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Playing in the Sandbox: Using Mixed Methods and Social Network to Examine Interorganizational Relationships Between Nonprofit Housing Organizations in the Richmond Metropolitan Area

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PLAYING IN THE SANDBOX: USING MIXED METHODS AND SOCIAL NETWORK ANALYSIS TO EXAMINE INTERORGANIZATIONAL RELATIONSHIPS BETWEEN NONPROFIT HOUSING ORGANIZATIONS IN THE RICHMOND METROPOLITAN AREA

A dissertation submitted in partial fulfillment of requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

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First, I would like to give thanks and honor God; I can do all things through him who strengthens me-Philippians 4:13

They say it "takes a village to raise a child" without my "village" this would not have possible.

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ABSTRACT

Nonprofit housing organizations primarily exist to address the housing needs of low-income residents, whose housing needs are not sufficiently met by the public or private housing market. NHOs are very similar to private corporations in their size, productivity and commitment to the "bottom line." However, unlike private firms, NHOs are "mission driven" instead profit-driven corporations. The development of affordable housing in the nonprofit housing sector requires a myriad of financial and non-financial resources. As competition for financial resources intensifies many organizations are adopting strategies as a means to not only reduce organizational uncertainty and sustain them, but also increase or maintain organizational capacity. The evolution of the role of nonprofit organizations coupled with market pressures such as attracting investment, competing for clients, and retaining and hiring skilled employees shapes the need for them to adopt market culture strategies (Salamon, 1999). A key strategy of market culture is collaboration (Frost and Sullivan, 2006). This dissertation study was designed to examine interorganizational relationships between nonprofit housing organizations in the

Richmond Metropolitan area, and the influence of organizational characteristics, environmental conditions, and resource availability on an organization's Level of Collaboration. Furthermore, the study examined the attitudes and perceptions of executive directors of collaboration. The primary research question is: *Do nonprofit housing organizations display identifiable patterns of relationships with each other?*

This study contributes several important findings to furthering the understanding of collaboration within the nonprofit sector, and the relationship between organizational characteristics, environmental conditions, and resource availability and an organization's Level of Collaboration (interorganizational relationships). Study findings convey that the examination of the network itself using social network analysis is a useful tool for examining relationships and identifying opportunities for collaboration. For this network it revealed that the organizations interact on an informal basis as well as identified the prominent actors are in the network. The findings of this study suggests that there are two key factors that influence nonprofit organizations participation in establishing relationships interorganizational learning and personal characteristics.

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CHAPTER ONE: INTRODUCTION AND STUDY OVERVIEW

Housing is and can be the basic building block for a range of related benefits-personal health and safety, employment opportunities, a decent education and security of tenure (Hartman, Bratt, & Stone, 2006). Housing affordability has become a growing concern for those whose rent and mortgage payment leaves too little income for other necessities. According to the U.S Department of Housing and Urban Development (2012) a housing unit is typically defined as affordable when its costs (rent or mortgage payments including utilities) is no more than thirty-percent of the household income (U.S. Department of Housing and Urban Development,). Households that spend thirty-percent or more on housing costs are considered to have a housing cost burden. In 2000 , slightly more than one third (36%) of renters and slightly less than a quarter (19%) of owners in the Richmond metropolitan area carried a housing cost burden they could not afford under this definition . In 2007, slightly less than two-quarters (42.8%) of renters and a third (33%) of owners in the Richmond metropolitan area carried a housing cost burden (U.S. Census Bureau, 2007). Data has shown that there has been an increase in the housing cost burden for both renters and owners, with the largest increase occurring among owners (14%), twice the increase among renters (6.8%) (U.S. Census Bureau, 2007). The increase in housing costs is not unique to renters and owners; it has also affected nonprofit housing organizations.

The undertaking of developing affordable housing has overwhelmingly occurred in the nonprofit housing sector. Community Development Corporations (CDCs) are credited with having produced or rehabilitated over 1.2 million units of housing (Walker, 1993)and in, general, nonprofits have been responsible for a significant percentage of the low to moderate income housing that has been developed over the past two decades (Bratt, 2005).

Escalating costs coupled with a decline in financial resources has resulted in increased competition between nonprofit housing organizations for very few dollars to develop and rehabilitate affordable housing. In the nonprofit sector, environmental uncertainty about survival is fueled by concern of stable funding sources while facing an increase in demand for services. As competition for scarce financial resources intensifies many organizations are adopting strategies to not only sustain themselves, but to also increase or maintain organizational capacity as a means to reduce organizational uncertainty.

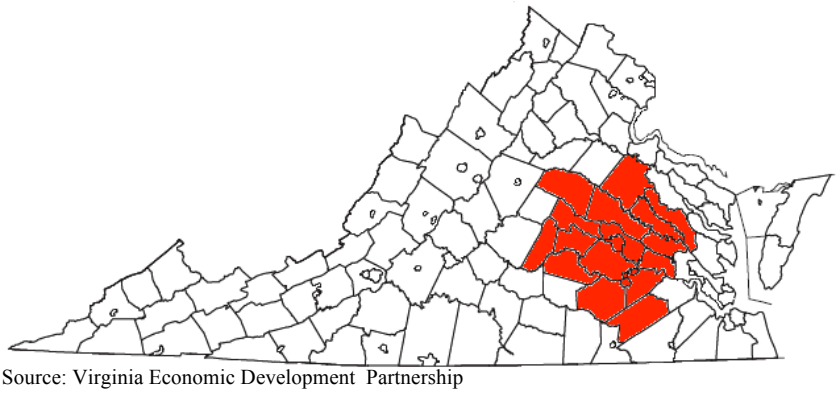
The evolution of the role of nonprofit organizations coupled with market pressures such as attracting funding and investment, competing for clients and retaining and hiring skilled employees shapes the need for them to adopt market culture strategies (Salamon, 1999). A key strategy of market culture is collaboration. The current business literature exploring collaboration reveals that it is a key driver of overall performance of companies around the world. Its impact is twice as significant as a company's aggressiveness in pursuing new market opportunities (strategic orientation) and five times as significant as the external environment (market turbulence) (Frost and Sullivan, 2006).

This dissertation study was designed to examine the influence of organizational characteristics, environmental conditions, and resource availability on an organization's Level of Collaboration, as measured by the degree centrality measure. Furthermore, the study examined the attitudes and perception of executive directors of collaboration.

This chapter will review (1) the study area, (2) the issue of affordable housing in the Richmond Metropolitan area, (3) scope and significance of this study, (4) research questions and hypotheses, and (5) study overview.

Study Area

The study area consists of localities (three counties and four cities) that are part of the Richmond metropolitan statistical area (MSA) that share coterminous geographical boundaries. For the purpose of the study, this area will be considered the Greater Richmond metropolitan area (Henrico County, City of Richmond, Chesterfield County, City of Hopewell, City of Colonial Heights, and the City of Petersburg). The Richmond MSA is located in the center of eastern Virginia. The sixteen county and four city area encompasses nearly 5,717 square miles. The Richmond MSA is an intersection of major modes of transportation: rail lines radiate in all directions from Richmond, and Interstates 64, 85, and 95 converge in the metropolitan area (Virginia Economic Development Partnership, 2012). A review of the Virginia Department of Housing Authority Housing guide reveals that community development corporations provide housing services and operate programs, as well as develop affordable housing in the Richmond MSA's cities and counties.



Source: Virginia Economic Development Partnership

The 2012 median annual income is $73,900. Slightly more than twelve percent of children under the age of 18 live below the poverty level reside in the study area; thirty-five percent reside in single female-headed households. As of September 2012, the unemployment rate was 6.0 percent, which is slightly higher than the state's 5.6 percent (Virginia Economic

Development Partnership, 2012). Over 77 percent of unemployed residents have a high school diploma or obtained a GED, or attended at least two years of college.

Affordable Housing

According to the U.S Department of Housing and Urban Development a housing unit is typically defined as affordable when its costs (rent or mortgage payments including utilities) are no more than thirty-percent of an individual's household income (U.S. Department of Housing and Urban Development,). Households that spend thirty-percent or more on housing costs are considered to have a housing cost burden. In 2000 , slightly more than one third (36%) of renters and slightly less than a quarter (19%) of owners in the Richmond metropolitan area carried a housing cost burden they could not afford under this definition . The issue at hand is two-fold, housing cost and the lack in available affordable housing. In 2007, slightly less than two-quarters (42.8%) of renters and a third (33%) of owners in the Richmond metropolitan area carried housing burden. Data has shown there has been an increase in housing cost burden for both renters and owners, with the largest increase occurring among owners (14%), twice the increase among renters (6.8%) (U.S. Census Bureau, 2007) .

There are approximately 255,651 households, of which 26 percent are renter-occupied; the cities of Hopewell and Petersburg have the highest renter-occupied households at 50% and 28%, respectively. According to the American Community Survey (2009) 56.4 percent of renters in the study area are under the age of 35, 27.2 percent are between the age of thirty-five to fifty-four, 15 percent are between the age fifty-five to seventy-four, and 25.5 percent are seventy-five and over (U.S. Census Bureau, 2009). The fair market rent is $786 for a studio apartment, $826 for a one-bedroom apartment, $979 for a two-bedroom apartment, $1287 for a three bedroom apartment, and $1560 for a four-bedroom. According to the National Low Income Housing

Coalition's Out of Reach report for the Richmond metropolitan area, annual income or hourly wage needed to afford fair market rents by apartment size are as follow, $31,440 or $15.21 for a studio, $33,040 or $16.48 for a one bedroom, $39,160 or $18.42 for a two-bedroom, $51,480 or $24.58 for a three-bedroom and $62,400 or $29.35 for a four-bedroom (National Low Income Housing Coalition, 2012).

According to the Virginia Housing Development Authority (2009), the current housing stock is not adequate to meet emerging population needs. Each stage of life requires a need for a different type of housing unit in terms of size, cost, and location. As the population continues to changes, so does the need for a different type of housing. Existing apartments and homes that are being vacated by baby boomers that have "traded up" to new homes that are larger and more costly. The new stock of homes primarily serves the needs of Richmond metropolitan area residents that are between the ages of thirty-five to fifty-four. As residents under the age of thirty-five began to form independent households, the existing housing stock consists of either older or newer larger built homes. The current surplus of homes is mismatch with future housing needs. The issue at hand is not only the availability of affordable housing. The undertaking of developing affordable housing has overwhelmingly occurred in the nonprofit housing sector. Community Development Corporations (CDCs) are credited with having produced or rehabilitated over 1.2 million units of housing (Walker, 1993) and in general, nonprofits have been responsible for a significant percentage of the low to moderate income housing that has been developed over the past two decades (Bratt, 2005).

Scope and Significance of Study

This study was designed to examine interorganizational relationship between nonprofit housing organizations (NHOs) in the Richmond Metropolitan area. Since the 1960's, nonprofit

organizations (NPOs) have become increasingly responsible for the implementation of affordable housing policy in the United States (Alexander, 2000; Salamon, 1999; Silverman, 2008). Nonprofit housing organizations primarily exist to address the housing needs of low-income residents, whose housing needs are not sufficiently met by the public or private housing market. NHOs are very similar to private corporations in their size, productivity and commitment to the "bottom line." However, unlike private firms, NHOs are "mission driven" instead profit-driven corporations. The development of affordable housing in the nonprofit housing sector requires a myriad of financial and non-financial resources. As competition for financial resources intensifies many organizations are adopting strategies as a means to not only reduce organizational uncertainty and sustain them, but also increase or maintain organizational capacity. The evolution of the role of nonprofit organizations coupled with market pressures such as attracting investment, competing for clients, and retaining and hiring skilled employees shapes the need for them to adopt market culture strategies (Salamon, 1999). A key strategy of market culture is collaboration.

The current business literature exploring collaboration reveals that it is a key driver of overall performance of companies around the world. Its impact is twice as significant as a company's aggressiveness in pursuing new market opportunities (strategic orientation) and five times as significant as the external environment (market turbulence) (Frost and Sullivan, 2006). . A great deal of research has primarily been done on collaboration in the private sector, which has helped inform nonprofit studies, but does not account for the uniqueness of the nonprofit sector. The nonprofit sector is hybrid of the private and government sector. They are required to have the management discipline of the private sector and the commitment of local government. (Koebel and Hardin, 1999). Nonprofit organization administrators or executives are embedded in

an elaborate network of social relations both within and across organizations. Whether they are viewed as benefits or obstacles, these networks influence their choices and strategies. Network strategies offer a powerful set of tools to manage tasks and challenges faced by nonprofit. There have been few reported attempts to use these tools to assist communities in building their networks (Eisenberg & Swanson, 1996; Provan, Isett, & Milward, 2004). By using the network analysis approach, managers can see exactly where their organizations fits within the structure of the organizational environment, not just based on their own perception, but also on the perception of other organizations in their network (Provan, Veazie, Staten, & Teufel-Shone, 2005). Network analysis can reveal new information that is often contradictory to intuitive perception of nonprofit leaders and managers (Cross, Laseter, Parker, & Velasquez, 2006).

Research Questions

The following key research questions guided this study in examining the interorganizational relationships in the network, and the relationship between organizational characteristics, environmental conditions, and resource availability on an organization's level of interaction, as measured by the Level of Collaboration Scale. Furthermore, the study examined the attitudes and perceptions of executive directors of collaboration

The primary research question that was addressed is:

> Do nonprofit housing organizations display identifiable patterns of relationships with each other?

In order to answer this research question, this study proposed the following sub-questions.

Social Network Analysis

- What is the overall connectedness among nonprofit housing organizations?

Quantitative

- What organizational characteristics (age, size, and gender diversity) influence the Level of Collaboration?

- What environmental conditions (housing conditions, advocacy efforts, and problems with funding) influence the Level of Collaboration?
- What resources availability (construction and project management capacity, and diversity in funding) characteristics influence the Level of Collaboration?
- To what extent do actual types of interaction correlate with perceived levels of interaction?

Qualitative

- What are the attitudes and perceptions of collaboration held by nonprofit housing leaders in the Richmond Metropolitan area?

Hypotheses

Connections

H1. More established organizations as measured by key organizational characteristics (age, financial diversity, and more in-house resources) would be more connected in the network than less established organizations.

H2. Organizations with females in leadership positions (executive directors and board members) will have more formal connections than those with men in leadership positions organizations.

H3. Organizations with less in-house resources will have a higher closeness centrality.

Organizational Characteristics

H4. Age will have a greater influence on the Level of Interaction than environmental conditions and resource availability

H5. Size will have a greater influence on the Level of Collaboration that environmental conditions and resource availability

H6. Gender diversity will have a greater influence on the Level of Collaboration than environmental conditions and resource availability

Environmental Conditions

H7. Housing conditions will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

H8. Advocacy efforts will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

H9. Problems with funding will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability.

Resource Capacity

H10. Diversity in funding will have a greater influence on the Level of Collaboration than organizational characteristic and environmental conditions

H11. Construction Management will have a greater influence on the Level of Collaboration than organizational characteristics and environmental conditions

H12. Project management will have a greater influence on the Level of Collaboration than organizational characteristics

Interorganizational Relationships

H13. There is a difference between an organization's perceived level of Collaboration, as measured by the Collaboration Scale and actual types of interaction as measured by question 18.

Study Outline

This dissertation study divided into five chapters. Chapter 1 includes the Introduction and Study Overview. The Introduction presents the scope and significance of the dissertation study, the research questions and hypotheses. Chapter 2 presents a review of literature relevant to the theoretical and conceptual frameworks that informed this study within the larger context of organization and management theory and network theory, along with nonprofit studies. Chapter 3 presents the research methodology and procedures employed for data collection and analysis. Chapter 4 presents the data analysis results. The final chapter, Chapter 5, presents the conclusion, discusses and summarizes the dissertation study and its findings, and proposes policy implications and direction for future research studies.

