect effect (.352) on participation in collective action, operating through associational membership. Perceptions of the efficacy of community organizations and confidence in

central government had indirect effects as well, again mediated through the multiple dimensions of social capital. Interestingly, frequency of church attendance (.019) had a small negative indirect effect on participation in collective action, suggesting, again, that greater participation within the church may insulate members from involvement in other community affairs. These findings demonstrate the importance of social capital as a mediating variable between collective action and its proposed predictors. The remaining indirect effects are largely unimpressive ($<.060$).

Interpersonal trust is indirectly influenced by associational membership via reciprocity (.153). This could indicate that while both associational membership and interpersonal trust influence participation in collective civic action, they are not necessarily directly linked to one another. Instead, they appear to have separate, yet complementary, effects on collective action, as indicated by the lack of a significant direct effect between the two. Gender, education, confidence in central government performance, and frequency of church attendance also had fairly substantial positive indirect effects on interpersonal trust. Not surprisingly, these indirect influences are mediated through norms of reciprocity. Again, this demonstrates the potential importance of education in the production of social capital and also provides considerable support for the vital link between norms of reciprocity and trust. While reciprocity is not directly linked to collective action in the path analysis, it is an important dimension of social capital to the extent that it mediates the effects of associational membership on interpersonal trust. The nuanced relationships between these dimensions of social capital that have emerged in this study prove to be important for social capital and collective action theory and research.

Total Effects

The standardized total effects presented in Table 16 represent the sum of each variable's direct and indirect effects on the others in a comparable metric format. This allows us to interpret which variables have the strongest overall influence on the dependent variables in the path model. Focusing first on associational membership, discussing village concerns with others had the strongest (.254) total effect as the willingness to discuss community problems with other residents generated a much greater likelihood of participation in formal community organizations. Education was a close second (.239), the perceived efficacy of community organizations (.202) third, and the frequency of visits with friends and family in other villages (.156) having the weakest total effects on associational membership.

Norms of reciprocity, the second component of social capital in the path model had six significant predictors. Education had the strongest total effects (.349), followed by gender, confidence in central government performance, and frequency of church attendance. Associational membership, a significant predictor of reciprocity in both the OLS and SEM analyses, had the fifth strongest total effect and had only half of the impact of education. The perceived efficacy of community organizations had the weakest total effect on this dimension of social capital.

The third component of social capital, interpersonal trust, had nine variables that either directly and/or indirectly influenced it. Among these, confidence in central government had the strongest total effect (.281). Again, this offers support for the argument that government performance has consequences for the level of trust in one's fellow citizens. This was

Table 16. Total Standardized Effects of Factors Predicting Social Capital and Participation in Collective Action Events

	Associational Membership	<u>Total Effects (Standardized)</u>		
		Norms of Reciprocity	Interpersonal Trust	Participation in Collective Action
Associational Membership	--	.172	.041	.353
Norms of Reciprocity	--	--	.237	.046
Interpersonal Trust	--	--	--	.195
Times visited friend or family in other villages	.156	.169	.040	.062
Discuss village concerns with others	.254	.043	.010	.090
Perceived efficacy of community organizations	.202	.035	.008	.071
Confidence in central government	--	.244	.281	.055
Frequency of church attendance	--	.193	.046	-.068
Gender (male)	--	.332	.079	.212
Level of Education	.239	.349	.259	.133
Age	--	--	--	-.304

followed by level of education (.259) and norms of reciprocity (.237). The remaining variables in the path analysis had relatively minimal total effects on interpersonal trust.

Participation in collective action, the final dependent variable in the path model, was influenced directly and/or indirectly by all other variables in the model. Overall, five variables had significant direct effects on participation in collective civic action.

Associational membership (.353) had the strongest total effect among these, followed by age's strong negative effect (-.304), gender, and interpersonal trust. Education, with its relatively strong indirect effect, had the sixth strongest total effect. The remaining variables had relatively weak total effects on participation in collective action.

Overall, education seemed to be the lone variable with consistently high effects on all three measures of social capital. Aside from that, the frequency of visits with friends and family outside of one's village was the only other variable that had similar total effects on both associational membership and norms of reciprocity. Interpersonal trust shared few significant predictors in common with the other two measures of social capital, but clearly demonstrated a strong relationship with norms of reciprocity both directly and with norms of reciprocity serving to mediate the effects on many of the other variables on trust. The significance of these and the other findings of the three stages of the analysis presented here are discussed in greater depth in Chapter 6.

CHAPTER 6

SUMMARY AND CONCLUSIONS

The recent literature on the concept of social capital has endorsed its potential for positively influencing the achievement of diverse individual and community objectives (e.g., Flora and Flora 2003, 2004; Krishna 2002; Naryan 2002; Pigg and Bradshaw, 2003; Putnam 1993, 1995, 2000). While the concept holds considerable appeal for many scholars and policymakers alike, the frequent use of generalized measures of social capital across studies and the lack of an understanding of the processes through which it operates to achieve collective outcomes have created limitations that require additional theorization and empirical research (Castle 2002; Sharp 2001). This dissertation set out with three primary goals in mind. The first objective was to address problems with the generalization of measures of social capital drawn from studies in developed nations, like the United States, across studies of communities in developing countries. The second objective of this study was to expand on the literature examining the various factors that account for variability in the multiple dimensions of social capital. The last objective was to test the contention that social capital facilitates the pursuit of shared objectives within communities (Putnam 1993, 1995, 2000).

To address the first objective, this study utilized measures of social capital, developed from key informant interviews and observations on the island of Carriacou, which are especially relevant within the context of developing countries. These measures were then used in the analyses that addressed the remaining two objectives. This chapter provides a brief synopsis of the key findings of this study and their implications for community theory

and development research. The discussion begins with the relationship between the multiple dimensions of social capital and participation in collective action. This is followed by a closer look at the findings related to the predictors of each dimension of social capital and the chapter concludes with a discussion of the limitations of the study and suggested directions for future research.

Summary of Findings

Social Capital and Participation in Collective Action

This study examined individual participation in purely civic forms of collective community action in a developing region of the world. Many of these events, such as fundraisers and ad hoc village meetings, directly address village goals or problems. Others, such as village clean-ups, festivals and sporting events also provide opportunities to raise funds for a community or to promote awareness of public issues (e.g., HIV/AIDS awareness, nutrition education, environmental conservation), while fostering civic unity and pride at the same time. In the process of examining why individuals participate in both formal and informal civic events, this study tested one of the most common assumptions of social capital theory; that involvement in associations, and the trust and norms of reciprocity that are fostered by such interactions, facilitate collective action (Putnam 1993, 1995, 2000).

The results of the analyses provide support for two of the three hypothesized relationships between the multiple dimensions of social capital and individual participation in collective action. Associational membership (a network measure used in many studies) and interpersonal trust both were found to have significant direct effects on involvement in

collective action. These findings are partially consistent with Putnam's (1993) argument that social capital can help resolve problems of collective action by facilitating people working together for mutual benefit. However, inconsistent with Putnam's argument, norms of reciprocity, while strongly related to participation in collective action in the bivariate analysis, was not found to have a significant effect when entered simultaneously with the other measures of social capital in various analyses (e.g., OLS regression). It is important to note that while Putnam (2000: 134) constructed measures of community organizational life and social trust, he failed to measure reciprocity even though he refers to it as the "touchstone of social capital." Furthermore, he did examine the individual effects of his multiple dimensions of social capital, treating them as a single social capital index.