CHAPTER TWO: LITERATURE REVIEW

Purpose Statement

This purpose of this literature review is to provide the theoretical and conceptual frameworks that informed this study within the larger context of organization and management theory and network theory, along with nonprofit studies. In order to do so, it was important to identify theories and concepts that provided insights into various components of interorganizational relationships (IORs) and collaboration, the models that were developed from those theories and concepts, and the empirical literature that tested these models. This review will contribute to an understanding of nonprofit interorganizational relationships.

The study of relationships between organizations has been well documented in both the private and public sectors. Studies began to materialize in the 1960's as organizational scholars became interested in understanding relationships between social service organizations. These studies provided the foundation for what is now known as interorganizational relationships (IORs). The term interorganizational relationships refers to arrangements between organizations, often referred to as collaborations, in which partners work together to achieve common goals without significant integration, lost autonomy or changes in governance (Bailey, 1996). Common examples of interorganizational relationships include collaboration, coalitions, networks, and alliances.

Organization and Management Literature

Much is written about interorganizational relationships (IORs) in general (Barringer & Harrison, 2000). The existing body of research has examined for-profit, nonprofit, and cross sector IORs. IORs are comprised of long and short-term linkages among pairs or multiple organizations (Lewis, Isbell, & Koschmann, 2010) . The existing body of interorganizational literature is fragmented. This is due to the mixture of motives and intentions in the establishment

of interorganizational relationships (Barringer & Harrison, 2000). This literature review draws heavily from Barringer and Harrison's (2000) review of literature on interorganizational relationships because it offers a detailed review of six theoretical paradigms that motivate organizations to establish interorganizational relationships: resource dependency theory, transaction cost economics, strategic choice, stakeholder theory, learning theory, and institutional theory.

This review also incorporates Oliver's (1990) review of the literature on interorganizational relations because it is a comprehensive review incorporating public, nonprofit and for-profit organizations. Oliver (1990) focuses on six critical contingencies that motivate organizations to form relationships with other organizations: necessity, asymmetry, reciprocity, efficiency, stability and legitimacy. The contingencies under which relationships are established occur in general, but also include factors that are both environmental and interorganizational in nature (Oliver, 1990).

Motivation for the Formation of Interorganizational Relationships

The conditions under which interorganizational relationships are established fall along a conceptual continuum of economic rationale to a reliance behavioral rationale (Barringer & Harrison, 2000). While each of the six theoretical perspectives provide an explanation for the formation of relationships between organizations, only resource dependency theory and transaction cost theory have received the most attention examining the establishment of interorganizational relationships in the nonprofit sector (Guo & Acar, 2005; Salancik & Pfeffer, 1978). This may be attributed to the uniqueness of nonprofit organizations; they face substantially different market mechanisms, history, culture, and institutional pressures than the for-profit and public sectors (Bailey, 1996; Galaskiewicz, 1985). Despite their explanatory

power, these theoretical perspectives have been criticized for their insufficient attention to the constraint on strategic choice that are embedded in an organization's institutional environment (Baum,1996; Galaskiewicz, 1985; Oliver, 1990), its structural context (Baum, 1996; Galaskiewicz, 1985), as well as other contextual and organizational process factors (Cigler, 1999). Such oversight has become even more problematic in the nonprofit sector because a considerable number of interorganizational relationships are mandated through law and regulations, primarily for funding (Bailey, 2000; Foster, 2002; Galaskiewicz, 1985; Galaskiewicz, 1985).

Recent studies have attempted to improve upon the existing body of interorganizational literature by examining why nonprofit organizations establish relationships with other nonprofit organizations (Foster & Meinhard, 2002). In their study of nonprofit organizations in Canada, Foster and Meinhard (2002) found that organizational characteristics (Blau, 1991), environmental context (Blau, 1991), and attitudinal characteristics were important factors in the motivation of organizations in establishing collaborative relationships. Guo and Acar (2005) combined resource dependency theory, institutional, and network theories to examine factors that influence the likelihood that nonprofit organizations develop formal and informal types of collaborative relationships. Their findings suggest that an organization is more likely to increase the degree of formality of its collaborative activities when its older, has a large budget size, receives government funding, has more board linkages with other nonprofits, and is not operating in the education and research or social services industry. This literature review incorporates these additional factors because they provide additional insight into the establishment of interorganizational relationships between nonprofit organizations.

Resource dependency

Resource dependency theory is often used in IOR scholarship and takes a decidedly rational approach (Salancik & Pfeffer, 1978) . The basic principle of the resource dependence theory is that organizations operate in uncertain environments, over which they must attempt to gain control. One of the strategies employed is acquiring and maintaining resources (Salancik & Pfeffer, 1978) . Acquiring resources requires an organization to establish a relationship with other entities. Resources needed delimit the range of potential partners and service demands of the organization. Pennings (1981) distinguished among three types of interdependences: horizontal, symbiotic, and vertical. Firms that are horizontally interdependent compete with each other in obtaining resources and disposing of similar goods and services. Firms that are symbiotically interdependent complement each other in that they render services to one another, but clearly do not control the resources the other needs. Firms that are vertically interdependent are viable transactional partners to which organizations could turn to alleviate their dependency problems (Pennings, 1981).

The primary focus for an organization is to minimize their dependency on other organizations, while preserving their autonomy, but also recognizing that these relationships are necessary in acquiring resources (Gray, 1989). To manage resource dependency, theorists argue that organizations must do the following: (1) acquire control over critical resources in an effort to decrease dependencies on other organizations, and (2) acquire control over resources that increase the dependence of other organizations on them (Barringer & Harrison, 2000). This is particularly important given the uncertain environment in which nonprofit organizations operate.

At any point in time organizations operate in uncertain environment, some would argue that organizations in the public and nonprofit sectors potentially experience an even greater

amount of uncertainty than the for profit sectors. This turbulence is often attributed to a constant shift in funding priorities, problems in the coordination of services, the need to comply with complex local, state, and federal regulations, and the transfer of public programs to the nonprofit sector (Blau, 1991; Bozeman & Loveless, 1987; Galaskiewicz, 1985). Some organizations often establish interorganizational relationships with other organizations to gain access to resources. These IORs are often established to meet necessary funding, legal or regulatory requirements. In such an environment, this type of relationship offers opportunities for the establishment of relationships to support one another by leveraging, combining, and capitalizing on their complementary strengths and capabilities (Alter & Hage, 1993). Because of these outcomes, public and private funding agencies are increasingly mandate interorganizational relationships as a condition of funding. In situations in which interorganizational relationships are mandated there are potential repercussions of noncompliance such as loss of financial resources or expulsion from the field (Oliver, 1990). For most organizations that operate in a community where there is a chronic and unstable shortage of resources, both competition and creative searches for new sources are triggered (Selsky, 1991). A great deal of an organization's influence and ability to gain resources come through its interactions with others and other entities. Acquiring and maintaining adequate resources requires an organization to interact with individuals and groups that control resources. Interorganizational relationships help acquire critical resources and reduce uncertainty in the nonprofit sector (Guo & Acar, 2005).

Transaction Cost Theory

The impetus for the establishment of the relationships in transaction cost theory comes primarily from management and cost concerns internal to the organization. It is an attempt to mediate transaction costs that occur as the result of an organization's interaction with the market to access necessary resources (Oliver 1990). The initial introduction of interorganizational literature in non-market settings has primarily left considerations of internal efficiency underdeveloped in the literature and has failed to consolidate efficiency considerations with more developed theoretical considerations such as necessity, power, or reciprocity (Oliver, 1990). This is most likely due to transaction cost theory being restricted to the efficiency and cost-minimizing rationale. They do not take into consideration that interorganizational relationships, particularly those that are established due to social networks is a means of reducing transactions costs. Granovetter (1985) argues that organizational decision makers use their social networks to overcome uncertainty and distrust that plagues market exchange. Entering the market place and incurring costs of verifying the credibility of prospective partners and establish a business relationship with firms and people that are familiar and they trust and hope that the savings in transaction costs will offset the higher price that one may pay for goods and services (Granovetter, 1985).

Strategic Choice

The strategic choice perspective is very broad (Barringer & Harrison, 2000) . The effects of relationships are strategic when they enable organizations to secure resources that cannot be developed internally (Powell, Koput, & Smith-Doerr, 1996). Individual organizations make strategic choices to form or become part of a cooperative network of organizations when it appears that the advantages to such as arrangement enhances their survival capacity. This often

occurs in situations where survival outweighs the costs of maintaining the relationship, thereby reducing the potential loss of autonomy. Another factor that appears to influence an organization's decision about establishing a relationship is their perception and the relative benefits and drawbacks of those relationships (Alter & Hage, 1993; Goodman, 1998). Several aspects of partner relationships are likely to influence the extent which partnerships achieve high levels of synergy. Many researchers have acknowledged the importance of trust in building interorganizational relationships. Trust has been cited frequently in interorganizational literature as a factor that will make or break a relationship. In addition, organizational characteristics, such as leadership, administration and management, governance and efficiency are also cited as important factors that can influence a strategic choice in selecting a potential partner.

There are two problems identified in the literature regarding strategic choice in the nonprofit sector. First, researchers have not paid enough attention to environmental constraints on strategic choice. Secondly, the influence of an administrator's or executives networks of social relations both on intraorganizational and interorganizational relationships. Fluctuation in the resource environment could affect the options available to an organization's decision makers. As the resource environment becomes richer or leaner, more or less stable, more homogenous or heterogeneous, or more concentrated or dispersed, the options available to organizations change accordingly (Aldrich, 1978). Whether, administrators or executives view their social relations as a benefit or obstacle, their social networks will influence their strategic choices.

Stakeholder Theory

The stakeholder management rationale for the establishment of relationships is centered of a network of stakeholder (Barringer & Harrison, 2000). Stakeholder theory requires organizations to give simultaneous attention to the legitimate interests of all relevant stakeholders in the important operations and strategic decisions that it makes (Donaldson & Preston, 1995) . Known as the "Father of Stakeholder Theory" Freeman (1984) believed that existing management theories were not equipped to address changes occurring in the business environment. He cautioned that managers needed to take into account all of the groups and individuals that have a vested interest and are affected by a business enterprise (Freeman, 1984). Essentially, stakeholder theory implies the need for organizations to be sensitive and responsive to stakeholder interests (LeRoux, 2009).

Nonprofit organizations are challenged to fulfill the demands of different stakeholders groups such as their board, their funders, their competitors, and their clients. Given that nonprofits do not have stakeholders who will make a profit from the organization's activities, stakeholder theory has been scarcely applied to nonprofit organizations and only in a descriptive sense (Abzug & Webb, 1999). The lack of scholarly attention to how nonprofits manage their stakeholders can be attributed to their shareholders (board members) not holding a personal financial interest in the organization (LeRoux, 2009). Rowley and Moldoveanu (2003) proposed that a group of stakeholders are is more likely to mobilize or be part of a collective if it has (a) acted collectively in the past, (b) a more internal network density (i.e. group members communicate effectively), (c) members who value the common identity conferred through their association with the group, and (d) few members who belong to overlapping groups with conflicting interests. Furthermore, Butterfield, Reed and Lemak (2004) argues that

[organizations] that also find goal commonality, share economic interests, a common threat or enemy, a share vision, and common legal concerns or mandates all motivate stakeholder groups to come together and collaborate. Freeman (1984) suggests that role of management is to balance the interests of all stakeholders over time.

Learning Theory

The term interorganizational learning is found through the literature and refers to learning in the context of a group of organizations that are proactively cooperating (Croom & Batchelor, 1997; Larsson, Bengtsson, Henriksson, & Sparks, 1998). The learning explanation for the establishment of interorganizational relationships is well-developed and conceptually strong. Interorganizational relationships can be a particularly effective means of transferring knowledge across firms (Barringer & Harrison, 2000). Organizational learning has been found to enhance survival and the effectiveness of acquisitions, diversifications, and foreign entries; to increase customer orientations, and to facilitate innovation (Barkema, Shenkar, Vermeulen, & Bell, 1997). Organizational learning can occur through vicariously learning and interacting with other firms through alliance and joint ventures (Bapuji & Crossan, 2004). Vicarious learning is learning from the experience of other firms. These interorganizational relationships offer a much higher and more relevant learning opportunity because of the types of interaction that occurs in these relationships. Organizations are more likely to learn from organizations that are similar in knowledge base and organizational structure. Firms often take learning prospects into consideration when selecting potential organizations to create and maintain interorganizational relationships.

Institutional Theory/Environmental Context

Galaskiewicz and Shatin (1981) found that greater environmental uncertainty prompted executives to seek out interorganizational relationships with other executives that had similar backgrounds to their own. Environmental uncertainty often occurs as the result of scarce resources, imperfect knowledge about the changes in the environment, or uncertainty about exchange partners (Oliver, 1990). In more turbulent environments, the establishment of relationships is more likely to take place between organizations whose leaders had similar racial and educational backgrounds to theirs (Galaskiewicz & Shatin, 1981b). In more placid environments, the race and education of organizations leaders had no effect on cooperation. Research has found that organizational decision-makers were willing to forfeit the opportunity of getting the "best deal" on the resources they needed in exchange for the increased security derived from working with organizational leaders who were similar, thereby considered to be more trustworthy. Stable relationships with other organizations create regularities that help an organization to manage uncertainty in a turbulent market. These relationships as they are developed form patterns that develop into structures that shape current and future interactions (Gulati, 1995). These relationships are with outside entities that are suppliers, competitors, creditors, governmental agencies, or any other relevant entity in an [organization's] environment (Barringer and Harrison, 2000). Recent research studies on the environment context surrounding nonprofit organizations suggests that nonprofit organizations are facing increasing levels of uncertainty because of the availability of funding for operation and capital projects is shrinking (Smith, 2002).

Due to the trend of nonprofitization, nonprofits are experiencing greater demand for services, more competition from other nonprofits, and for-profits for financial resources (Stone,

2000). These factors increase environmental uncertainty for organizations (Galaskiewicz, Wasserman, Rauschenbach, Bielefeld, & Mullaney, 1985). As local, state, and federal governments continue to depend upon nonprofits to address social problems it is likely that uncertainty facing the sector will continue and possibly increase over time. During the 1980s, there was a transfer of public programs to the nonprofit sector (Blau & Rabrenovic, 1991). This transfer resulted in uncertainties that stemmed from a growing dependence on external funding, problems involved in the coordination of services and the need to comply with complex government regulations. This resulted in the need of nonprofit organizations to begin to manage their environmental uncertainties. Management of environmental uncertainty is an important concept because it provides an explanation for the establishment of interorganizational relationships between organizations. Particularly, among nonprofit organizations because they face common environmental uncertainties. Proponents of the network theory argue that the most significant aspect of an organization's environment is the set of other organizations it interacts with and the pattern of the interactions (Wasserman & Faust, 1994)

Organizational Legitimacy

DiMaggio and Powell (1983) suggest that the desire for legitimacy often overrides many other institutional incentives (i.e. efficiency) and accounts for the reasons many organizations take on similar and seemingly irrational forms (Dimaggio & Powell, 1983). One of the ways in which an organization can display its legitimacy is through partnering with other organizations that are more established or prominent. Their ability to form a relationship with an established or more prominent organization signals a level of acceptance within a community. It also signals competency of the organization within their service area, because a respected service provider sees them as a valuable partner. The literature exploring legitimacy or social status emphasizes

the importance of the nonmaterial aspects of organizations that may encourage the establishment of interorganizational relationships that might otherwise seem unlikely. Legitimacy is important to organizations for several reasons including the need to establish a reputation within a community to attract financial and nonfinancial resources as well as clients (Galaskiewicz & Burt, 1991). While organizations may establish interorganizational relationships with other organizations primarily for a single reason, it is unlikely that this can be attributed to a single motive. For example, a relatively unknown or new organization in a community may establish a relationship with the local United Way to increase stability in its funding resources and enhance its legitimacy within the community. It is very likely that multiple factors in an organization's environment influence the establishment of interorganizational relationships. This may in turn result in the relationship shifting and changing over time (Schmidt & Kochan, 1977). For example, a nonprofit organization may initially establish a relationship with another nonprofit organizations for reasons of efficiency and stability in order to deliver services to clients and continue the relationships for reasons of reciprocity and or expectations (Smith, 2002).