The findings that associational membership had a direct effect on norms of reciprocity and that reciprocity directly influenced interpersonal trust demonstrate the interactive effects of these multiple dimensions of social capital, which is in keeping with Putnam's definition. This is a significant finding in that it supports the notion that social capital is a multi-dimensional construct and that using only one measure may be insufficient. This finding serves as a critique of the two dominant perspectives on social capital as the structural camp emphasizes social networks and involvement in formal organizations (e.g., Burt 1992; Edwards and Foley 1998; Portes 1998; Woolcock 1998), while the normative focuses on trust and norms of reciprocity (e.g., Fukuyama 1995; Hardin 2002; Knack and Keefer 1995; Paxton 2002). While the relationship between trust and associational membership has been tested in the literature (e.g., Brehm and Rahn 1997; Knack and Keefer 1995), the relationship between these two dimensions and norms reciprocity has not.

The third hypothesis postulating the interrelationship between associational membership and interpersonal trust was not supported. Knack and Keefer (1995) reported a similar finding and they suggest that homogeneity among associations can weaken trust and cooperative norms between groups. This is a possible explanation for the lack of a significant relationship between the two measures in this study. It is also possible that “participation in formal groups may constitute only a small percentage of the social interactions that can build trust” (Knack and Keefer 1995: 1278). Unfortunately, this study could not test this explanation due to the lack of additional measures of social interaction in informal networks. However, four respondents indicated that they had discontinued their membership in community groups due their lack of trust in the other members of the organization. The reason for the reported lack of trust among some former members deserves further attention, but is not addressed in the survey instrument.

While this study does not provide evidence of a direct effect of associational membership on interpersonal trust, there was an indirect effect present operating through norms of reciprocity. Thus, the hypothesized relationship between associational membership and trust cannot be wholly dismissed. Furthermore, the fact that norms of reciprocity were found to play a role in the overall process as a mediating variable indicates that it serves a vital role in the process through which social capital influences individual participation in collective civic action. This is a particularly important finding as reciprocity is rarely measured and tested in social capital research, yet it is generally assumed in the normative perspective to play a role in individual and collective outcomes.

The central roles associational membership and interpersonal trust play in promoting participation in collective civic action, coupled with the interactive nature of these variables with norms of reciprocity, supports community integration theory (Luloff and Wilkinson 1979; Moxley and Proctor 1995; Wilkinson 1991; Young and Young 1973). This is consistent with the view that community interaction and networks are central to levels of interpersonal trust, reciprocity, and solidarity (Christenson and Robinson 1990; Young 1999). This also provides support for the argument of considering both structural and normative measures of social capital in rural and remote locations (Dasgupta 1988; Krishna 2000 & 2002; Narayan 2002; Narayan and Pritchett 1996; Woolcock 1998). However, community integration theory has been largely ignored by the social capital literature, leaving ample room for theoretical synthesis between the two complementary perspectives (see Thompson et al. 2011).

One of the most important findings of this study was that associational membership was the strongest predictor of participation in collective action, with the exception of the OLS regression model that controlled for age (leaving out education). While this does not represent a new idea in the literature, the relationship between the two has rarely been empirically tested. This significant relationship was expected as field observations and key informant interviews indicated that community organizations play a vital role in civic affairs. According to key informants, responsibilities assumed by formal community groups included: sponsoring village cleanups, helping people build cisterns for collecting rainwater, assisting in the construction of housing for the elderly, providing meals for the elderly, helping to organize cultural (festivals) and sporting events, organization events to raise funds

for community projects, holding disaster preparedness meetings for the entire village, organizing skills training sessions for unemployed residents, working on occasion with the government ministry offices to plan construction projects within the villages, and providing toys for kids on Carriacou and Petite Martinique. One key informant (Key Informant #3, 2006) stated that “the village Community Development Group assumes most of the community responsibilities.” At the time this study took place, this particular group had raised funds and organized local labor to build a hurricane shelter that currently serves their village (Mt. Pleasant) and another in the immediate vicinity (Grand Bay). The shelter also doubles as a community center that provides skills training for young adults in the two villages. These findings are consistent with those of previous studies that link social capital to community capacity and the ability to address collective objectives (e.g., Flora and Flora 1993; Krishna 2002; Narayan 2002; Woolcock 1998).

Each of the villages surveyed in this study have active formal community organizations, several of which have obtained official status as NGOs. According to key informants, all five have a number of public services (Appendix B) and the community civic groups are involved in providing financial and organizational support for many of them. This is particularly relevant considering the argument forwarded by John Meyer and colleagues (1997) that the role of cultural forces, while often ignored in the literature, can have an enormous impact on a change.

Table 17 provides a summary of the number of services provided in each of the villages, along with overall percentages indicating the level of involvement provided by civic

groups, government ministry offices, and NGOs off the island. Several of the public services are operated or funded by multiple sources.

Clearly, community involvement provides vital support for the public services offered in each village. These include programs that address poverty, care of the elderly, health education, job training, public safety, and environmental protection, to name just a few (Appendix B). It is important to point out that Harvey Vale has a relatively small population and many of the residents live there on a seasonal basis, which likely accounts for the

Table 17. Number of Public Services Provided in Surveyed Villages and Level of Involvement by Sponsoring Organizations

Village	Number of Services Provided	Community Sponsored	Government Sponsored	Outside NGO Sponsored
Mt. Pleasant	15	86.7	20.0	40.0
Hillsborough	13	69.2	69.2	38.5
L'Esterre	15	53.3	33.3	33.3
Harvey Vale	13	30.8	30.8	38.5
Windward	12	50.0	41.7	41.7

relatively low rate of community involvement in public services in comparison to the other four villages.

While the community groups are vital to community well-being, these organizations do face a number of challenges and appear to lack cohesion across villages. As a result, most projects headed by civic groups focus solely on concerns related to that village. Many of the difficulties faced by community groups also relate to a lack of interaction and collaboration with government ministry offices on the island. According to several key informants, there has been a general breakdown in communication with government officials and this has only

served to create tension between community groups and the ministry offices. In an era where devolution has become common practice, even in developing countries, this creates further structural challenges for local communities. The following comments made by several key informants over the summers of 2005 and 2006 point out some of the problems community groups on Carriacou encounter:

“The ministry (government offices) does not share with the people. Government does not consult with the community. If they do, it is only for protocol and not taken seriously. They (government officials) take offense instead (when offered suggestions by members of the community)” (Key Informant #2, 2006).

“They (government) need to empower community groups to find ways to increase their capacity in so doing improve the livelihoods of the country” (Key Informant #3, 2005).

“The local government should organize more community outreach programmes especially for the younger ones in the community. Also the community groups should be more interactive with each other socially” (Key Informant #6, 2005).

“There is much potential for developing community building activities. However, there is no targeted programme or programmes in the area (Community Development). Creating linkages in a more conscious and formal way maybe more in accord with the prevailing concepts of community development” (Key Informant #13, 2005).

“Community projects must be publicized so that the people are aware of what is taking place” (Key Informant #2, 2005)

“The fact that things are not done in an organized manner is the greatest problem. Projects are not prioritized. There is wastage in government services” (Key Informant #21, 2005).