Organizational Characteristics

Mainstream organization theory maintains that external and internal environments influence an organization's structural and strategic decisions, as well as their internal belief system (Dimaggio & Powell, 1983; Powell et al., 1996). Recent studies have attempted to improve upon the existing body of literature by exploring the reasons nonprofit organizations establish relationships with other nonprofits (Foster & Meinhard, 2002; Guo & Acar, 2005). Foster and Meinhard's (2002) examination of collaboration between nonprofit organizations in Canada expanded the body of literature by incorporating both important organizational characteristics and environmental pressures. As discussed earlier, most research focused on the

external environment as the explanation for collaboration. They found that both attitudinal characteristics of organizational leadership and environmental pressures were important in understanding the collaborative behavior of nonprofit organizations. However, they did not address the importance of the specific characteristics of nonprofit organizations. Organizational characteristics include organization size, governance, managerial systems, the use of volunteers, use of commercial income, and racial diversity of organizational membership. The organizational characteristics of a nonprofit influence their decisions of whom to establish an interorganizational relationship.

Political Environment

The category of tax-exempt 501(c) 3 organizations includes a broad range of charitable nonprofits such as environmental protection organizations, social services providers, food banks, arts and cultural organizations, hospices, education providers, and disaster-relief groups. In a 2007 *Stanford Social Innovation Review* article, "Creating High-Impact Nonprofits," the authors identified a best practice that all successful high-impact nonprofits share: the combination of providing services in their communities and engaging in policy advocacy, including lobbying, at the local, state, or federal level. Who, after all, knows the problems of their communities more intimately and is in the best position to suggest practical solutions than the nonprofit organizations that work in those communities every day? Nonprofits that do not take advantage of their ability to lobby miss an opportunity to advance policies that will improve the lives of their constituents (Grant & Crutchfield, 2007).

In the face of shrinking local, state, and federal government budgets and foundation funding and growing need for services, some nonprofits are adopting more strategic and long-term approaches to meet the needs of their clients. There is a growing awareness and recognition

among public charities that policy work—including lobbying—is entirely consistent with their charitable and educational missions. Without the input of the charities that work on behalf of vulnerable or underserved populations, legislators and regulators will craft policies and budgets that may not reflect the concerns of the people or communities they are supposed to serve. The body of interorganizational literature provides some insight on the problem of mobilization when it found that (a) organizations within political coalitions tended to have interorganizational relations among themselves prior to coalition formation, and (b) the mobilization of individual organizations was often a function of their importance in a resource network (Barringer & Harrison, 2000). As organizations develop and become part of a community they naturally interact with other organizations. Over time, the interactions take on structural characteristics and result in a network.

Nonprofit Sector

The nonprofit sector is a vital and growing component of worldwide economies and governance (Lewis et al., 2010). Nonprofits refer to a group of organizations that are defined by the Internal Revenue Services as "501(c) (3)" (Hoyt, 2001). There are 1.6 million registered nonprofit organizations in the United States (Independent Sector, 2011). These organizations usually serve some collective purpose within a community and range from large hospitals to small traditional charities (i.e. soup kitchens run by local churches) (Dimaggio & Powell, 1983). These organizations do not exist in a vacuum; they are members of larger body of organizations. They are linked to the private sector, local and state government, and other nonprofit organizations through a complex network of relationships (Laumann, Galaskiewicz, & Marsden, 1978) . These linkages are often used to integrate programs within a community, coordinate client services, and obtain resources (Blau & Rabrenovic, 1991) . However, there has been a shift

in the role of nonprofit sector over the last twenty years. Smith (2002) identified five changes to the nonprofit sector. The first major change is the shift in societal expectations for services which has expanded in scope and diversity due to social movements. The second major change is the increase in demand for services, resulting in policy and funding changes to address needs. This change in expectations has blurred distinctions between social services and other services. The third and major shift is in policy and management attitudes. The fourth and final shift has been the expansion of contracting out traditional governmental functions to nonprofit organizations, which has resulted in the restructuring of external and internal management of nonprofit organizations (Smith, 2002).

Nonprofits face stresses that are not only related to environmental uncertainty about the demand for services but also uncertainty of the political environment. Uncertainty is caused by rapid changes in government policies, which can drastically change what is required in order to receive government contracts and funding. These changes often impact service delivery. Establishing an interorganizational relationship enables an organization to exchange information through linkages and commonalities among them (Gray, 1989; Levinson & Asahi, 1995). It is common for organizations to form alliances with other organizations, exchange directors and enter into a wide range of collaborative activities (Baker & Faulkner, 2004).

Although organizations may differ in size, purpose and mission, they contribute to the overall functioning of a community. Organizations may serve in a variety of roles, such as, but not limited to, supplier of goods and services, linkages to resources and opportunities, brokers of external resources, developers of human capital, creators and reinforces of community identity, and advocates for power and resource distribution. Community development requires the

participation of multiple organizations that can serve in the above roles because it is almost impossible for one organization to independently address the needs of the community.

While this research study focused on examining relationships between nonprofit housing organizations, special emphasis has been placed on community development corporations (CDCs). An emphasis was on CDCs because from 1960 to 1990, CDCs accounted for the production of one out of seven houses constructed with federal funds by building 736,000 housing units. Since 1990, CDCs have increased their housing production by an average of 30,000 to 40,000 units annually (Cowan, Rohe, & Baku, 1999) . They are citizen-driven nonprofit organizations that revitalize neighborhoods through public and private investment. Most CDCs address local housing concerns through the development of affordable housing and rehabilitation of affordable housing. Local and state governments often entrust CDCs to utilize federal grant allocations to address neighborhood level housing problems. The primary source of federal funds available to CDCs is from the U.S. Department of Housing and Urban Development (HUD) in the form of Home Investment Partnership grants (HOME) and Community Development Block Grants (CDBG). More that 85 percent of CDCs are engaged in housing development projects (Pollard & Stanley, 2007) .

Nonprofitization

Since the 1960's, nonprofit organizations (NPOs) have become increasingly responsible for the implementation of affordable housing policy in the United States (Alexander, 2000; Salamon, 1999; Silverman, 2008). Scholars have referred to this process as the *nonprofitization* (Swanstrom, 1999) and *devolution* (Bockmeyer, 2003) of affordable housing policies in the United States. As the role of federal, state, and local governments has decreased in the housing arena, the role of the NPOs increased. Nonprofit organizations are central to the delivery of

affordable housing in the United States, most commonly referred to as community development corporations (CDCs). Religious and nonprofit organizations working with the homeless, elderly, disabled, and low income persons and families have assumed leadership roles in the production and management of [affordable housing] (Keyes, 1996). The importance of the role of nonprofit organizations is reflected in affordable housing legislation and regulations[1] designed to support their work. Nonprofit organizations have evolved from providing supportive social services to rehabilitating, developing and managing affordable housing. This evolution has occurred at the same time an increase in environmental uncertainty, such as escalating costs, a decrease in government and nongovernment financial resources, as well as an increase in demand and competition from an increasing number of other nonprofit and for-profit organizations (Eikenberry, 2004).

The evolution of the role of nonprofit organizations coupled with market pressures such as attracting investment, competing for clients, and retaining and hiring skilled employees has shaped the need for them to adopt market culture strategies (Salamon, 1999). A key strategy of market culture is collaboration. The current business literature exploring collaboration reveals that it is a key driver of overall performance of companies around the world. Its impact is twice as significant as a company's aggressiveness in pursuing new market opportunities (strategic orientation) and five times as significant as the external environment (market turbulence) (Frost & Sullivan, 2006). Collaboration represents a specific type of interorganizational relationship. Minimally, collaboration is understood to involve the exchange of resources (i.e. people, funding, information, ideas). Frederickson (2008) asserts the growing importance of collaboration reflects the inability of political borders to contain complex social problems. Issues

[1] The HOME program, first enacted in 1990, has a 15% nonprofit set-aside but by 1994 the nonprofit share increased to 25% (U.S. Department of Housing and Urban Development, 1996b).

of poverty, unemployment, homelessness, and environmental protection cut across policy and service (Fredrickson, 2008) delivery areas and resist solutions provided by a single agency or hierarchical approaches (Provan et al., 2005). Only through collaboration activities will human and social capital and financial and non-financial resources be brought together in ways that they will have a meaningful impact (Provan, Nakama, Veazie, Teufel-Shone, & Huddleston, 2003).

Collaboration Framework

The concept of collaboration originates from organization and management theory. Its roots are buried deep in American life and public administration. When placed within the context of an American public ethos, collaboration can be understood as a process that is rooted in two competing political traditions: classic liberalism and civic republicanism (Thomson, 2006). Classis liberalism, with its emphasis on private interest, views collaboration as a process that aggregates private preferences into collective choices through self-interested bargaining. Organizations enter in collaborative agreements to achieve their own goals, negotiate among competing value systems, expectations and self-interested motivations. Civic republicanism, on the other hand, with its emphasis on commitment to something larger than the individual (whether that be the neighborhood or the state) views collaboration as an integrative process that treats differences as the basis for deliberation in order to arrive at "mutual understanding, a collective will, trust and sympathy [and the] implementation of shared preferences (March & Olsen, 2005).

Despite that over the last 30 years there has been a significant growth in the body of literature examining collaboration, including numerous studies conducted in various disciplines and sectors (Gajda, 2004), we still lack a comprehensive theory of collaboration. Collaboration is a hard term to grasp. It has the capacity to empower and connect fragmented systems for the purpose of addressing a variety of social concerns; its definition is elusive, inconsistent and

theoretical. This can be attributed to its overuse. Collaboration "builds the organizational infrastructure of communities through the development of relationships and collaborative partnerships on the organizational level (Gajda, 2004)." It is also used to describe the process of bringing independent organizations together for specific purposes and outcomes while maintaining their own autonomy (Abramson and Rosenthal, 1995 as cited in (Bailey, 2000).

Collaboration can be used as a single strategy or a combination of strategies to establish interorganizational relationships that will strengthen community capacity. Establishing broker organizations to convene participants and supporting network development among existing organizations has been used to create community linkages. In addition, creating mechanisms for communication, planning and implementation among organizations are faced with the challenge of doing more with less. As organizations become more interdependent, it has become increasingly important for them to develop the capacity, or ability to function, in an ever changing social, economic, and political environment.

In order to do so, organizations have found it necessary to establish interorganizational relationships to develop and strengthen their local infrastructure and ability to solve problems (Gajda, 2004). By working together, individual entities can pool scarce resources and minimize the duplication of services in order to achieve a vision that would not otherwise be possible to obtain as separate actors working independently (Gajda, 2004).

Definition

While the value of developing collaborations is recognized throughout the literature, numerous scholars have developed definitions for the term "collaboration". Some examples of collaborative arrangements include joint ventures, consolidations, networks, partnerships, coalitions, collaborative, alliances, associations, conglomerates, councils, task forces, and

groups. Most definitions are centered on the idea that participants work together for mutual benefit that they could not achieve independently. A common definition found throughout the literature is Gray. According to Gray (1989) "collaboration is a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible….the objective of collaboration is to create a rich, more comprehensive appreciation of the problem among the stakeholders than any one of the them could construct alone. In order to develop an operational definition of collaboration for this study a review of definitions of collaboration was conducted.

Through this review three themes were identified. First, collaboration is a process that enables individuals and organizations to combine their human and material resources so they can accomplish objectives they are unable to bring alone (Butterfoss, Goodman, & Wandersman, 1993; Zuckerman, Kaluzny, & Ricketts 3rd, 1995). Second, collaboration is an interorganizational relationship that is negotiated in an ongoing communicative process that relies on neither on market or hierarchical mechanisms of control (Lawrence, Hardy, & Phillips, 2002) . Third, collaboration is the highest level, where the purpose is to accomplish a shared vision and build an interdependent system (Bergstrom et al., 1995). Collaboration can also be informal or formal (Mulford & Rogers, 1982) . These themes coupled with the theoretical frameworks and concepts for motivation for the establishment of IORs, allows one to ascertain that IORS are not only motivated by the external environmental, but also the organizational environment; and that it is a process that occurs in multiple stages. Collaboration may take various levels of interaction. A number of scholars have attempted to identify different types of nonprofit collaborations based on degrees or level of collaboration intensity (Arsenault, 1998; Osborne & Murray, 2000; Zajac, D'Aunno, & Burns, 2011). Murray (1998) argued that the

degree of interdependence between the parties or conversely, the degree of autonomy is the key to understanding the difference in the levels of collaboration. In examining collaboration, this research study has identified seven levels of collaboration and each level varies based on the differences of purpose, structure, and level of interaction.

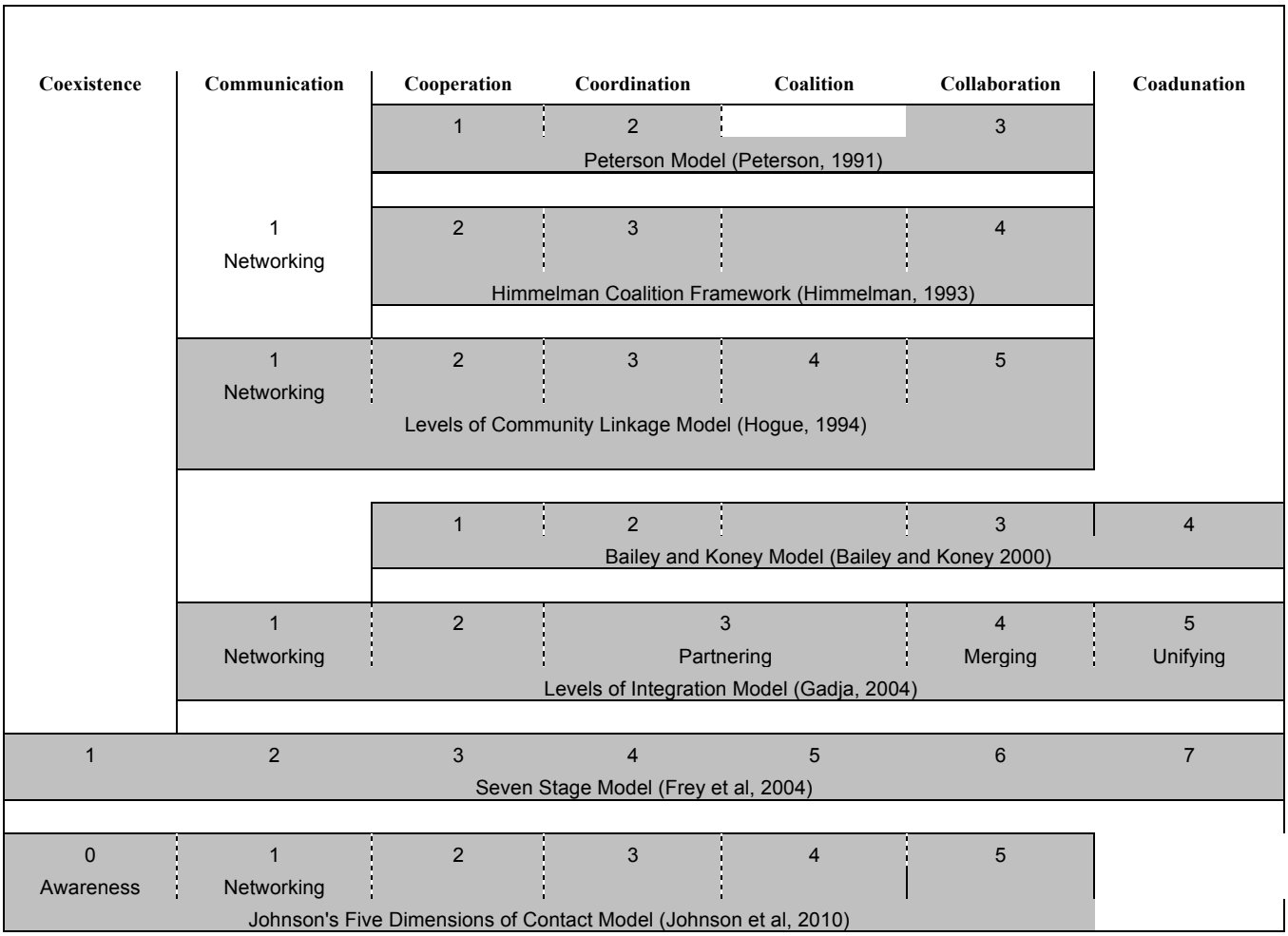
Models and Levels of Collaboration

As the emphasis in organizational theory and research shifted in the 1960's from controlling internal activities to managing external constraints, discussions of resource control became prominent. A key strategy that has been adopted is the establishment of interorganizational relationships. For Gray (1989) collaboration involves interdependence, dealing constructively with differences to arrive at solutions, joint ownership of decisions, and collective responsibility that recognizes collaboration as an emergent process. The strategic management literature strongly supports the notion that there are varying degrees and types of linkages that develop between agencies that seek to work together in some capacity (Gadja, 2004). The most common terms used to describe interorganizational relationships are cooperation, coordination and collaboration. They are often used interchangeably, collaboration is used most often by scholars. Peterson (1991) has proposed that there are three types of interagency relationships: cooperation, coordination, and collaboration. Chrislip and Lawson (1994) distinguished collaboration from the two other forms of relationships, while adding a third relationship: networking (Chrislip & Larson, 1994) . Expanding on these frameworks, Bergstrom et al. (1995) argued that there are actually five different levels of "linkage" that can be identified by examining differences in the purpose of the relationships, the formality of the roles of participating partners, and the process of interaction. The Collaboration Framework (see Table 1), published by the National Network for Collaboration, reflects five levels of

relationships differentiated by purpose, structure, and process (Hogue, 1994).In this model, collaboration is the highest level, where the purpose is to accomplish a shared vision and build an interdependent system and networking is the lowest level, where the purpose is communication (Bergstrom et al., 1995).

Koney and Bailey (2000) describe cooperation as the most basic type of arrangement in which organizations may choose to work with one another. Organizations that chose to cooperate typically share information that will support each organization's activities and services. Coordination is portrayed as a relationship in which independent groups may co-sponsor events and activities. It does not involve the integration of services. Collaboration allows organizations to maintain independence while working together to develop common strategies. Koney and Bailey (2000) argue that the distinguishing features among these concepts is the extent to which organizations work together based on a continuum of processes that move from a minimum (cooperation) to a maximum (coadunation) degree of organizational integration. There seems to be consensus throughout the literature that cooperation and collaboration differ in terms of their depth of interaction, integration, commitment, and complexity, with cooperation falling at the low end of the continuum and collaboration at the high end (Alter & Hage, 1993; Himmelman, 1995; Himmelman, 2001; Mattessich & Monsey, 1992) . According to Himmelman (2001) there are four strategies when working in a coalition, organizations use four basic strategies: networking, cooperation, collaboration, and coordinating.

Figure 1-Models of Collaboration



Adapted from Frey, et al, 2004).

Johnson, et al (2010) expanded on the Himmelman's (2001) coalition framework by including awareness as the lowest level of interaction in their study. Using a modified version of Himmelman's coalition framework, Johnson et al (2010), utilized social network analysis to measure degree (the number of ties incident upon a node -Dejordy, 2011) across five dimensions of connectivity-awareness, networking, coordinating, cooperating, and collaborating. Awareness was added as a baseline measure to assess the name recognition of a nonprofit organization. They defined awareness as having general knowledge of another organization's existence. The definitions remained the same as Himmelman's for networking, coordinating, cooperating and

collaboration Often in research studies it is assumed that organizational actors have complete information on all potential partners that may be available to reduce their uncertainty. This may seem like a trivial point, but ignoring one's options can seriously hinder an organization in its efforts to overcome uncertainty. Numerous studies have shown that organizations do not know about all their prospective partners, will interact with those they are aware of and will avoid the rest (Galaskiewicz & Shatin, 1981a; J. A. Johnson, Honnold, & Stevens, 2010; Van de Ven & Walker, 1984). From these studies we learn that by "awareness" we mean general knowledge of goals, services or resources of other organizations, or personal knowledge of individuals who are associated with the organizations. Awareness of other organizations is important because it enables organizations to have a better understanding when selecting a potential partner.

Reilly (2001) supports the argument that there are differences in relationships by focusing on the degree to which organizations work together, he defines the formality or structure of the relationship as the determining factor that distinguishes the terms from one another (Reilly, 2001). He believes that organizations that coordinate their activities have a modest amount of structure and role differentiation in their joint activities. Most collaboration theorists contend that collaboration falls across a continuum of low to high integration. The level of integration is determined by the intensity of the purpose, structure and process of the relationship. This is consistent with the Hogue model.

Table 1-Level of Collaboration Scale

Level	Purpose	Structure	Process
Awareness **0**	• Knowledge of organization	• None	• None
Networking **1**	• Communicate for a common understanding • Clearinghouse for information • Create a base of support	• Non-hierarchical • Loose/flexible link • Roles loosely defined • Community action is primary link among members	• Low key leadership • Minimal decision making • Little conflict • Informal communication
Cooperation **2**	• Match needs and provide information • Limit duplication of services • Ensure tasks are done • Increase cooperation	• Central body of people as communication hub • Semi-formal links • Roles somewhat defined • Links are advisory • Group leverages/raises money	• Facilitative leaders • Complex decision making • Some conflict • Formal communication within the central group
Coordination **3**	• Coordinate and share resources to address common issues • Merge resource base to create something new	• Central body of people consists of decision makers • Formalized links • Defined roles • Groups develops new resources and joint budget	• Autonomous leadership but focus is on issues • Group decision making in central and subgroup • Communication is frequent and clear
Coalition **4**	• Share ideas and be willing to pull resources from existing systems • Develop commitment for a minimum of three years	• All members involved in decision making • Roles and time defined • Links formal with written agreement • Group develops new resources and joint budget	• Shared leadership • Decisions making formal with all members • Communication is common and prioritized
Collaboration **5**	• Accomplish shared vision and impact benchmarks • Build interdependent system to address issues and opportunities	• Consensus used in shared decisions making • Roles, time and evaluation formalized • Links are formal and written in work assignments	• Leadership high, trust level high, productivity high • Ideas and decisions equally shared • Highly developed communication

Adapted from Cross, et al (2009)

In Cross et al (2009) they utilized a mixed methods approach to assess the development of interagency relationships. The method of data collection included numeric ratings of the strength of interagency relationships, narrative description of interagency relationships, and interview with key leaders in community agencies. The purpose of their study was to evaluate changes in interagency relationships between local school district, law enforcement, mental health, and human service agencies working together under a SS/HS initiative grant to prevent violence. Their study was limited to the examination of changes in relationships and network structure and did not evaluate the value of those changes on other grant objectives. Rather than develop a new scale, the community linkages matrix by Hogue et al (1995) was used as an

ordinal scale for measuring the strength of interagency linkages. In the community linkage matrix, networking is the lowest and collaboration is the highest. Each of the five levels of linkage, (1) Networking, (2) Alliance, (3) Partnerships, (4) Coalition, and (5) Collaboration, is defined by differences in three dimensions-purpose, structure and roles. One additional level was added, 0, to represent agencies that did not regular contact or relationships. A rating of 0 identifies that the two agencies coexist in the community network and that they have no established relationship (J. E. Cross, Dickmann, Newman-Gonchar, & Fagan, 2009). Cross et al (2009) found that the comparison of network structure alongside the qualitative data provided the best explanation of when and how collaboration was able to accomplish grant objectives and sustain them beyond the life of the grant.

The evaluation approach used in this study offers a variety of advantages to more commonly used evaluation methods. First, this approach collected robust data, both qualitative and quantitative, with minimal burden on the participants. Secondly, adding network analysis to the examination of levels of collaboration improved the complexity that could be captured in both the network diagrams and in the descriptive statistics.

As discussed earlier in this literature review the conditions under which relationships are established fall along a conceptual continuum from a reliance on an economic rationale to a reliance on a behavior rationale (Barringer & Harrison, 2000). These rationales span a variety of disciplines from social sciences and political science, which has focused primarily on studying economic rationale, to sociology and anthropology which focuses on social forces and their influence the actions of individuals. Neither of these disciplines has fully explained the complex nature of human behavior in society, particularly when it comes to understanding the establishment of interorganizational relationships. Network research is part of a general shift,

beginning in the second half of the 20th century, away from individualist, essentialist, and atomistic explanations toward more relational, contextual, systematic understandings of the establishment of interorganizational relationships (Borgatti & Foster, 2003).

Network Theory

Network research embraces a distinctive perspective that focuses on relations among actors, whether they are individuals, work units or organizations. Network theory conceptualizes organizations as embedded in networks of linkages which both facilitates and constrain theirs actions and shapes their interests (Granovetter, 1985b; Gulati, Nohria, & Zaheer, 2000). According to the network perspective actors are embedded within networks of interconnected relationships that provide opportunities for and constraint on behavior (Wasserman & Faust, 1994) . This perspective is different than the traditional perspectives in organizational studies that examine individual actors (Brass, Galaskiewicz, & Greve, 2004). The difference is that it focuses on relations rather than attributes on structured patterns of interaction rather than isolated individual actors. It is the intersection of relationships that defines an individual's centrality in a group, a group's role in an organization or an organization's niche in a market (Echols & Tsai, 2005). Relational data helps to balance under and over-socialized accounts of human behavior by taking into account both [organization] attributes and attributes of the social structure through incorporation of quantitative, qualitative and graphical data (Kilduff, Tsai, & Hanke, 2006). Networks have frequently been interpreted as 'social' because they involve exchanges across settings. The social character of networks derives from the fact that the relevant relational

contents involve direct connections among individuals, or 'dual' relations between individuals and organizations (Breiger, 2004). While a great deal of what has been written about networks has been theoretical, discussing the advantages of networks or examining issues of measurement and analysis, considerable theory-based research has emerged (Cook & Whitmeyer, 1992; Granovetter, 1985a; Provan, 1995). In the organization theory literature, work on networks has been guided primarily by two theoretical perspectives: resource dependence and related exchange perspectives, and transaction cost economics, with recent works focusing on the latter.

Each of these perspectives offers both a complementary and contrasting views about network formation. However, each perspective focuses essentially on the organizational antecedents and outcomes of the network involvement, with little attention paid to the network as a whole, except for its governance and structure (Provan & Kenis, 2008). This organizational view is understandable, since organizations make up a network and organizations either lose or benefit by network involvement. In both the transaction cost and resource dependence literature, the motivation and rationale for cooperative, interorganizational integration of activities and services is at the organizational level, rather for reasons of efficiency related to reduce transaction costs (Williamson, 1987) or to gain resources and power (Salancik & Pfeffer, 1978). As discussed earlier in the literature review individual organizations make strategic choices to establish relationships with other organizations when the advantages to such an arrangement,

such as enhanced survival capacity outweighs the costs of establishing and maintaining the relationship, including any potential loss of operating and decision autonomy (Uzzi, 1997).

Despite the use and acceptance of network analysis in the academic literature, notably sociology and organization theory, there have been few reported attempts to use the procedures to assist communities in building their networks (Eisenberg & Swanson, 1996; Provan et al., 2004) . Network strategies offer a powerful set of tools to manage tasks and challenges faced by nonprofit. Nonprofit organization administrators or executives are embedded in an elaborate network of social relations both intra and inter organizational. Whether they are viewed as benefits or obstacles, these networks influence their choices and strategies. By using the network analysis approach, managers can see exactly where their organizations fits within the structure of the network, based not just on their own perceptions, but also on the perception of other organizations in the network (Provan et al., 2005). Network analysis can reveal new information that is often contradictory to the perception of nonprofit leaders and managers (Cross et al., 2006). This is often revealed through reciprocity in network analysis. Networks analysis is useful for demonstrating the connections and interorganizational relationships among organizations and the structural characteristics of the network (Provan et al., 2005).

The conditions under with interorganizational relationships are established vary according to an organization's needs. Each of the six theoretical paradigms and additional factors discussed earlier can motivate the establishment of interorganizational relationships. They can

individually or combined offer an explanation for the motivation of the relationship. Research has revealed that establishing interorganizational relationships allows nonprofit organizations to: (a) increase cost-effectiveness of social service delivery, (b) enhance capacity of partnering agencies, and (c) increase the comprehensive nature of social services (Takahashi, 2002).

CHAPTER THREE: RESEARCH METHODS

Introduction

This chapter provides an overview of the research methodology selected to examine relationships among nonprofit housing organizations in the Richmond metropolitan area. This research study examined the influence of organizational characteristics, environmental conditions, and resource availability on interorganizational relationship. Furthermore, the study examined the attitudes and perceptions of executive directors of collaboration

This chapter included the following sections: research and sub-research questions, hypotheses, research design, data collection, levels of measurement, sampling design, levels of analysis, unit of analysis, and study variables. A brief discussion of each is provided. The chapter concludes with a review of the research design and limitations.

The primary research question is:

> Do nonprofit housing organizations display identifiable patterns of relationships with each other?

In order to answer this research question, this study proposed the following sub-questions.

Social Network Analysis

- What is the overall connectedness among nonprofit housing organizations?

Quantitative

- What organizational characteristics (age, size, and gender diversity) influence the Level of Interaction?
- What environmental conditions (housing conditions, advocacy efforts, and problems with funding) influence the Level of interaction?
- What resources availability (construction and project management capacity, and diversity in funding) characteristics influence the Level of interaction?
- To what extent do actual types of interaction correlate with perceived levels of interaction?

Qualitative

- What are the perceptions of collaboration held by nonprofit housing leaders in the Richmond Metropolitan area?

Hypothesis

This study included hypotheses for both social network analysis and quantitative analysis. Provided below are the hypotheses for each variable within the research study. The categories of the variables are connections, organizational characteristics, environmental conditions, resource capacity, and interorganizational relationships.

Connections

H1. More established organizations as measured by key organizational characteristics (age, financial diversity, and more in-house resources) will be more connected in the network than less established organizations.

H2. Organizations with females in leadership positions (executive directors and board members) will have more formal connections than those with men in leadership positions organizations.

H3. Organizations with less in-house resources will have a higher closeness centrality.

Organizational Characteristics

H4. Age will have a greater influence on the Level of Collaboration than environmental conditions and resource availability

H5. Size will have a greater influence on the Level of Collaboration that environmental conditions and resource availability

H6. Gender diversity will have a greater influence on the Level of Collaboration than environmental conditions and resource availability

Environmental Conditions

H7. Housing conditions will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

H8. Advocacy efforts will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

H9. Problems with funding will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability.

Resource Capacity

H10. Diversity in funding will have a greater influence on the Level of Collaboration than organizational characteristic and environmental conditions

H11. Construction Management resources will have a greater influence on the Level of Collaboration than organizational characteristics and environmental conditions

H12. Project management resources will have a greater influence on the Level of Collaboration than organizational characteristics

Interorganizational Relationships

H13. There is a difference between an organization's perceived level of interaction, as measured by the Level Collaboration Scale and actual types of interaction.

Research Design-Mixed Methods

This research study will utilized a mixed methods research design. In a mixed methods research design, both quantitative and qualitative data are collected and assessed at different or separate stages of the research. According to Johnson and Onwuegbuzie (2004) some of the advantages of a mixed methods research approach are: (1) utilization of the strength of both quantitative and qualitative research methods, it can "answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach, words, pictures, and narrative can be used to add meaning to numbers, numbers can be used to add precision to words, pictures, and narratives, (2) a researcher can use the strengths of an additional method to overcome weaknesses in another method by utilizing both, (3) it can provide stronger evidence for a conclusion through convergence and corroboration of findings, can add insight and understanding that might be missed when only a single method is used, can be used to increase the generalizability of the results, and quantitative and qualitative research used together produce more complete knowledge necessary to inform theory and practice" Additionally, the triangulation approach of collecting data from multiple data sources also aids in minimizing threats to the validity of the study's results. The identified strengths of the mixed methods approach support its use in this dissertation study.