In addition to associational membership, interpersonal trust is significantly associated with participation in collective civic action. This is particularly noteworthy given recent claims downplaying the importance of this dimension of social capital. Cook, Hardin, and Levi (2005) argue trust plays a role in producing micro-level social order at the interpersonal level, while institutions and other social arrangements are required for making cooperation

possible outside the realm of small communities. Following this argument, trust can serve as a complement to (not a substitute for) organizational arrangements that make cooperation possible (Cook, Hardin, and Levi 2005). In support of Cook, Hardin, and Levi (2005), Raymond (2006) found that institutional mechanisms and political leadership are more important in promoting collective action than is trust among cooperators. According to this view, it is possible for communities to overcome the collective action problem with little trust.

The findings of this study provide evidence to support Cook, Hardin, and Levi's (2005) argument that trust can still serve to promote cooperation among small communities. At the same time, the role of trust should not be downplayed as it relates to rural regions and developing countries that may lack stable government institutions that provide the coordination and state regulation that would supplant the need for cooperation built on trust (Jicha et al. 2011). This has been a staple notion of sociological theory dating back to Tönnies's (1963 [1887]) discussion of mutual trust in *Gemeinschaft* associations and Durkheim's (1947 [1893]) emphasis upon mutual trust for mechanical solidarity in more traditional and small-scale societies.

Factors that Influence the Multiple Dimensions of Social Capital

The second objective of this study was to identify social and structural factors that influence associational membership, interpersonal trust, and norms of reciprocity. The literature provided various measures of ascribed characteristics (Alesina and La Ferrara 2000; Putnam 1995), socioeconomic status (Alesina and La Ferrara 2000; Brehm and Rahn

1997) and socio-demographic characteristics (Putnam 1995). Education, a common indicator of human capital (Coleman 1988), had a very strong direct effect on all three measures of social capital. In fact, it was the single strongest predictor of the two normative measures and had the second strongest effect on the associational membership, the structural measure. Among the other theoretically driven predictors, gender was significantly associated with norms of reciprocity as male respondents reported more favorable impressions of give-and-take interactions among village residents. In the final path analysis, gender and age were also significant predictors of participation in collective civic action and their effects were not mediated by social capital.

Findings provided partial support for the hypothesized relationship between regular church attendance and social capital. Park and Smith (2000) argue that church attendance contributes to the formation of social networks and fosters a sense of community. In line with this, Strømsnes (2008) contends that faith can promote positive attitudes towards others through the formation of a sense of solidarity. This study failed to find a significant relationship between church attendance and associational membership. However, a significant relationship was indicated with norms of reciprocity. This suggests that respondents who attend church on a regular basis are more likely to engage in give-and-take interactions characteristic of this measure of social capital.

Support for Hypothesis 5, that favorable perceptions of government performance is associated with higher levels of social capital (Edwards and Foley 1998; Levi 1996), was provided in that respondent perceptions of government performance was associated with both of the normative measures of social capital. This is evidence that government performance

can potentially foster trust among citizens. At the same time, unfavorable perceptions of the ability of government to meet the needs of individual villages could in all likelihood have a detrimental effect on interpersonal trust. The inability of government institutions to regulate the actions of members of a population and to ensure that individual rights are protected and needs met could breed general distrust among the citizenry (Brehm and Rahn 1997). The fact that perceived government performance had the strongest total effect on interpersonal trust is a very revealing finding, considering Grenada's colonial past and often fragile governmental stability since gaining independence.

This study also provided support for Hypothesis 6. Community attachment had a significant effect on both associational membership and norms of reciprocity. However, this measure was limited in that it only captured close relationships outside of the respondent's village. The data indicate that most residents have expansive ties within their villages and this lack of variability left only this measure as a way of gauging how rooted respondents are within the community. While not necessarily the best indicator of community attachment, it still indicates that residents who spend more time with friends and family outside of their village are more likely to participate in community civic groups in their own community and to engage in the give-and-take interactions characteristic of norms of reciprocity.

The results of the analysis provide support for both Hypothesis 7 and 8 as respondents who report that they voice their concern over community affairs and have a favorable view of the efficacy of community groups are more apt to take part in these organizations. This is not surprising in as much as residents who are more likely to voice their opinion may seek out others who do the same and community groups provide the perfect forum for addressing

civic concerns. Similarly, perceptions of the ability of these groups to work for the community would have a strong influence on the decision to seek membership.

Study Implications

The findings of this study provide support for social capital as an important construct for collective action research, as well as an important tool for policymakers concerned with increasing levels of community capacity to address various goals and development concerns. Rural development planning has long focused on building community capacity as a means of improving or sustaining the social and economic vitality of a locality (e.g., Flora and Flora 2004; Sharp et al., 2002). However, early studies of development in rural areas focused on government investment in the physical infrastructure (Green 2003), community structural characteristics, variation in access to resources, and population characteristics (Luloff and Wilkinson, 1979). It has only been in the past two decades that research and policy agendas have begun to rigorously test the effects of local interaction processes on the role of civic capacity in development with sophisticated methods. This has occurred in the wake of increasing patterns of devolution across the globe and neoliberal policies that seek the retreat of government from support of many social programs (Cheshire and Lawrence 2005; Plehwe 2007). Local economic development policies now recognize that “it is essential to engage local residents in decisions affecting their community and that local involvement improves the effectiveness of these policies” (Green 2003:343).

The findings of this study have important implications for applied sociology, especially in the context of rural communities and developing countries. Since the 1970s, multilateral

development agencies have turned towards a neoliberal development framework (Campfens 1999; Harvey 2005; McMichael 2004; Stiglitz 2002), localized development efforts have become increasingly important as maintaining problem-solving capacity (Young 1999) in the absence of state involvement largely depends on the extent to which communities are able to address their own needs and foster cooperation (Jicha et al. 2011). The role of community capacity in development is especially important when considering growing concerns over the role of foreign direct investment (FDI) in international development efforts. The effects of FDI, on its own, have been debated within the sociological literature (Brady, Kaya, and Beckfield 2007; Dixon and Boswell 1996a and 1996b; Firebaugh 1996; Stiglitz 2002; Wimberley and Bello 1991). Research by dependency/world-systems theorists suggests that FDI may undermine quality of life at the local level and the ability of local communities to address problems and act on their own behalf can be one pathway by which these effects may be mitigated. Thus, community capacity may help facilitate community-driven development, while offsetting any potential negative consequences of FDI such as job loss, human rights violations, environmental degradation, and increased cultural tension (Herman, Chisholm, and Leavell 2004: 15).

The significance of achieving a balance of local and external involvement in development efforts has been the focus of much of the work by Cornelia and Jan Flora. The Floras (2003) contend that “bonding” and “bridging” social capital are both necessary for successful collective action at the community level. “Bonding social capital consists of connections among homogenous individuals and groups, which may be based principally on class, ethnicity, gender, or another social characteristic. Bridging social capital, in contrast,

connects diverse groups within the community to each other and to groups outside the community” (Flora and Flora 2003: 217). They argue that entrepreneurial social infrastructure, or ESI, results when a community has high levels of both bridging and bonding social capital and the two reinforce one another, as opposed to conditions in which both are low or one is predominant in development efforts (Flora and Flora 2003). Carriacou presents a case where communities have high levels of bonding social capital but relatively low levels of bridging social ties that link them to resources outside of the community. This is supported by the comments provided by key informants that suggest that interactions between village civic groups and with government ministry offices are limited, which contributes to a lack of unity between villages and slow progress towards development goals.