In this study, three research designs were conducted in two stages. The first research design assessed the relationships between the nonprofit housing organizations using Social Network Analysis. The second research design assessed the relationships between organizational characteristics, environmental conditions, resource capacity, and actual types of interactions to the Level of Collaboration. The third and final research design obtained the qualitative context of attitudes and perceptions of collaboration of leaders in the nonprofit

housing sector in the Richmond metropolitan area. Each of these separate research designs within the overall mixed methods approach generated significant insight into interorganizational relationships between nonprofit housing organizations in the Richmond metropolitan area as well as attitudes and perception of collaboration. A more detailed description of each of the individual research method within the overall mixed methods research design is provided.

Quantitative Research Design-Cross Sectional

The data for this cross-sectional research study was collected using a quantitative approach as well as a social network approach. Survey research was conducted. The purpose of the survey research was to obtain information on interorganizational relationships between nonprofit organizations, as well as collect data on organizational characteristics, environmental conditions and resource capacity. Survey research is the most appropriate data collection technique based on the nature of this research study. It is the most widely used data collection technique in social sciences. Surveys produce information that is statistical and considered quantitative. Surveys ask questions about characteristics, beliefs and opinions, and behaviors, and are appropriate for research questions about self-reported beliefs and behaviors. Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of population by studying a sample of the population. According to Wasserman and Faust (1994) a survey or questionnaire is the most commonly used method of collecting network data. The questionnaire usually contains questions about the respondent's ties to the other actors.

Social network analysis is a distinct research perspective within the social and behavioral sciences because it is based on the assumption of the importance of relationships among interacting units. The social network perspective encompasses theories, models and applications that are expressed in terms of relational concepts or processes. That is, relations defined by

linkages among units are a fundamental component of network theories (Wasserman & Faust, 1994) . It differs in fundamental ways from standard research methods rather than focusing on attributes of individual units, association among these attributes, the social network perspective views characteristics of the social units as arising out of structural or relational processes and focuses on properties of the relational systems themselves. The task is to understand properties of the social structural environment (economic or political) and how these structural properties influence observed characteristics and associations among those characteristics. Questionnaires are used when the actor in a study is a collective entity, such as corporation, with an individual person representing the collective reports of their ties. For this research study respondents were representatives of a collective entity, a nonprofit housing organization. Social network analysis (SNA) is a method of collecting and analyzing data from multiple individuals or organizations that may be interacting with one another (Provan et al., 2005) . It involves the measuring and mapping of relationships and flows between people, groups, organizations, computers, URLs, and other connected information/knowledge entities. The nodes in the network are the people and groups while the links show relationships or flows between the nodes. SNA provides both a visual and a mathematical analysis of various types of relationships.

Rationale for Design

The primary justification for the utilization of cross sectional research design rests within the methodology's primary function and strength. The strength lies in the methodology's ability to uncover relationships between study variables. By determining if a relationship exists between study variables, it is believed that a deeper understanding of the dynamics of organizational characteristics, environmental conditions, resource availability, and interorganizational relationships will be more apparent. Likewise, the cross-sectional approach coupled with the

appropriate statistical techniques can also determine the strengths and weaknesses of the relationships between the independent variables (organizational characteristics, environmental conditions, resource availability, and actual interorganizational relationships) and the dependent variable (Level of Collaboration). The determination of whether a relationship exists and the assessment of such relationships amongst the study's variables was a key component and a critical element of this dissertation study.

Foster and Meinhard (2002) found that organizational factors, such as size and type (feminist or not), were related to the extent of formal collaborative activity. Yet the strength of these factors as predictors were moderated by the intervening perception of the impact of environmental changes. They considered the absence of external factors in their model (such as community characteristics) and acknowledged the important contributions that such factors have on the motivation to collaborate. They recommended that future research identify additional structural, attitudinal and environmental variables that may act as predictors to collaboration. Guo and Acar (2005) found that an organization is more likely to increase the degree of formality of its collaborative activities when its older, has a large budget size, receives government funding, has more board linkages with other nonprofits, and is not operating in the education of social service industry.

This dissertation study contributes to the existing body of research because it takes into consideration various levels of degree of the relationship between the nonprofit organizations using network analysis. The previous studies, Foster and Meinhard studied motivations for collaboration and Guo and Acar studied various types of interorganizational relationships but collapsed them into two categories, informal and formal. This dissertation study utilized the out-degree measure from social network analysis as the variable for interorganizational relationships.

The results of this study's cross sectional analysis will assist future researchers in validating or reassessing the relationship between the study variables and Level of Collaboration.

Study Area

The study area consists of localities (three counties and four cities) that are part of the Richmond metropolitan statistical area (MSA) that share coterminous geographical boundaries. For the purpose of the study this area will be considered the Greater Richmond metropolitan area (Henrico County, City of Richmond, Chesterfield County, City of Hopewell, City of Colonial Heights, and the City of Petersburg). The Richmond MSA is located in the center of eastern Virginia. The sixteen counties, four city areas encompasses nearly 5,717 square miles. The Richmond MSA is a cross of transportation. Rail lines radiate in all directions from Richmond. Interstate 64, 85, and 95 converge in the metropolitan area (Virginia Economic Development Partnership, 2009). A review of the Virginia Department of Housing Authority housing directory reveals that community development corporations provide housing services or operate programs, as well as develop affordable housing in multiple cities and urban counties.

Population and Sample

The research design for social network analysis is different from the traditional survey research design in terms of sampling; the research design in social network methods does not draw samples. "Because social network methods focus on relations among actors, actors cannot be sampled independently to be included as observations (Hanneman & Riddle, 2005). If one actor happens to be selected, then we must also include all other actors to whom our ego has (or could have) ties" (Hanneman & Riddle, 2005) . Instead of sampling, this study draws a population boundary by "demographic" or "ecological" approach (Hanneman & Riddle, 2005) . First, it was necessary to define actors of collaboration who generate and maintain collaborative relations in this study. As stated, the focal type is nonprofit organizations. Nonprofit

organizations are linked in complex webs of relationships among diverse stakeholders. These stakeholders include beneficiaries of services, funding agencies (foundations, individual donors, local, state and federal governments, loans from banks, and user fees), workforce (paid staff, volunteers, and board members), and other comparable organizations (organizations that offer related or similar, and substitutable programs and services) (Dees, Emerson, & Economy, 2001; Kearns, 2000). Knowing that survey research with nonprofits traditionally suffers from low response rate and the need to identify as complete a network structure as possible made it necessary to attempt to maximize the number of respondents to the survey (Hager, Wilson, Pollak, & Rooney, 2003) . Secondly, it was difficult to compile a complete list of nonprofit organizations.

Participants in this study were obtained from a list nonprofit housing organizations contained in the Virginia housing directory provided by the Virginia Housing Development Agency (VHDA). They were selected based on a prescribed geographical boundary, the Greater Richmond metropolitan area and their involvement in the housing sector. In order to ensure that all organizations were part of the network the researcher obtained a membership roster for the Richmond Community Development Alliance (RCDA) from the Partnership for Housing Affordability. The final list contained sixteen organizations. This study was undertaken in a quasi-laboratory setting, by studying relations among organizations in a relatively small and discreetly bounded geographic area. Many, but not all, of these organizations are presumed to have relationships of various types and intensity with each other as a result of their shared geographic boundary, clientele, programs and services. Moreover, the informant organization, the Virginia Housing Development Agency is in a good position to define the population boundary for this study because it is a focal point and clearinghouse for all housing programs in

the Commonwealth of Virginia and therefore is familiar with many of the housing nonprofit housing organizations in the Richmond metropolitan area.

Instrumentation

Since network analysis was used as the primary data analysis method for this research study, it was necessary to design a method of collecting relational data. Relational data can best be described as data collected on the content, direction and strength of a relationship. The content refers to the resource that is exchanged, direction can be directed or undirected, and strength can be operationalized in a number of ways. For the purpose of this study strength was characterized by the current rating on a scale of 1 to 5, 1 being the lowest-networking and 5 being the highest-collaboration. In this study, one type of relational data was collected; level of interaction between nonprofits. On the basis of this research scheme, this study employed a full network method for collecting relational data. The full network method was applied to the 16 nonprofit organizations that will be surveyed for this study (Hanneman & Riddle, 2005) . This study collected linkage data and the level of linkage between the nonprofits. Full network methods require that data be collected on information about each actor's ties with all other actors. In essence, this approach is taking a census of ties in a population of actors -- rather than sample. Because it collected information about ties between all pairs or dyads, full network data gave a complete picture of relations in the population. Full network data is necessary to properly define and measure many of the structural concepts of network analysis (Hanneman & Riddle, 2005) .

The Survey of Richmond Metropolitan Area Housing Organizations is a modified instrument comprised of 18 (15 close-ended and 3 open-ended) items obtained from previous research studies. Permission was obtained from each of the study's Principal Investigators (Appendix A for Letters of Permission). Items 1 to 16 are items from the "Capacity and Production: A Survey of Community Based Organizations Engaged in Affordable Housing

Development in Michigan" conducted by the Michigan State University Center for Urban Affairs, Community and Economic Development Program. Item 17, The Level of Collaboration Scale was adapted from the Using Mixed Methods design and Network Analysis to Measure Development of Interagency Collaboration conducted by Dr. Jennifer Cross and colleagues (2009). Item 18 is a question that is comprised of a list of actual types of interactions that were identified in existing research during the literature review.

Reliability

In order to assess the reliability of the Level of Collaboration Scale, this research study examined findings from two previous studies in which the instrument was administered. According to Test Science website, The Level of Collaboration Scale was developed from existing models and instruments with the purpose of assessing collaboration among grant partners. In developing the instrument, the detailed descriptions of community linkages by Hogue (1993) and discussed by Borden and Perkins (1998, 1999) were combined and shortened. Given the definition, respondents are asked to what extend they collaborate with grant partner. The preliminary evidence of the high test-retest of the Levels of Collaboration Scale from the Frey et al (2006) study indicated a good degree of precision in measurement, suggesting it is an appropriate tool for measuring change. When the scale was used in their study with just seven representatives on both measurement occasions, a change in mean collaboration of 0.55 standard deviation was observed between baseline and end of the 1st year of grant activities. The mean moved from 1.40 (SD-.55) to 1.71 (SD=.57) during the first full year of the grant. Taking into account all respondents, not just those responding on both occasions, the mean collaboration moved from 1.50 (SD=.54) to 1.77 (SD=.50). In the Cross (2009) study the test–retest ratings were highly associated, comparing Time 1 ratings to Time 2 retrospective ratings, the correlation coefficient was 0.73 . In addition, the interrater reliability was even higher, comparing one

group's rating of an interagency relationship with the other group's rating of that same relationship, the interrater reliability was .91. As recommended by Dr. Cross in her approval of the use of the instrument, this research study should examine the interrater reliability. This will be done by obtaining the reciprocal relationship between the nonprofit housing organizations. According to Tashakkori and Teddlie (1998) this is also called interjudge or interobserver, which is the degree to which ratings of two or more raters, or observations are consistent with one another. For the purpose of the research study, individuals are representing the collective (organization), which is consistent with the social network approach.

Construct Validity

Construct validity was established in the previous studies that utilized both instruments for data collection. The studies in which the instruments were previously used were obtained during the literature review. In the course of developing a comprehensive capacity building model for Michigan nonprofit organizations, the Center for Urban Affairs and its community partners outlined a detailed skills base learning curriculum for nonprofit affordable housing development groups. This curriculum incorporates general nonprofit management practices (e.g., board development, strategic planning, financial management), along with skills unique to housing development (e.g., financial packaging for real estate acquisition, techniques of construction management, management of rental properties). The various units of this curriculum, informed by the years of practical experience represented by those contributing to its design, served as the primary basis for generating the items included in the survey questionnaire for the Capacity and Production: A Survey of Community Based Organizations Engaged in Affordable Housing Development in Michigan" conducted by the Michigan State University Center for Urban Affairs, Community and Economic Development Program. On the basis of this

model curriculum, the research team developed a survey instrument for use in conducting a personal interview. The final questionnaire consisted of 49 questions including over 150 distinct elements. After Phase one interviews, the questionnaire was modified slightly to collect more specific information about certain elements. The questionnaire was organized by topic into nine sections. Section topics included:

- Organizational Profile;
- Community Assessment and Participation;
- Financial Packaging;
- Construction Management;
- Project Management;
- Homeownership Programs;
- Organizational Administration and Development;
- Professional Development and Linkages to Educational Institutions; and
- Public Policy and Housing Advocacy.

As suggested by Stone (1978) wherever possible, survey items (questions) were adapted from prior studies to enhance validity. In addition, this study double-checked the definitions of the Levels of Collaboration Scale by asking individuals who work in housing related fields, local community development and planning officials, three executive directors on nonprofit organizations that are located outside the Richmond metropolitan area to review the definitions. They were asked to provide comments on their understanding of each item, as well as the sequence of questions after completing the survey. Minor revisions were made based on their feedback. All of them stated that they clearly understood the definitions. From this result, this study is important because definitions of relationships can be ambiguous. Construct validity was assumed that survey respondents will understand the definitions of interorganizational relationships accurately

Study Variables and Measurements

There are several types of variables that can be included in a network data set: structural and composition. Structural variables are measured on pairs of actors and are the cornerstone of

the social network dataset (Wasserman & Faust, 1994) . Composition variables are measurements of actor attributes. Composition variables, or actor attributes, are of the standard social and behavioral science variety and are defined at the level of individual actors (Wasserman & Faust, 1994) .

Attribute Variables

In Foster and Meinhard (2002) study the main hypothesis was that interorganizational collaboration depends on the relationship between organizational characteristics, the respondent's perceptions of the environment and attitudes about collaboration and completion on the other. They found that the amount of collaboration activity was positively related to the strength of its perceived benefits (e.g., efficiency, resources gain, service improvements, and risk avoidance) and negatively related to a competitive outlook or perception of obstacles to collaboration. Larger organizations were more likely to engage in formal collaborative activities, which were attributed to the perception among the larger organizations that external change without collaboration might have a negative impact on their organization. Foster and Meinhard (2002) found that future research identifying additional structural, attitudinal and environmental variables that may act as factors of collaboration. This research study furthered the research conducted by Foster and Meinhard (2002) by collecting data on additional organizational characteristics and attitudes and perceptions of executive directors of the nonprofit housing organizations of collaboration.

Organizational characteristics

Organizational characteristics are variables that ascertain basic demographic information about the organization. Descriptions of these variables are provided.

- IV-*Organization's* Age-Calculated from the year the organization was founded.

- Level of Measurement is ratio

- IV-Size-The number of full-time and part-time employees

  - Level of Measurement is ratio

- IV-Gender diversity-the percentage of females to total employees. This variable will be recalculated into a number by multiplying the percentage and total number of employees for an actual number.

  - Level of measurement is ratio

Environmental Conditions

Organizations in part form relationships with one another to manage uncertainties. The uncertainties they are concerned with are not just limited to uncertainties of resources but also uncertainty in the communities in which they operate. Large changes in the number of people they need to serve, the types of services that will be demanded or even the transience of their client base all have impacts on nonprofits operations. Galaskiewicz and Shatin (1981) found that organizations were more likely to form ties with other organizations when faced with a turbulent environment. It can be argued the same pressures affect nonprofit organizations.

Environmental Conditions a group of variables that obtain data on the

- IV-Housing conditions-List of housing conditions in an organization's service area.