Understanding how social capital is formed and enhances community civic action is an essential task, particularly in developing nations (Woolcock and Narayan 2000). While devolution was intended to empower communities, many rural areas have encountered a myriad of problems that limit the capacity for locally-driven development efforts. Those with attractive lifestyle amenities (e.g., resort areas, located near a lake or other recreational attraction), a highly educated workforce, or that are located near urban areas are likely to have experienced employment and economic growth in recent years (Drabestott and Smith 1995). However, spatial inequality (Lobao, Hooks, and Tickamyer 2007) forces many other rural and developing regions that lack these qualities, to fall behind in development efforts.

Impediments to development can be attributed to a number of factors. Distance to and the lack of resources to compete within global markets, the shortage of human and physical capital, high rates of out-migration, service withdrawal and private disinvestment can limit

the ability of rural regions to manage their own development efforts (Gray and Lawrence 2001; Swanson and Brown 2003). The remote location of many developing nations and their peripheral, or hinterland, status in the world-system may make self-development the only practical strategy to maintain or create employment and economic activity (Hall 2001). This is very much the case for the island of Carriacou as it rests on the periphery of a peripheral nation. The remote location of the island, coupled with its small size and population limit any opportunities for industrial growth.

For civil society solutions to be effective and viable over a wide range circumstances and challenges, either the factors that enable coordinated action by citizens must be abundantly available, or these factors should be easy to reproduce at a relatively low cost (e.g., advocacy groups, self-help groups, community organizations, non-governmental community development organizations, women's organizations). One or both of these assumptions must be upheld if civil society solutions are to be valid and effective in all parts of the world. The growing literature on social capital provides one potential avenue towards increasing community capacity, particularly within a developing country context.

One of the key findings of this study is the importance of membership in community organizations as the primary predictor of collective action on the island of Carriacou. Thus, in communities where resources are limited, social ties can indeed pay off.³⁹

³⁹ In a favorable institutional environment these social ties may easily translate into a flow of benefits (Krishna 2000). There is, however, the potential that such community-based approaches may be vulnerable to elite capture where locally based individuals with disproportionate access to social, political, or economic power dominate development project decisions and the allocation of project benefits, which can pose a significant threat to community efforts and the equitable distribution of benefits (Blair 2000; Dasgupta and Beard 2007; Flora and Flora 2003; Titeca and Vervisch 2008).

Contributions

Social capital has been utilized to explain a wide variety of outcomes. However, the use of general measures across settings and the inability to arrive at a consensus as to what actually constitutes social capital has led to significant confusion and debate among scholars (Fulkerson and Thompson 2008; Portes 1998). By defining social capital using particular characteristics of social organization only (i.e. trust, reciprocity, membership in community organizations), the definitions often do not specify the reason these dimensions are important. This dissertation has empirically tested and found evidence of a relationship between both structural and normative measures of social capital and participation in collective action. In the process, the study makes a number of methodological and theoretical contributions for the social capital literature.

Rigorous steps were undertaken in the summer of 2005 to design and implement a pilot study to identify contextually relevant measures of social capital and collective civic action. The rationale for this was based on arguments that measures of social capital used in studies in developed countries are not always applicable to studies of developing regions. For example, associational membership is not the most appropriate measure of social capital in impoverished communities that lack formal community organizations (Woolcock and Narayan 2000). In this case, the presence of formal civic organizations on Carriacou allowed for this measure to be included as an indicator of structural social capital. Measures of informal social networks of friends and family, viewed as an indicator of bonding social capital, could not be included due to little variation in this indicator as respondents were heavily embedded in large social networks both on and off the island. Thus, it may prove

difficult to acquire an accurate measure of social network ties among relatively small and racially homogenous populations in developing countries. Measures of trust and reciprocity also pose a challenge as no study prior to this one has attempted to measure and test the effects of norms of reciprocity. Measures of trust used in developed nations are also problematic as this dimension of social capital is frequently measured as “generalized trust,” which refers to trust in the broader society (Paxton 2007). This measure may have little meaning among individuals who have frequent contact with the other members of a relatively small population. The normative measures of social capital derived from the pilot study are relevant to Carriacou’s recent experiences with natural disasters and struggles as part of a developing nation, but are still broad enough to incorporate aspects of day-to-day life common to many rural and developing regions of the world.

The construction of an index of participation in collective action events that is relevant to more close-knit communities with relatively small populations is another important methodological contribution of this study. This index includes collective action events that are open to all members of the village and that tend to attract a large number of residents. It is the contention of this study, that recent sociological research investigating collective action events has been constrained by both its negligence of non-contentious forms of community action and in how the concept itself is conceptualized. For example, Sampson and colleagues (2005) define collective action as including two or more people, but this narrow definition does not effectively operationalize community participation. This study argues that collective action consists of events that involve a substantial portion of community

residents, not the isolated efforts of two individuals who may not even be pursuing the interests of the collectivity.

Aside from these methodological contributions, the examination of purely civic forms of collective action is itself a valuable addition to the literature. The emphasis on the role of community-driven efforts in current development studies and practice marks a different approach from the classic focus on contentious forms of social movements within the social sciences (Blumer 1951; Geschwender 1968; Gurr 1970; Kornhauser 1959; Park 1972; Smelser 1962; Tilly 1978). Such forms of non-contentious collective action may also meet with greater success than grassroots social movements designed to improve living conditions among the poor and powerless such as those organized by Saul Alinsky from the 1930s to the 1960s in the United States. The reason for this is that widespread political activism may prove to be too risky in developing settings. The focus on more commonly-occurring community events has generated a reconceptualization of collective action, one that considers a variety of new types of cooperative action that take place in everyday settings and that are more civic in nature. The forms of collective action examined in this study are ones that involve a substantial portion of the resident population. Such broader citizen involvement provides the potential to empower communities by tapping into local resources, labor, funds, and social networks, while generating greater awareness of community issues and increasing feelings of civic pride and unity. This form of collective action impacts communities on a day-to-day basis and can help forge local and extra-local networks and provide resources for more sustainable development practices.

The findings of this study also provide valuable insight into the process through which social capital contributes to collective action. Commonly viewed as one of the most valuable outcomes of social capital processes, this relationship has rarely been tested. The findings of this dissertation demonstrate the importance of both structural (associational membership) and normative measures (trust and reciprocity) of social capital in promoting individual participation in collective civic action. This provides substantial support for definitions of social capital that incorporate both measures. Furthermore, the findings of this study make a significant contribution to theory related to social capital and its role in developing countries. Social capital research has been limited to mostly developed societies, and given its contribution to development policies this is an important weakness that this dissertation addresses.

In addition, this study further develops the conceptualization of processes through which social capital operates, another neglected area of research and theory related to this concept. The findings of this case study support the importance of examining both structural and normative perspectives of social capital and their association with collective action. The findings that interpersonal trust is related to collective action and that norms of reciprocity mediates the relationship between associational membership and trust helps to link the structural dimension to the normative.