  - Level of measurement is ordinal

- IV-Advocacy efforts-List of advocacy efforts and levels of government

  - Level of measurement is nominal

- IV-Problems with funding-List of common problems with funding and degree of difficulty.
    - Level of measurement is ordinal

Resources Availability

- IV-Diversity in funding-The types of funding available to nonprofit organizations
    - Level of measurement is nominal
- IV-Construction management activities-List of construction management activities and resource capacity
    - Level of Measurement is ordinal
- IV-Project Management capacity-List of project management functions and resource capacity
    - Level of measurement is ordinal

Interorganizational Relationships

- IV-Types of interactions-List of types of interactions obtained from literature review
    - Level of Measurement is nominal

Dependent Variable

This research study measured perceived interorganizational relationships using the Level of Collaboration Scale from a study by Cross, et al (2009). For each of the organizations listed respondents (Executive Directors) from one of the organizations will rate their level of interaction using a 5 point-scale (1=Networking, 2=Cooperating, 3=Coordinating, 4=Coalition

and 5=Collaboration). Using a sociometric recall procedure (Wasserman and Faust, 1994), this study will collect data on the relationship between the target organizations. Each respondent was asked to rate their relationship, as measured by the Level of Collaboration Scale with other organizations based on the definitions provided in the table below.

Networking-Communicate for a common understanding –Clearinghouse for information -Informal communication

Cooperation-Match needs and provide information –Limit duplication of services-Formal communication within a central group

Coordination-Share resources to address common issues –Merge resource base to create something new –Communication is frequent and clear

Coalition-Share ideas and willing to pull resources –Develop commitment (minimum 3 years) –Roles and time defined -Communication is common and prioritized

Collaboration-Accomplish shared vision and impact benchmarks -Roles, time, and evaluation formalized -Ideas and decisions equally shared -Highly developed communication

Data Collection Procedures

Survey data was collected from nonprofit housing organizations in the Richmond Metropolitan area using an on-line survey tool, Survey Monkey. Participants in the survey research were Executive Directors of a nonprofit housing organizations located in the Richmond metropolitan area. A list of organizations was obtained from the Virginia Housing Development Agency (VHDA). Email addresses for prospective participants were obtained from the organization's website or requested through phone calls to the organization's main number. The survey was administered through a link to the survey instrument in an email using Survey Monkey. Survey Monkey generates results and graphed information. Results can be downloaded into a spreadsheet or database for analysis (Creswell, 2008). An on-line survey allowed for the best cross-sectional results with the least amount of cost for this dissertation study. In addition, Survey Monkey provided technology that helps design the survey, collects responses and analyzes basic descriptive for preliminary survey results.

Qualitative Research Design-Individual Interviews

The goal of this aspect of the data collection process was to obtain additional information regarding collaboration that would not be answered from survey research, as well as confirm or refute findings from existing research on attitudes and perceptions of collaboration in the nonprofit sector. In the Cross et al (2009) mixed methods study, network structure coupled with qualitative data from interviews provided the best explanation of when and how the collaboration was able to accomplish grant objectives and sustain them beyond the life of the grant. According to Tashakkori and Teddlie (1998) the interview is a powerful method of data collection. It provides one-to-one interaction between [the researcher] and individuals they are studying. Unstructured interviewing can provide greater breadth than do other types given its qualitative nature. It provides the opportunity to ask for clarification if an answer is vague or to provide clarification if a question is not clear. Open-ended interviews result in copious information about issues. Qualitative research offers an interpretive methodology that is based primarily on the experiences of people and provides an in-depth understanding of the real world. Marshall and Rossman (2006) describe qualitative research as a broad approach to studying some types of social phenomenon. It consists of a set of interpretive practices that present a particular worldview using data collected from interviews, conversations, and in-person observations.

Qualitative research allows the researcher to study events or phenomenon in their naturalistic state, and make informed interpretations that provides new knowledge. Qualitative studies instead allow the researcher to develop his or her own theories or worldview. It is less structured than traditional positivist studies, but it maintains the sound scientific principles necessary to be treated as credible research (Creswell & Clark, 2007; Marshall & Rossman, 2010) . The process of developing assumptions or worldviews in qualitative research is called *grounded theory.* In grounded theory, the information derived from one of the various forms of

qualitative data collection methods develops into congruent themes that present a complete picture of the phenomenon being studied. The method used to develop a grounded theory is *constant comparison*), which involves analyzing data and comparing the findings to identify important themes (Corbin & Strauss, 1990). It is through these themes that the research acquires an identity, and constructs a storyline that enables the reader to further understand the topic being studied.

Research Design

The design of this study was intended to produce new knowledge about attitudes and perception of collaboration in the nonprofit sector. In order to accomplish this goal, the study applied Engel and Schutt's (2009) explanation of *grounded theory*. In contrast with other studies that conceptualize a theory and then tests that theory against empirical data, grounded theory uses data collected through qualitative means to formulate a particular understanding of a certain phenomenon.

Rationale for Design

Using a qualitative research design that applies systematic coding and inductive reasoning enabled the researcher to produce concepts and themes about attitudes and perceptions of collaboration. The specific form of interviewing the researcher used is *ethnographic interviewing* (Denzin & Lincoln, 2004; Marshall & Rossman (2006) define this particular style of interviewing as "an elaborate system of a series of interviews structured to elicit insiders' cultural knowledge" (p. 104). Ethnographic interviews attempt to gain knowledge about a participant's perspectives on certain conditions based on their lived experiences. In particular, they are useful in "eliciting participants' meanings for events and behaviors and for generating a typology of cultural classification schemes (Marshall & Rossman, 2006). This particular

interview methodology produces a working explanation that builds a conceptual framework, while avoiding oversimplification by allowing the researcher to pursue in-depth narratives. The researcher obtained interviews with the executive directors through phone contact and email.

Data Analysis Plan-Quantitative

The dataset was analyzed using descriptive and correlation analysis. These statistical techniques were selected based on the number of respondents and the level of measurement of study variables. All descriptive and correlation analyses was performed using the SPSS statistical software package (version 21 SPSS, Chicago, IL, USA). All social network analyses was performed using UCINET (6 version 6) (Borgatti, Everett, & Freeman, 2002). The researcher used the survey response to the Item #17-Level of Collaboration Scale to create a graphical representation of the network using NETDRAW V 2.123(Borgatti, 2002). NETDRAW is an integrated program that works in tandem with UCINET for visualizing networks, network visualization software allowed the researcher to overlay information about the subgroups that the nodes belonged to, which is helpful in terms of conducting analysis and recognizing patterns within the network. In addition, NETDRAW visualization software allowed the researcher to create graphical representations of the metanodes in the network that can aid in interpretation of network patterns.

Research Design and Data Limitations

This research study utilized a mixed methods research design. As previously discussed, the primary reason for utilizing a mixed methods approach was based in its ability to incorporate the strengths of both quantitative and qualitative methods. Used together in a single design, they minimize weaknesses of the other method when used exclusively. Therefore, the limitation of using either method was not discussed since the relative weakness of each individually tends to counteract the other. However, there were some limitations with the use of cross sectional method, particularly the design itself. Each limitation is discussed further in the next section

Cross Sectional Design

Although there are numerous strengths to cross sectional research design, there are also several limitations to the approach. Cross sectional research coupled with quantitative and qualitative methods outweighs the limitations. Cross sectional design is limited in what can be determined about the study's variables. This dissertation study is limited in determining relationships, if any among study variables. A critical assessment of this study is that the data analysis will depict relationships as they appear at one point in time. Unlike longitudinal studies, cross sectional research does not determine change over time. This study was not be able to determine if the Level of Collaboration Scale would increase or decrease over time. This is in part due to the nature of the study; unlike previous applications of the Level of Collaboration Scale (Frey et al, 2006 and Cross et al 2009) this study was not an evaluation of a grant-funded initiative to measure the impact of the grant on collaborative efforts.

A cross sectional research design does not determine causality between the independent variables and the dependent variable. This is a common limitation of the cross sectional research methodology. The goal of this study was not to determine causality but rather examine the

relationship between the variables. Future research studies may be able to better determine the likelihood of causality (Tashakkori and Teddlie, 1998).

Data Analysis Plan-Qualitative data

Strauss (1987) emphasizes that using a coding design enables the researcher to scrutinize interview transcripts or other documents in a concise fashion that develops explanations which reflect the true nature of the data. Furthermore, Strauss suggests that coding is an efficient tool that allows the researcher to analyze data in a way that avoids the common tendency to overstate themes throughout the study (Maxwell, 2005). The usefulness of coding is predicated on its ability to structure the data and clarify explanations that lead to strong grounded theories. The application of coding is particularly useful when employing axial coding, discussed later in these pages, which consists of rigorous analysis performed on a single category or concept that emerges during data analysis (Strauss, 1987). According to Strauss and Corbin (1990), grounded theory and its procedures help achieve the following qualitative research goals: (a) build rather than test a conceptual framework; (b) apply rigorous procedures that validate the study's acceptance in the scientific community; (c) prevent the researcher from using his or her own assumptions to dictate how data is analyzed; and (d) systematically use the data to build a theory that accurately depicts the conditions being studied.

Triangulation has several benefits as well. To begin, it allows the researcher to avoid any biases that would have otherwise emerged using a single data source. Maxwell (2005) describes the use of triangulation as a way to improve the study's validity, in which corroboration and elaboration help determine if the data accurately reflects the current conditions being studied. That is, it compares and contrasts the information provided by the different participants.

Accuracy

At least one research study has raised the question about the ability of an individual to recall their day-to-day interactions with other (Bernard, Killworth, Kronenfeld, & Sailer, 1984) . However, Freemen, Romney, Freeman (1987) have shown that in general people are good at recalling the enduring pattern or typical interactions they have with others. In order to reduce this inaccuracy, this study defines the time period of interaction "as within the past year". In addition, in order to avoid possible inaccuracy from differences between unit of analysis (organizations) and units of observation (individuals), the survey was administered to persons who are designated as representatives of the organizations. Because this study relied on self-reported responses of relationships and most respondents will depend on memory, there was a risk for inaccuracy (Wasserman and Faust, 1994).

Establishing Credibility

The criteria for judging a qualitative research differs from a quantitative research. The uniqueness of a qualitative study precludes its being replicated in another context. However, statements about the researcher's positions – the central assumptions, the selection of informants, the biases and values of the researcher – enhance the study's chances of being replicated in another setting (Ivankova, Creswell, & Plano Clark, 2007). To validate the findings and determine the credibility of the information and whether it matches reality , four primary forms were used in the qualitative, phase of the study: (1) triangulation – converging different sources of information (interviews and organizational documents); (2) member checking – getting the feedback from the participants on the accuracy of the identified categories and themes; (3) providing a rich and thick description to convey the findings; and (4) external audit – asking a person outside the project to conduct a thorough review of the study and report inconsistencies.

Conclusion

This research study is a mixed-method nature examined interorganizational relationships among nonprofit housing organizations in the Richmond metropolitan area. This dissertation study also examined the influence of organizational characteristics, environmental condition, and resource availability on their level of interaction. Survey research methods were used to gather relational and demographic data. Interviews were conducted to gather attitudes and perceptions of collaboration from executive directors of the nonprofit housing organizations. A justification for the use of each approach was discussed as well as strengths and weaknesses of each research approach.

CHAPTER FOUR: DATA ANALYSIS

Introduction

This chapter is divided in three sections:(1) discussion of findings and results from the social network analysis; (2) discussion of findings and results from the correlation analysis between the Level of Collaboration and organizational characteristics variables, resource availability variables, and environmental conditions variables; and (3) a discussion of the general findings and results of the qualitative analysis of interview conducted with representatives from the nonprofit housing organizations.

Data Collection

Network and Quantitative Data

The first step in the network and quantitative data collection process was to establish the network's boundary by identifying all of the nonprofit housing organizations in the Richmond metropolitan area. The unit of analysis was the organization. A list of organizations was compiled using the Virginia Department of Housing Authority housing directory. In order to ensure that all organizations were part of the network the researcher obtained a membership roster for the Richmond Community Development Alliance (RCDA) from the Partnership for Housing Affordability. The final list contained sixteen organizations. All network and quantitative data was collected using a survey instrument distributed via email using Survey Monkey. Thirteen out of the sixteen nonprofit organizations in the network completed a survey, resulting in an 81.3 percent response rate. The researcher made several attempts and received confirmation from representatives from two of the three organizations through email and

telephone calls the surveys was not completed. The lack of participation of all sixteen organizations identified as the network of nonprofit housing organizations resulted in limitations for data analysis.

Qualitative Data

Interviews were conducted by the researcher and administered to eleven executive directors and one senior executive staff member. Twelve interviews (92.3 percent response rate) were conducted, a majority were conducted face-to-face, ten (77 percent) and the remaining two (23 percent) were conducted via telephone. The interviews were tape-recorded and transcribed by the researcher. The researcher also took notes during the interviews.

Network Characteristics

The researcher used survey responses to the Level of Collaboration Scale to create a graphical representation of the network, using UCINET 6 Version 6.439 to answer the following research questions and to test the following hypotheses (Borgatti et al., 2002) .

Primary Research Question

Do nonprofit housing organizations display identifiable patterns of relationships with each other?

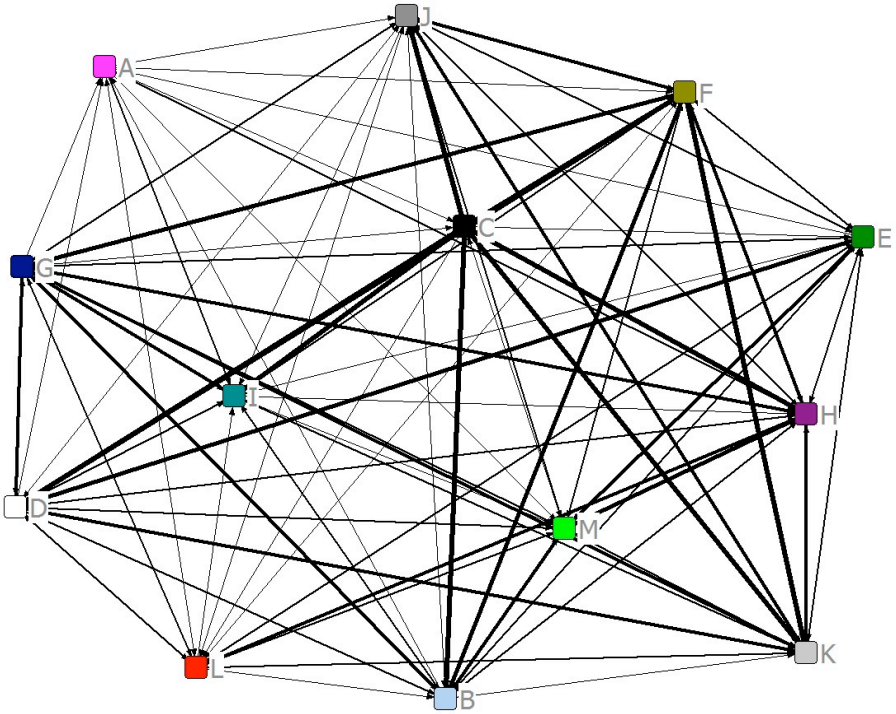
Sub-Research Question

1. What is the overall connectedness among nonprofit housing organizations, the

The graphical representations of the network(s) are displayed and analyzed using NETDRAW V 2.123 (Borgatti, 2002). NETDRAW is an integrated program that works in tandem with UCINET for visualizing networks, network visualization software allowed the researcher to overlay information about the subgroups that the nodes belonged to, which is helpful in terms of conducting analysis and recognizing patterns within the network. In addition,

NETDRAW visualization software allowed the researcher to create graphical representations of the metanodes in the network that can aid in interpretation of network patterns

Figure 2-Richmond Nonprofit Housing Network



The relationship rating from the Level of Collaboration Scale was used to create figures 2 to 7. Figures 2 to 7 are a visual presentation of the Richmond Housing Network, from the total network, to networking (informal) to collaboration (formal). Figure 2 is the network diagram for entire network. The thickness of each line denotes the total Level of Collaboration Scale score of an organization. A thin line indicates a low Level of Collaboration Scale rating, while a thick line indicates a high Level of Collaboration Scale rating. The diagram reveals that the intensity of the relationship differs organization to organization. There are a total of 141 ties in the network of Richmond Nonprofit Housing Organization. The average number of ties per actor in the network is 10.84. The ties are directional with a weighed value. Each relationship in the Level of Collaboration Scale has an assigned value (Networking=1, Cooperation=2, Coordination=3, Coalition=4, and Collaboration=5). While completing the survey, respondents were asked to

select the category that best described their relationship with the listed organization. This data was used to create figures 3 through 7. In figure 2, the diagram reveals the network contains several pairs of actors, 81.3 percent of the pairs have a reciprocated connection, which suggests that there are number of horizontal connections within the Richmond Housing Organization network.