Social capital is considered by many to be a resource possessed by communities. However, community-level measures of social capital have their basis in individual actions and social psychological processes. As a result, research on social capital and its associated outcomes at the individual-level is important for developing contextually appropriate

measures of the concept and for understanding how it operates to generate desired outcomes. Concerted efforts to develop a better understanding of individual-level processes involved in the formation of social capital and how it contributes to collective action is also important for policy agendas concerned with increasing levels of social capital within communities.

In line with this, another important contribution of this study is that it adds to the literature on social and structural factors that account for variance in measures of social capital at the individual level. Rather than viewing it solely as an independent variable, this study also treated social capital as a dependent variable. Aside from providing support for relationships already identified by the literature, this study also found evidence for additional predictors of associational membership, interpersonal trust, and norms of reciprocity. The findings also provide support for the argument that human capital can facilitate the formation of social capital, which is the opposite of the relationship proposed by Coleman (1988). However, data would have to be gathered at multiple points in time to verify this claim.

A final contribution of this study is that it provides support for the argument that government performance is important for the development of the normative dimension of social capital. While this study lacks data from multiple points over time that would provide definitive support for causality, this finding does open the door for consideration of the role good governance plays in enhancing social capital. This is particularly important in developing countries, where state governments may lack legitimacy. In situations where central governments are predatory, community based development may do very little without institutional reform (Evans 1995). State provision of a rule-governed environment that allows for collective action and social organization is one of the most important ways in

which to promote social capital (Evans 1996). Therefore, while the findings of this study suggest that social capital is indeed conducive to collective action, I should caution that it is not a replacement for strong government institutions. Given the current trend of devolution and the retreat of the state in a globalized era, this provides a mixed bag of sorts for policymakers and requires further research (Jicha et al. 2011).

As a whole, these findings extend community theories and research, especially those dealing with social capital and its predecessors. The study of the localized conditions that enhance the ability of communities to act has a rich background in rural sociology (Young and Young 1973; Luloff and Wilkinson 1979; Moxley and Proctor 1995). In light of these theories of communities, I would like to emphasize that social capital theory has substantively extended these community theories, and this study compliments this overall body of research. As communities and collective action regain prominence in the sociological literature, it is increasingly important to maintain theoretical and conceptual clarity in order to advance knowledge. By modeling the mediating effects and multiple dimensions of social capital in relation to collective action, this study makes such a contribution.

Limitations

As discussed in Chapter 5, parts of the analysis were constrained by the size of the sample. While the 114 cases are sufficient for the OLS regression models and the reduced SEM path analysis, suggested guidelines related to the number of variables per case restricted the number of variables in the analyses. This also disallowed the use of latent variables in

the SEM analysis and threshold for the number of variables that could be included in the overall model. Fortunately, the sample provided enough cases to estimate a parsimonious model that incorporated all of the significant relationships from the reduced OLS regression models. Another limitation related to sample size was lack of sufficient cases for a cross-village comparison of respondents that may have turned up differences rooted in broader village structural characteristics that were reported in the key informant questionnaires.

While statistical tests did not reveal any major multicollinearity issues throughout the analysis, it did necessitate the use of separate OLS regression models controlling for education and then age. However, this problem was resolved in the path analysis as SEM allowed the effects of these variables to be examined separately.

Aside from these methodological issues, a major limitation of this study relates to the lack of time series data. The absence of multiple data points prevents the ability to control for autocorrelation, which makes it impossible to definitively identify causation between the variables in the analysis. Thus, it is possible for outcomes to be interpreted differently when they are not guided by theory. For example, this study argues for two particular relationships that are the reverse of what is proposed in much of the social capital literature. I argue that positive perceptions of government performance and educational attainment enhance levels of social capital. The background characteristics of the respondents and the historical circumstance surrounding the island appear to suggest some time-order between the variables. While this provides a reasonable justification for the directionality of these relationships one must use caution when accepting this as proof of causation. However, the

findings presented in this study provide adequate evidence to keep a focus on these relationships in future studies that involve data collected at multiple points in time.

An argument can be made that this study is also limited in its focus on a small developing island nation, with a largely culturally and racially homogenous population, and a colonial history. For this reason, the measures used and the proposed relationships between them are likely not generalizable to other settings in the developed world. However, the intent of this study was to provide measures of social capital and collective action and to test hypotheses that are relevant to developing nations. Thus, the findings of this study could be used to inform research in other similar settings (e.g., other small Caribbean islands). At the same time, there is also the potential that the measures and relationships proposed in this study could also inform studies in rural areas of developed countries with large minority or impoverished populations coping with the devastating effects of recent natural disasters. In either case, a country's particular set of historical, cultural, economic, and environmental circumstances would still need to be considered when constructing measures of social capital and collective civic action.

A final key limitation of this study is the lack of sufficient studies testing the relationship between social capital and participation in collective action in the Caribbean that would permit comparative analyses or make a meta-analysis possible. However, this study provides a promising start with virtually limitless potential for future investigation.

Directions for Future Research

While this study emphasizes the importance of institutional and formal measures of structural social capital, the role of informal networks should be considered as well. However, as previously stated, residents on Carriacou had extensive informal networks, and as a result there was not enough variation between respondents to enable an analysis of this dimension of structural social capital. This is a possible avenue for consideration for future sociological research on structural social capital in developing societies.

Much of the social capital literature also emphasizes the importance of extracommunity linkages and weak ties within the community as a means of promoting information and accessing resources (Flora and Flora 2003). Yet, the social structure of many rural communities is characterized by strong social ties within the community and a lack of connections to external organizations and resources. This proved to be the case on Carriacou as respondents had extensive networks of strong social ties and weak ties proved much more challenging to quantify. Consequently, a promising area of future social capital research would be to focus on the identification of weak ties within and outside of communities that could influence collective action.

The findings of this dissertation indicate that possessing a high level of social capital enables members of a community to act collectively for achieving diverse common goals. At the same time, and according to key informant interviews, it would seem that more is needed to both promote collective action goals and to ensure that such undertaking will achieve optimal success. According to key informants, community development agents are also required to help select goals that are feasible and likely to be achieved. Agents who have

regular contact with state officials and market operators and who are familiar with their procedures and practices can help villagers organize themselves in ways that are more likely to succeed. This study provides some evidence that such organizational expertise and leadership can be provided by residents with higher levels of formal education. Specialized knowledge is required to gain access to government agencies and to their stock of development benefits. Such knowledge is not easily available to all villagers, but only to some few who have the capacity and who invested time and effort in acquiring the necessary information and contacts. However, this study did not examine the factors that contribute to educational attainment or other potential measures of residents who may serve as key agents in collective civic action. This is yet another promising area of consideration for future research.

Only 22-40 percent of the variance was explained for each of the four dependent variables in this study. This leaves substantial room for the consideration of other predictors of social capital and individual participation in collective action in future studies on Carriacou. For example, more accurate measures of income, informal social networks, and potential constraints on time could serve as additional influences on participation in collective action.