Figure 3-Networking Network

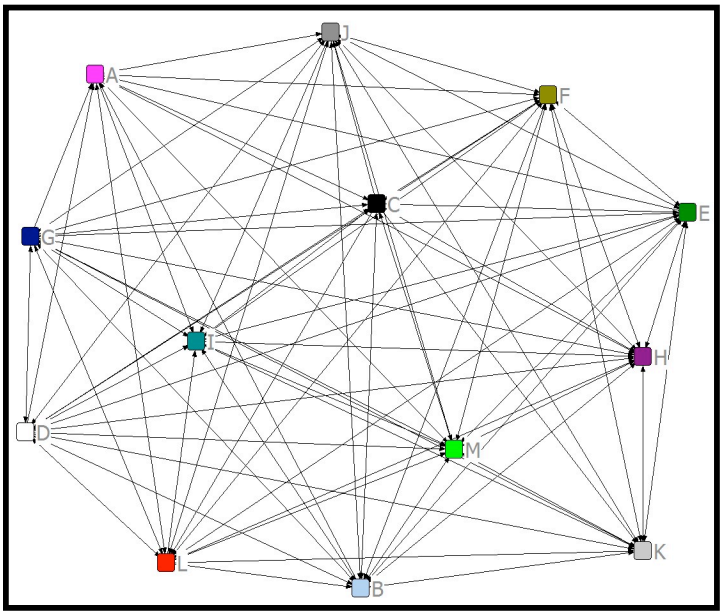


Figure 4-Cooperation Network

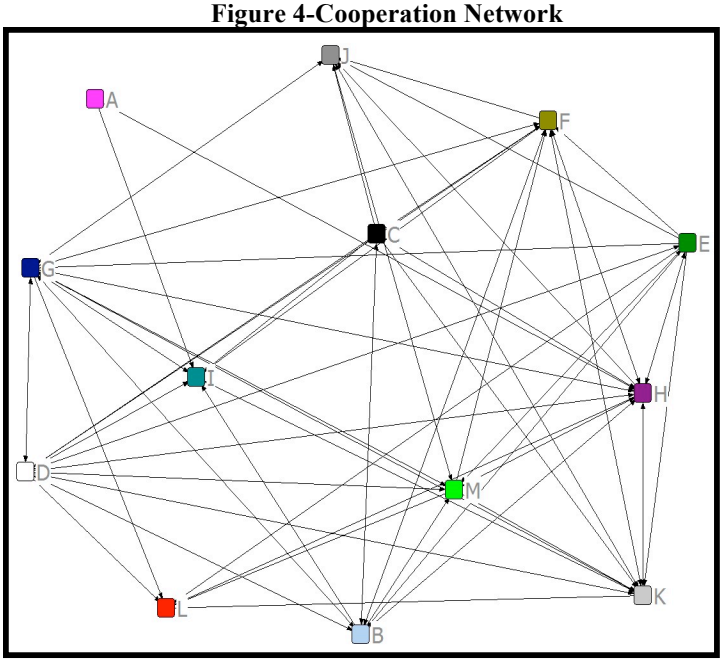


Figure 5-Coordination Network

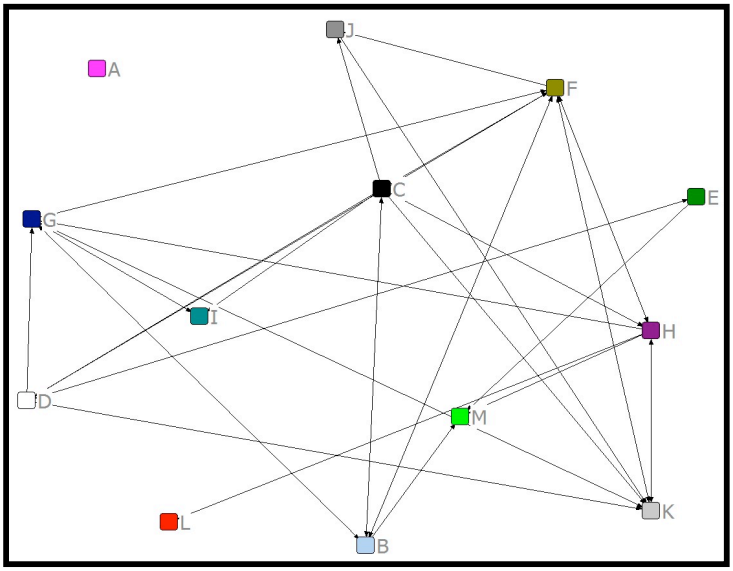
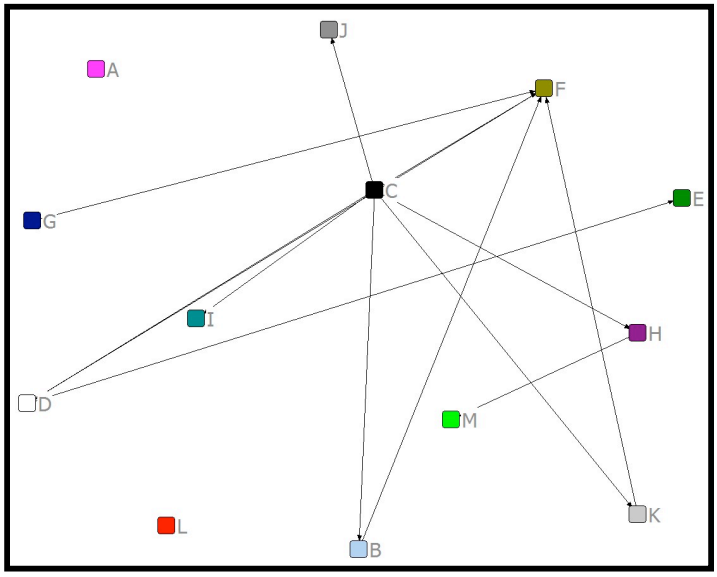
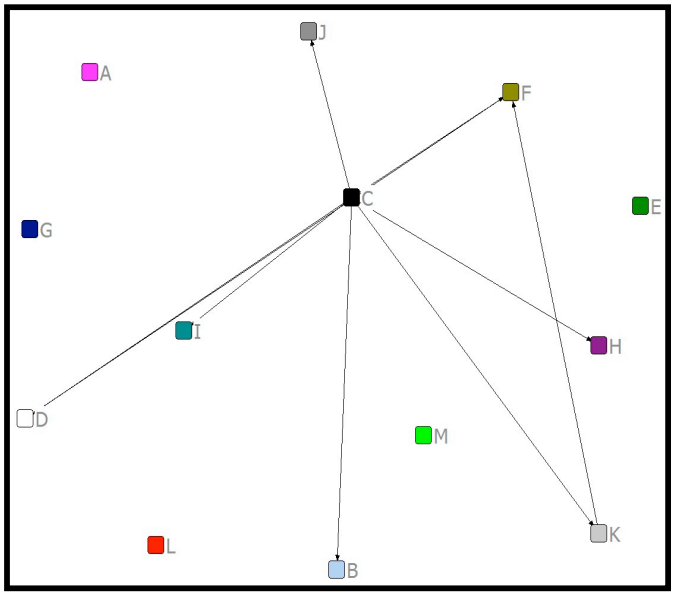


Figure 6-Coalition Network



In Figure 3, the diagram reveal that the networking network mirrors Figure 2, which is comprised of the all actors and is the most connected network among the five networks. The cooperation network is presented in figure 3. A number of things can be perceived by looking at this diagram. While the number of actors in this network remains the same as the networking network, and all of the actors are connected, not every possible connection is present in the

Figure 7-Collaboration Network



network. This is reflected in the number of nodes in the network, 13, as well as the ties between the nodes, 75. There appears to be some differences among the actors in how they are connected. Organization C and I are at the center of the network. However, Organization A is not well connected to the network. The coordination network is presented in Figure 5. In this network, pendants and isolates began to appear. Organization A is disconnected and isolated from the network. Organization L has one out-going tie and no incoming ties. Organization C still remains central to the network as it had in Figure 3, Figure 4, and Figure 5. The coalition network is presented in Figure 6. In this network, there is an increase in the number of actors that disconnected, thereby revealing more pendants and isolates. This is reflected in the number of nodes in the network, 11, as well as the ties between the nodes, 13. This network has two isolates, Organization A and L and 5 pendants, Organizations J, B, D, I and H. The collaboration network is presented in Figure 7. This network is comprised of those organizations that rated their relationship as formal. The collaboration network is the most disconnected among the five networks. The collaboration network has a total of 9 organizations with a total of 9 ties between organizational nodes. This network consists of 5 actors that are disconnected and isolated, A, E, G, L and M. As we look closely at the network diagrams in Figure 3 to Figure 7, we see that some of the ties are reciprocated in the network, but some others are not. A comparison conducted of Figures 3 to 7 reveals that Organization A's interaction within the network is

primarily informal. In Figure 3, Organization A had both incoming and outgoing ties within the network, no incoming ties in Figure 4, and is disconnected and isolated in Figure 5, Figure 6, and Figure 7. This analysis of the networking, cooperation, coordination, coalition, and collaborations networks reveals that as the Level of Collaboration Scale rating increases there are fewer ties in the network, more organizations are disconnected and isolated in the network. This indicates that the nonprofit housing network consists of organizations that interact on an informal basis.

Social Network Analysis

In order to answer the primary research question and sub-research question one, the researcher conducted social network analysis (SNA) using Ucinet 6. SNA is the most suitable method to explore the hidden patterns of interaction. Social network analysis enables one to identify and analyze patterns of various interorganizational relationships. For example, because network analysis can discover who is connected to or isolated from others, it is helpful in revealing patterns of connectivity among organizations (R. Cross & Parker, 2004). This section of the research study is designed to present various features of interorganizational relationships within the nonprofit housing sector. Prior to presenting findings from the analysis of the network studied, it is important to explain the definitions and applications of social network centrality measurements. In order to identify and examine interorganizational relationships in the network of nonprofit housing organizations, the researcher utilized network analysis to obtain the following network centrality measures: degree, closeness, and betweenness. Because the data is asymmetric, the degree measure included results for both in-degree and out-degree and the closeness centrality include results for both in-closeness and out-closeness. A single measure is produced for betweenesss centrality. These three measures attempt to describe and measure

properties of an actor's location in a social network (Wasserman & Faust, 1994). These three measures are generalized to weighted networks. The network of Richmond Nonprofit Housing organizations is a weighted network. It is weighted due to the survey respondent's rating of their relationship with other organizations in the network.

Degree

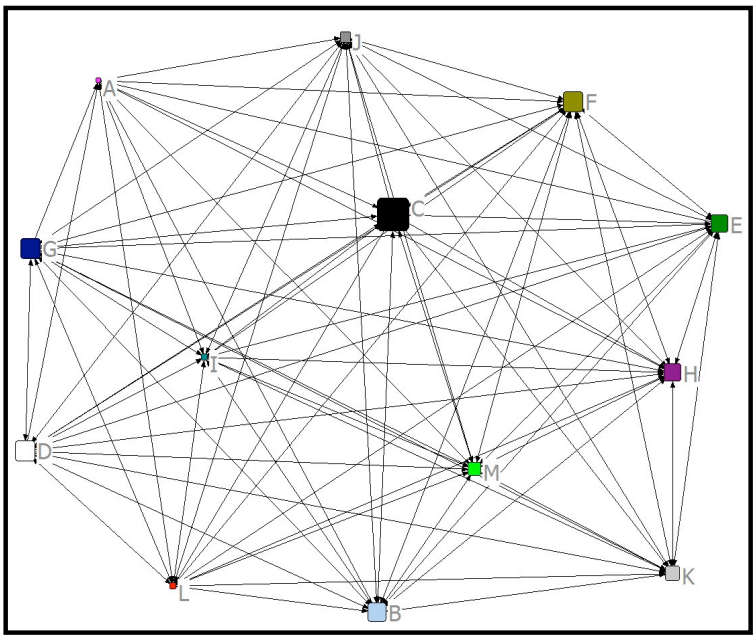
The first measure of centrality, degree measures the extent to which an organization is embedded in the network (Johnson et al., 2010). It takes into account how many immediate ties (i.e., dyadic relations) an actor has in the network. In this dissertation study, the degree centrality measure will not only provide data on the immediate ties that each organization has in the network but also the weight of the ties. The weight of the ties are based on the relationship rating from the Level of Collaboration Scale. Over time, the degree measure has been extended to include the sum of weights when analyzing weighted networks and labeled node strenght (Barrat, et al 2004; Newman, 2004, Opsahl et al 2008). Since node strength takes into consideration the weight of ties, degree is the preferred measure for analyzing weighted networks.

Degree centrality is useful to identify the prominent actor in the network. Actors who have a high degree centrality are considered significant or powerful in the network under the assumption that the more ties an actor has, the more opportunities and alternatives the actor has in their network. As a result, this actor is less dependent on others in the network. Out-degree centrality is the measurement of "how influential the actor may be" (Hanneman, 2001). While the in-degree centrality is the measurement of how prestigious the actor may be. An actor who has a high in-degree value can be said to occupy a prestigious position because other actors want to be known by the actor.

Table 2-Freeman's Degree Centrality Measure

Organization	Out-Degree	In-Degree
A	9	8
B	24	21
C	40	10
D	26	24
E	23	16
F	26	32
G	26	23
H	23	26
I	10	23
J	15	22
K	20	27
L	11	18
M	19	22
Minimum	9	8
Maximum	40	32
Mean	20.92	20.92
Std. Deviation	8.123	6.354

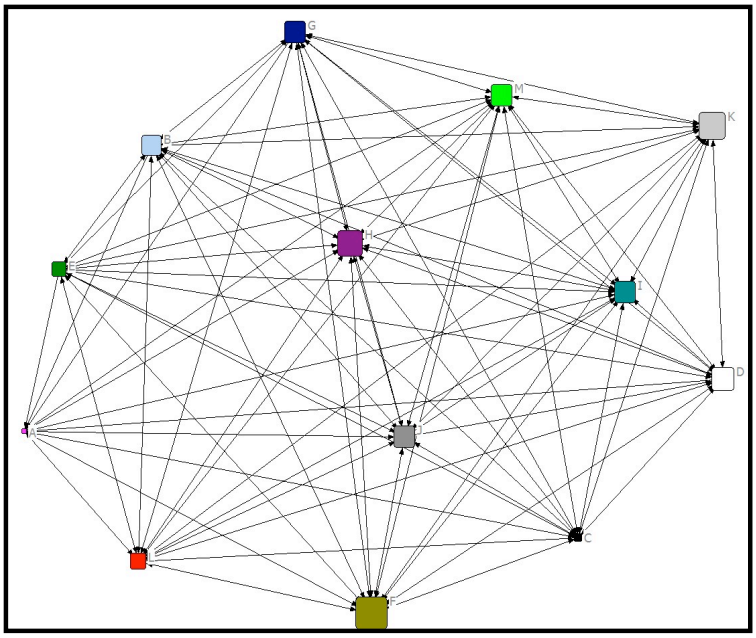
Figure 8-Out-Degree Diagram



The average in-degree for the network is 20.92; this is the same for out-degree. This indicates that on average, each organization has a relationship with another organization in the network, however the ratings for those relationships differ based on the differences in the range of the out-degree which is 9 to 40 and in-degree which is 8 to 32. Organization C has the highest out-degree at 61.5 percent (40 out of 65), and Organization A has the lowest out-degree 13 percent (9 out of 65). This is graphically displayed in Figure 8. The size of the node indicates an organization's out-degree. This may indicates that Organization C can be considered powerful or

significant in the network; however, its in-degree (10) is the second lowest in the network. This indicates that while Organization A perceived its relationships with other actors in the network as more formal on a scale from 0 to 65[2], the other organizations in the network rated their relationship with Organization C as less formal. Organization A has the lowest out-degree and in-degree in the network, which indicates that it is not well connected in the network. This finding is consistent with the earlier analysis and depiction of the network based on the Level of Collaboration Scale on page 70 and 71. The in-degree for Organizations F, H, I, J. L and M is greater than their out-degree indicating that other organizations in the network rated their relationship with these organization higher than they rated their relationship with that organization. Organization I has the greatest disparity between its out-degree and in-degree respectively, 35 percent (23 out of 65) and 15 percent (10 out of 65).