Another potential avenue for future research on Carriacou would be to conduct a more extensive study with a larger sample size that would allow for community-level analysis and comparisons across villages. The importance of associational membership suggests that other structural level factors may influence participation in collective action. Flora and colleagues' (2004) provide a set of measures in their Community Capitals framework that

could be incorporated into such a community-level study. They argue that for sustainable community and economic development to occur, communities must possess seven forms of capital. Two of these, human and social capital were examined in this study. Financial capital refers to the financial resources available to invest in development. Political capital refers to a community's access to resources of power and ability to have a voice in public affairs. Cultural capital is the traditions and values of a group of people. Built capital refers to the human-built infrastructure within a community and, lastly, natural capital is comprised of the natural resources and biodiversity within a location (Flora et al. 2004). Most of these measures of community capital relate to Charles Tilly's (1973) explanation of the structural factors that promote community action, which include a community's current level of development, control over resources, and infrastructure.

In conclusion, this dissertation has provided a case for the need to focus on civic forms of collective action, particularly in rural regions and developing nations. Future research should examine such forms of community action to help inform development policy as well as the literature on social capital. By examining multiple dimensions of social capital and the factors that contribute to their formation, more can be learned in regards to what aspects of social organization contribute to or detract from efficient collective action for communities. In addition, future research should incorporate individual measures of social capital as drawing connections between individual and collective social capital can broaden our understanding and in turn assist community development efforts that rely on collective action.

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APPENDICES

APPENDIX A – CARRIACOU RESIDENTIAL SURVEY**Collective Action and Sustainable Community Development on the Island
of Carriacou, Grenada****Phase II
Summer 2006
Residential Survey****DATE** _____**Respondent ID#** _____**Site Classification #** _____***INTERVIEWER:*** _____

I am here with a group of researchers from North Carolina State University in the United States, and we are talking to people who live on Carriacou about their experiences. We are interested in learning more about life in your local village and about group activities that take place there. We are also interested in your interactions with family members and friends living on the island as well as with those living abroad, as well as the type of things you would like to see happen on Carriacou in the near future.

Your opinions and experiences are important, and everything you tell us will remain completely confidential. We thank you for helping us understand what people on Carriacou think about these matters.

SECTION V

I would like to begin by asking you some questions about the village that you live in here on Carriacou and your relationships with your neighbors here.

V1. Enter the village name here. _____

V2. How many years have you lived in this village? _____

V3. Other than this village, how many other villages on Carriacou have you lived in? _____

V4. Within the past month, how many times have people in your village helped you with day-to-day tasks such as repair work, tending a garden, or watching children?

V5. Within the past month, how many times did you help others in your village with day-to-day tasks such as repair work, tending a garden, or watching children?

V6. In general, how often would you say the people in your village help each other?

As much as possible.....1
Often.....2
Occasionally.....3
Rarely.....4
Never.....5

V7. In general, how many of the people in your village do you think can be trusted?

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

V8. If you encountered a problem (such as not enough drinking water during the dry season) and needed some assistance, how many of your neighbors could you count on to help you?

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

V9. How many of your neighbors do you believe would ask you for help if they were in the same situation?

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

V10. If a local service in your community, such as a school or public meeting place, was in danger of being close, how many of your neighbors could you count on to work to keep it open?

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

V11. If a foreign company was trying to open a business that many people in your village did not want in the community, how many of your neighbors do you think would work to try to stop it?

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

V12. If a valuable local resource, such as the mangrove marshes or farmland, was threatened by actions of either the government or an outside company, how many of your neighbors do you think would work to try to save the resource?

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

V13. If another hurricane struck this year, how many of your neighbors do you think would be willing to help in community relief and reconstruction efforts?

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

I am going to ask you some questions about events in your village within the past six months. Sometimes it is helpful for people to think about an event that happened about six months ago in order to help them remember whether something has happened within that time period. Christmas was about six months ago. So, when I ask you about things that have happened in the past six months you might want to think about what has happened since Christmas or some other event at about that time.

V14. During the past six months has your village had any village improvement projects such As cleanup, building projects, or fund-raisers?

Yes.....1
 No.....2

If yes → V14a. How many times in the past six months have you participated in these projects?

V15. During the past six months, have you participated in any island-wide improvement projects?

Yes.....1
 No.....2

If yes → V15a. How many of these projects did you participate in?

If no, enter 0.

V16. During the past six months, has your village had any village-wide ceremonies or festivals?

Yes.....1
 No.....2

If yes → V16a. How many times in the past six months did you participate in these activities?

V17. During the past six months, have you participated in any island-wide ceremonies or festivals?

Yes.....1
 No.....2

If yes → V17a. How many of these festivals did you participate in? _____

If no, enter 0.

V18. During the past six months, have there been any meetings in your village to discuss village issues?

Yes.....1

No.....2

If yes → V18a. How many times in the past six months did you participate in these meetings? _____

V19. During the past six months, has your local school had any activities that adults can attend?

Yes.....1

No.....2

If yes → V19a. How many times in the past six months did you participate in these activities? _____

V20. During the past six months, how many times have you gone to a sporting event in your village, either to participate or watch? _____

V21. During the past six months, how many times have you gone to a sporting event in another village on Carriacou, either to participate or watch? _____

V22. During the past six months, have there been any problems or issues in your village or in the island-community that have bothered you?

Yes.....1

No.....2

If no, Skip to V20.

V23. What were these issues? _____

V24. Have you discussed these issues with anyone in your village?

Yes.....1

No.....2

If yes → V24a. How many people in your village have you talked to about these issues?

V25. In the past month, how many times have you left your village to get goods or services?

If ≤ 1 → V25a. How many times in the past six months have you left your village to get goods or services?

V26. During the past six months, have you had any difficulties getting where you wanted to go?

Yes.....1
No.....2

If yes → V26a. What types of problems did you have? _____

And → V26b. How many times in the past six months have you had these problems?

V27. During the past six months, have you or your family needed any medical care or any health services at all?

Yes.....1
No.....2

If yes → V27a. Did you have any problems getting the care that you needed?

Yes.....1
No.....2

If yes → V27b. What types of problems did you have? _____

SECTION O

Next, I would like to ask you about any organizations or clubs that you may belong to.

O1. Do you participate in any organization, clubs or groups?

Yes.....1

No.....2

If no, skip to O6.

I would like to ask you a few questions about these groups. If you would, pick a group to start with.

	Group 1	Group 2	Group 3
O2. What is the name of the group?			
O3. What is the purpose of group?			
O4. Does the group meet in a regular location?			
O5. How often does the group meet? (Weekly, Biweekly, Monthly)			

O6. In the past, have you been in any groups that you no longer participate in?

Yes.....1

No.....2

If no, skip O7- O9.

	Group 1	Group 2	Group 3
O7. What is the name of the group?			
O8. What is the purpose of group?			
O9. Why are you no longer a member of the group?			

If R is a member of any group or club, skip to O12.

O10. Why do you think you have decided not to take part in a village club or group?

Too busy/not enough time.....1

Simply not interested.....2

There is not a group that suits me.....3

Don't like people in the groups.....4

Other.....5

O11. Do you believe that joining a group or club could benefit you in the future?

Yes.....1
No.....2

O12. In your opinion, how much good do you think village groups have done for the village?

A Lot.....1
Some.....2
Not Much.....3
None at all.....4

O13. Are you a member of a church?

Yes.....1
No.....2

If no, skip to O15.

O14. What denomination is the church that you go to? _____

O15. In an average month, how many times do you go to church? _____

If ≤ 1 , ask O15a. About how many times in a year do you go to church? _____

SECTION G

Now, I would like to ask you just a few questions about local government.

G1. In your opinion, how much do you think the government on Grenada helps your village with its needs?

A Lot.....1
Some.....2
Not Much.....3
None at all.....4

G2. In your opinion, how much does the local government on Carriacou help your village with its needs?

A Lot.....1
Some.....2
Not Much.....3
None at all.....4

G3. In your opinion, do you believe that local groups could better serve village needs if they worked with the government?

Yes.....1
No.....2

G4. Are you registered to vote?

Yes.....1

No.....2

G5. Did you vote in the last election?

Yes.....1

No.....2

G6. In your experience, how often have your elected officials kept their promises?

Always.....1

Often.....2

Occasionally.....3

Rarely.....4

Never.....5

G7. If your village was electing a committee to seek help in case of a great catastrophe (for example, a Hurricane) what person would you most likely pick to be on that committee.

G8. Why would you pick this person? _____

SECTION L

Now I would like to ask you a few more questions about your personal experiences and your relationships with others on and off Carriacou.

L1. Have you ever lived off the island of Carriacou? Remember to include any time living on Grenada or Petit Martinique as off the island.

Yes.....1

No.....2

If no, Skip to L3.

L2. Are you originally from Carriacou?

Yes.....1

No.....2

If yes, answer questions YL1-YL4.

If no, answer questions NL1-NL5.

YES

YL1. In what country or countries did you live?

YL2. What was your reason for leaving Carriacou?

Make money to support family on Carriaco.....1
 Accumulate money in order to return.....2
 Join family elsewhere.....3
 Establish self permanently elsewhere.....4
 Personal desire to travel.....5
 Other6

YL3. How many years did you live off of the island? _____

YL4. When you lived off the island did you ever send money to people on Carriacou?

Yes.....1
 No.....0

NO

NL1. Where are you originally from? _____

NL2. How many years have you lived on Carriacou? _____

NL3. Why did you come to Carriacou?

Make money to support family on Carriaco.....1
 Accumulate money in order to return.....2
 Join family elsewhere.....3
 Establish self permanently elsewhere.....4
 Personal desire to travel.....5
 Other6

NL4. Other than those in your household, do you have family on Carriacou?

Yes.....1
 No.....0

NL5. Do you have family members off Carriacou that you support financially?

Yes.....1
 No.....2

L3. Other than the family members who live with you in your house, do you have family who live in this village but do not live with you? Please include those who **you** consider to be family.

Yes.....1
 No.....2

If yes, ask L3a. How many family members live in your village but not in your house?

L4. Do you have family in other villages on the island? I am interested in those who **you** consider to be family.

Yes.....1

No.....2

If yes, ask L4a. How many family members live in other villages on the island? _____

And L4b. In how many different villages do these family members live? _____

L5. How many close friends do you have who live outside your village but still live on the island of Carriacou?

L6. Within the past month, how many times have you visited friends or family who live outside your village but on the island of Carriacou?

SECTION M

M1. Do you have any family and friends who now live off the island that you still keep in touch with (this can include those living on Grenada or Petit Martinique)?

Yes.....1

No.....2

If NO, skip to SECTION V.

M2. How many family members living abroad do you keep in contact with? _____

If 0, skip to M11.

Let me ask you some questions about those family members. If several family members live together in the same house, please answer the questions for the whole household. You may begin with anyone you would like.

	#1	#2	#3	#4
M3. What is this person's relationship to you?..... (If household, use closest relative)				
M4. Are they from Carriacou?.....				
M5. What country do they live in?.....				
M6. About how many times during the year do you have contact with them?.....				
M7. Do you ever send them money?..... If no, Skip to M9.				
M8. Since this time last year, how many times have you sent them money?.....				
M9. Do they ever send you money?..... If no, Skip to M11.				
M10. Since this time last year, how many times have they sent you money?.....				

Now, we will ask similar questions about any friends or other acquaintances living abroad.

M11. How many people living abroad do you keep in contact with who are not members of your family?

If 0, skip to Section V.

SECTION F

Now, I would now like to ask you a series of questions about agriculture and the environment.

F1. Do you farm? (If No Skip to Question F11)

Yes.....1

No.....2

If no, Skip to F5.

F2. Do you sell the products you grow?

Yes.....1

No.....2

F3. Do you consume the products you grow?

Yes.....1

No.....2

F4. Do you own or rent the land that you farm, or both?

Own.....1
Rent.....2
Both.....3

F5. Do any of your close friends or relatives farm?

Yes.....1
No.....2

(If No Skip to Question 9)

F6. Do they sell the products they grow?

Yes.....1
No.....2

F7. Do they consume the products they grow?

Yes.....1
No.....2

F8. Do they own or rent the land that they farm, or both?

Own.....1
Rent.....2
Both.....3

F9. Do you work on other people's farms for pay?

Yes.....1
No.....2

F10. Do you know anyone who works on other people's farms for pay?

Yes.....1
No.....2

For the following questions I would like to ask whether you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree to each of these statements.

F11. Government should large farms.	SA	A	N	D	SD
F12. Government should help small farms.	SA	A	N	D	SD
F13. Carriacou should import most of its food.	SA	A	N	D	SD
F14. Carriacou should grow most of its food.	SA	A	N	D	SD
F15. Carriacou should grow food to export to other countries.	SA	A	N	D	SD

- F16.** Government should help farmers export farm products. SA A N D SD
- F17.** Good farmland should be protected from other land uses. SA A N D SD
- F18.** Agriculture is the most basic occupation, and all other rely on it. SA A N D SD
- F19.** Health problems on Carriacou due to farming methods should be a major concern? SA A N D SD

SECTION E

On a scale of 1 to 5, with 1 meaning that you are not concerned at all and 5 meaning that you are very concerned, how concerned are you about the following?

Sandmining	1	2	3	4	5
Sewage/waste treatment	1	2	3	4	5
Roaming livestock	1	2	3	4	5
Threatened wildlife on Carriacou	1	2	3	4	5
Loss of mangrove marshes	1	2	3	4	5
Deforestation	1	2	3	4	5
Over-fishing	1	2	3	4	5
Use of pesticides in agriculture	1	2	3	4	5
Use of land for construction of houses, businesses, etc.	1	2	3	4	5

SECTION X

The next three questions are about the involvement from outside parties on Carriacou. Such parties include foreign governments, organizations, missions, and companies on the island.

- X1.** Overall, would you say that efforts involving outside parties have been beneficial to your village?

Yes.....1
No.....2

- X2.** Do you believe that the involvement of individuals and organizations off the island is essential for the development of the island?

Yes.....1
No.....2

X3. Has outside assistance harmed or threatened the well-being of the residents of Carriacou?

Yes.....1

No.....2

SECTION P

I want to ask you just a few more questions about yourself and your household, and then we will be done.

P1. Are you single, married, divorced, or widowed, or do you live with someone as if married?

Single.....1

Married.....2

Divorced (or separated)...3

Widowed.....4

Cohabiting.....5

P2. How many people live in your household? _____

P3. How many of these are children under the age of 18? _____

P4. How many of these children are your children? _____

P5. Does your household own the house you live in or do you rent it?

Own.....1

Rent.....2

P6. Are you currently employed?

Yes.....1

No.....2

If no, skip to P14.

P7. Do you hold more than one job?

Yes.....1

No.....2

P8. What kind of work do you do at this job?

Job 1	Job 2

P9. What village do you work in [at this job]?

P10. Does anyone besides yourself help to support you and your household?

Yes.....1

No.....2

If no, skip to P14.

P11. Is this person a member of your household?

Yes.....1

No.....2

P12. What kind of work do they do? _____

P13. What village does this person work in? _____

P14. In the past 5 years, how often have you been the victim of a crime?

Never.....1

Once.....2

Two to four times.....3

Five times or more.....4

P15. Do you know anyone in your village who has been the victim of a crime in the past 5 years?

Yes.....1

No.....2

P16. Gender of respondent

Male.....1

Female.....2

P17. In what year were you born? _____

P18. What level of education have you completed?

Did not finish primary.....1

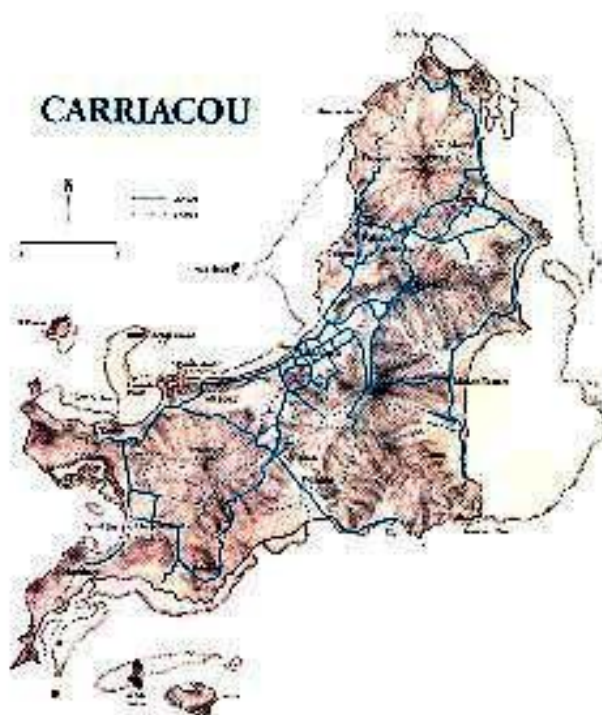
Finished primary.....2

Some secondary.....3

Finished secondary.....4

Some college.....5

Has a college degree (Highest degree _____)...6

APPENDIX B - KEY INFORMANT QUESTIONNAIRE**Collective Action and Sustainable Community Development
on the Island of Carriacou, Grenada****Phase II: Summer 2006**

1

Respondent ID number _____

Hello, we are talking to village leaders on Carriacou to learn about recent changes or projects that are aimed at bettering village life. More specifically, we ask for you to recall details about any projects within the past 5 years, who was involved, and what role, if any, citizen groups within your village played.

This questionnaire is part of a larger research project being carried out through North Carolina State University. You will not be personally identified with your answers. We thank you for helping us understand what community leaders on Carriacou think about these matters. Your opinions and experiences are very important to us.

1. In the past 5 years, have there been any projects within your village that addressed the following? If yes, were these projects headed by village residents, the ministry offices on Carriacou or by people or organizations outside of Carriacou?

Projects that addressed:	Yes	No	Village	Ministry	Outside
Poverty					
Services for persons with disabilities					
Services for the elderly					
Recreational youth services					
Health services					
Health education					
Promoting a local historic/cultural site					
Job training/creation					
Agriculture					
Fishing					
Promoting tourism					
New public services (e.g., fresh water)					
Construction of new buildings					
Public safety					
Environmental protection					
Village beautification					
Hurricane relief					
Other:					

2. Does your village have any annual festivals or other village-wide celebrations?

Yes.....1

No.....2

3. Does your village have a newsletter or other source of printed information that discusses news relevant to the village?

Yes.....1

No.....2

4. Is there a grouping of people who are generally recognized as village leaders even though they do not hold government offices?

Yes.....1

No.....2

5. Who are these individuals (name or title)?

6. Does your village have a town council or organization made up of residents that meets to discuss village matters?

Yes.....1

No.....2

If No, skip to question 11

7. If yes, how often do they meet?

Once a month.....1

More than three times a year.....2

Once a year.....3

Less than once a year.....4

8. Who generally participates in these meetings (e.g., elected individuals, influential residents)?

9. Is there some place (e.g., town hall) within your village set aside where groups can meet?

Yes.....1

No.....2

10. Are there any organized citizens' groups in your village (e.g., Mt. Royal Progressive Youth Movement)?

Yes.....1

No.....2

If No, skip to question 18

11. Please answer the following questions about these groups.

Group Name	About how many members are in this group?	How often do they meet?	Does this group exclude anyone from membership?	What types of activities or services does this group provide?

12. Do these groups usually take part in or head up projects or other activities aimed at improving conditions within your village?

Yes.....1

No.....2

13. Do ministry officials on Carriacou ever meet with these groups?

Yes.....1

No.....2

14. If yes, for what purpose?

15. If there is more than one group, do they ever meet together to discuss village matters?

Yes.....1

No.....2

16. To the best of your knowledge, do any of these groups ever meet with groups from other villages?

Yes.....1

No.....2

17. Have any groups within your village applied for any grants seeking funding from organizations (e.g., digicell) to sponsor a project or to provide a service for the village?

Yes.....1

No.....2

18. Has your village had any village-wide fund-raisers in the past three years?

Yes.....1

No.....2

19. Is there a village foundation or trust that sets aside money to provide funds for needed services or projects?

Yes.....1

No.....2

I would now like to ask you a series of questions about whether or not your village has had any involvement with individuals or organizations off the island on any projects within your village.

20. Have any non-profit and/or non-governmental organizations (i.e. Red Cross, USAID, UNICEF) carried out any village projects in the past 5 years?

Yes.....1

No.....2

21. In the past 5 years, has your village worked with a professional community development corporation or other type of outside consultant to address a community concern, problem, or interest?

Yes.....1

No.....2

22. What was this project(s)?

23. Please answer the following about each project.

Project	Did villagers participate?	If yes, what role did they play?				Was project completed?
		Planning	Management	Evaluation	Labor	
	Y N	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N	Y N
	Y N	Y N	Y N	Y N	Y N	Y N

24. Has your village participated in an island-wide projects designed to improve services or conditions on the island?

Yes.....1

No.....2

25. If Yes, please explain what this project or projects were for.

26. Has your village sought advice from other villages on the island to learn about any development/village improvement projects they were involved in?

Yes.....1

No.....2

27. Has your village sought out individuals or groups off the island to invest in the community (e.g., open businesses, provide funding for projects)?

Yes.....1

No.....2

28. Has your village sought outside assistance for skills training?

Yes.....1

No.....2

29. Has your village sought outside assistance for technical training?

Yes.....1

No.....2

30. Overall, would you say that efforts involving outside parties have been beneficial to your village?

Yes.....1

No.....2

31. Do you believe that the involvement of individuals and organizations off the island is essential for the development of the island?

Yes.....1

No.....2

32. Has outside assistance harmed or threatened the well-being of the residents of Carriacou?

Yes.....1

No.....2

33. Do you believe that residents in your village have any influence on government decisions made regarding planning decisions that affect your village?

Yes.....1

No.....2

34. In the past 5 years, have the people within your village come together to oppose any change?

Yes.....1

No.....2

35. Was the opposition successful?

Yes.....1

No.....2