Figure 9-In-Degree Diagram



Closeness

The second measure of centrality, closeness captures how closely an actor is to the rest of the actors in the network, both directly and indirectly. The idea is that if an actor is central it can quickly interact with all others (Wasserman and Faust, 2004). Closeness centrality approaches emphasize the distance of an actor to all others in the network by focusing on the geodesic

[2] Each of the five levels of interaction are coded as (1) Networking, (2) Cooperation, (3) Coordination,(4) Coalition, and (5) Collaboration, the computed Level of Interaction score is a minimum of 0 and a maximum of 65, based on the N=13.

distance from each actor to all others" (Hanneman, 2001). It is computed by counting the number of firms that a focal firm must go through to reach other firms in the network (Freeman, 1979). According to Gulati (1995) firms that have a high closeness centrality are likely to have access to more information about all the possible partners in the network than firms with low centrality Thus, closeness centrality is useful when it comes to the consideration of relationships with all other actors in the network. It is an index of expected time until arrival for a given actor. Actors who have a high degree of closeness centrality are regarded as central under the assumption that "actors who are able to reach other actors at shorter path lengths, or who are more reachable by other actors at shorter path lengths have favored positions" (Hanneman, 2001).

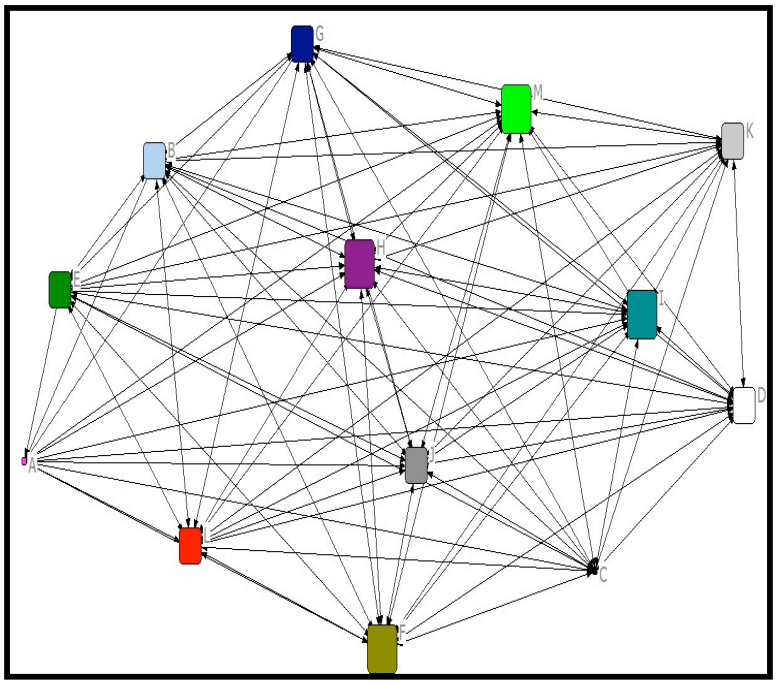
Table 3-Closeness Centrality

Organization	inCloseness	OutCloseness
A	75.00	70.588
B	92.308	100.000
C	75.00	100.000
D	92.308	100.000
E	92.308	100.000
F	100.000	100.000
G	92.308	100.000
H	100.000	85.714
I	100.000	85.714
J	92.308	92.308
K	92.308	85.714
L	92.308	92.308
M	100.000	92.308
Minimum	75.000	70.588
Maximum	100.000	100.000
Std. Deviation	8.013	9.052

N=13

The average closeness for the network is 92.01. Organizations F, H, I and M all have the same Closeness, (100.000). This indicates that those organizations will have a greater power of influence than the other organizations in the network. This is graphically displayed in Figure 10. Traditionally, Organizations A and C have the lowest closeness centrality and can be considered and are considered autonomous from the network. This finding is consistent with data obtained for the degree centrality measure, Organization A had the lowest indegree and outdegree measures in the network and Organization C had the highest outdegree measure and second lowest indegree. For this network the graph in-centralization measure is 18.09 percent and the out-centralization is 17.61 percent, that is, in-distances are more equally distributed than out-distances.

Figure 10-Closeness Diagram



Betweenness

The third and final centrality measure is betweenness. In UCINET, betweenness cannot handle valued data. Therefore, the dataset was converted from valued to binary. The betweenness centrality views an actor as being in a favored position to the extent of that actor falls between the geodesic paths between two pairs of actors in the network. According to Wasserman and Faust (1994) these actors potentially have some control over the interactions between the two

nonadjacent actors (p.188). Therefore, actors who have high betweenness centrality are considered significant or powerful in a network under the assumption that other actors are dependent on that actor to be their connections to more opportunities and alternatives.

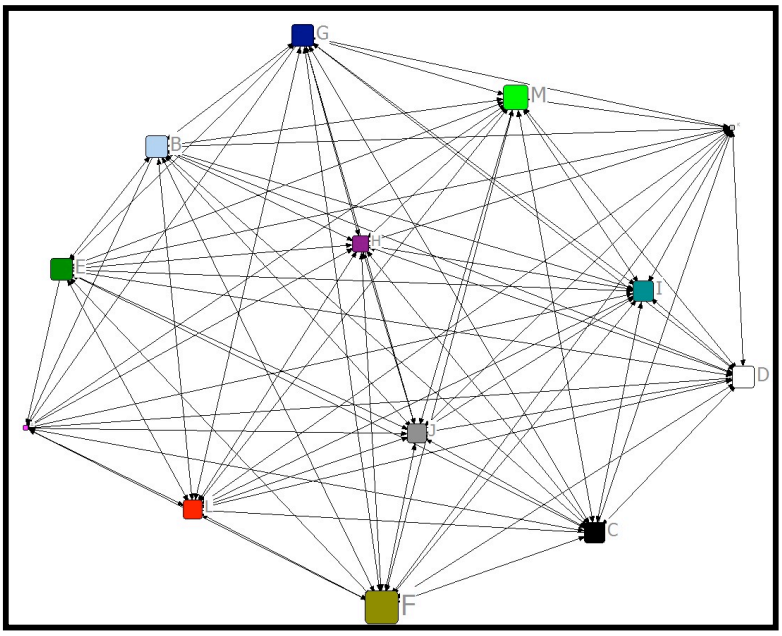
Table 4-Freeman Betweenness Centrality

Organization	Betweenness	nBetweenness
A	.250	.189
B	1.335	1.012
C	1.228	.930
D	1.335	1.012
E	1.335	1.012
F	2.050	1.553
G	1.335	1.012
H	.937	.709
I	1.250	.947
J	1.125	.852
K	.222	.168
L	1.125	.852
M	1.472	1.115
Minimum	.222	.168
Maximum	2.050	1.553
Mean	1.154	0.874
Std. Deviation	.463	.351

N=13

The average betweenness centrality is 1.15. Organization F has the highest betweenness centrality (2.050) in the network. The important idea here is that an actor is central if it lies between other actors on their geodesics, implying that to have a large between centrality, the actor must be between many of their actors via their geodesics (Wasserman and Faust, 1994). This reflects that Organization F is much more central than any of the other actors. Organization M has the second highest betweenness centrality (1.472). This indicates that these two organizations are more central than others in the nonprofit housing network. This is graphically displayed in Figure 11.

Figure 11-Betweenness Diagram



Connections

H1. More established organizations as measured by key organizational characteristics (age, funding diversity, and more in-house resources) would be more connected in the network than less established organizations.

In Table 6, Organization C (40) has the highest Level of Collaboration but is not considered an established organization based on the criteria established for this analysis. For this analysis an established organization is defined as an organization whose score exceeds the mean score for the network for age, funding diversity, and in-house resource (see Table 6 for scores).

Table 5-Mean Scores for Organizational Characteristics

Variable	Mean Score
Age	24.31
Funding Diversity	4.46
Resources	23.08

Organization C has a funding diversity score (3), which is slightly below the mean score of 4.46. In addition, Organizations B, D and F are established organizations with the second highest Level of Collaboration (26). Based on this analysis more established organizations are not more connected in the nonprofit housing network which does not support Hypothesis 1. This will be studied further in the quantitative analysis section of this chapter, the relationship between key organizational characteristics and the Level of Collaboration as measure by the relationship rating.

Table 6-Comparison of Age, Funding Diversity and Level of Collaboration

Organization	Level of Collaboration	Financial Diversity	Age	Resources
A	9	1	13	16
B	24	8	38	32
C	40	3	32	21
D	26	8	25	29
E*	23	3	15	0
F	26	8	25	31
G*	26	3	25	0
H*	23	4	42	0
I	10	3	25	30
J	15	3	21	20
K	20	5	21	32
L	11	6	27	31
M*	19	3	9	0

*Omitted from analysis due to no resources other than funding diversity.

H2. Organizations with females in leadership will have more formal connections than those with men in leadership positions.

The network contains three organizations who have a male executive director and 10 who have a female executive director. Organization C has the highest out-degree centrality and has a female executive director. The organizations with male directors have an out-degree range of 20 to 26. The mean score for the Level of Collaboration differs slightly, female 20.2 and male 23.3.

Organizations D and F (female) and Organization G (male) have the same size nodes. Furthermore, Organizations A, I, J, L, and M nodes are much smaller than the nodes for Organization B which has the lowest out-degree measure. Based on this analysis organizations with females in leadership do not have more formal connections than those with men in leadership positions which does not support Hypothesis 2.

Table 7-Comparison of Gender Diversity and Level of Collaboration

Organization	Female	Male
A	9	
B		24
C	40	
D	26	
E	23	
F		26
G	26	
H	23	
I	10	
J	15	
K		20
L	11	
M	19	
Minimum	9	20
Maximum	40	26

N=13

H3. Organizations with fewer resources will have a higher closeness centrality.

In Table 8, both Organization H (4) and M (3) have a low resource score and the maximum value for the closeness centrality (100.000). Organization E (3) has a low resource score and second highest closeness centrality (92.308). Organizations F has the second highest resource score (39) and the maximum value for the closeness centrality (100.000). Organization B has the highest resource score (40) in the network. The average resource score for the network is 23.07. Based on this analysis organizations with fewer resources do not have a higher closeness centrality which does not support Hypothesis 3. This can be attributed to the finding that an organization with high resources also has a higher closeness centrality.

Table 8-Comparison of Closeness Centrality and Resource Availability

Organization	Closeness	Resources
A	75.00	17
B	92.308	40
C	75.00	24
D	92.308	37
E	92.308	3
F	100.000	39
G	92.308	3
H	100.000	4
I	100.000	33
J	92.308	23
K	92.308	37
L	92.308	37
M	100.000	3

Variables

Dependent Variable

The **Level of Collaboration** variable is the out-degree centrality measure derived from UCINET. The out-degree is the total score for the weighted tie that one organization has with another organization in the network. The range of the out-degree is 9 to 40, average score for the network is 20.9. The value for each tie was adapted from Cross and Parker (2004) study, which used the community linkages matrix by Hogue et al. (1995) was used as an ordinal scale for measuring the strength of interagency linkages. In the community linkage matrix, Networking is the lowest level and collaboration is the highest level. Each of the five levels of linkage, (1) Networking, (2) Alliance, (3) Partnership, (4) Coalition, and (5) Collaboration, is defined by differences in three dimensions—purpose, structure, and roles. One additional level was added, 0, to represent agencies that have no regular contact or relationships. A rating of 0 identifies that the two agencies coexist in the community network and that they have no established relationship (Borgatti & Foster, 2003; Frey, Lohmeier, Lee, & Tollefson, 2006) .

Independent Variables

Organizational characteristics are variables that ascertain basic demographic information about the organization. **The Age of Organization** variable was calculated from the year the organization was founded. **The Size of Organization** was calculating by adding the number of full-time and part-time employees. **Gender diversity-** is the percentage of females to total employees. This variable was calculated into a number by multiplying the percentage and total number of employees for an actual number.

Organizations in part form relationships with one another to manage uncertainties. The uncertainties they are concerned with are not just limited to uncertainties of resources but also uncertainty in the communities in which they operate. Large changes in the number of people they need to serve, the types of services that will be demanded or even the transience of their client base all have impacts on nonprofits operations. Galaskiewicz and Shatin (1981) found that organizations were more likely to form ties with other organizations when faced with a turbulent environment. It can be argued the same pressures affect nonprofit organizations

Environmental Conditions

Environmental Conditions a group of variables designed to obtain data on housing conditions, advocacy efforts and level of government, and problems with funding or financing for operations or projects. **Housing conditions** is the calculated total of housing conditions selected by the organization in their response to Question 10. **Advocacy efforts and levels of government** is the total score for advocacy efforts for organizations each level of government has a different value in the calculation. **Problems with funding** is the calculated total of funding problems designed to obtain data on common problems with funding and an organization's degree of difficulty.

Resources Availability

Resource Availability is a group of variables to obtain data on an organization's resources. For this research, the **Diversity in funding** was calculated to total the number of funding sources for each organization. **Construction Management** was calculated to obtain data on the availability of in-house resources. **Project Management** was calculated to obtain data on the availability of in-house project management resources.

Quantitative Results

The researcher developed a codebook for survey questions. A codebook is a document (describing the coding procedures and location of data for variables in a format that is for a computer (Neuman, 2004). All quantitative analysis was conducted using the SPSS (Version 21) statistical software package. Correlations Analysis was conducted to answer the following sub-research questions.

1. What organizational characteristics (age, size, and gender diversity) influence the Level of Collaboration?
2. What environmental conditions (housing conditions, advocacy efforts, and problems with funding) influence the Level of interaction?
3. What resources availability (construction and project management capacity, and diversity in funding) characteristics influence the Level of interaction?
4. To what extent do actual types of interaction correlate with perceived levels of interaction?

Hypotheses

Organizational Characteristics

H4. Age will have a greater influence on the Level of Collaboration than environmental conditions and resource availability

H5. Size will have a greater influence on the Level of Collaboration than environmental conditions and resource availability

H6. Gender diversity will have a greater influence on the Level of Collaboration than Environmental Conditions and Resource Availability

Environmental Conditions

H7. Housing conditions will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

H8. Advocacy efforts will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

H9. Problems with funding will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability.

Resource Capacity

H10. Diversity in funding will have a greater influence on the Level of Collaboration than Organizational characteristic and environmental conditions

H11. Construction Management will have a greater influence on the Level of Collaboration than organizational characteristics and environmental conditions

H12. Project management will have a greater influence on the Level of Collaboration than organizational characteristics

Interorganizational Relationships

H13. There is a difference between an organization's perceived level of interaction, as measured by the Collaboration Scale and actual types of interaction as measured by question 18.

Correlation Analysis

Pearson's product-moment correlation coefficient was selected as the most appropriate statistical technique to study the relationship of selected organizational characteristics on the Level of Collaboration, because of its ability to measure the association between variables, and the size and direction of the relationship between the variables. It is the most appropriate statistical

Table 9 -Correlation of the Level of Collaboration and age of organization, environmental conditions, and resource availability

		Level of Collaboration	Age of Organization	Environmental Conditions	Resource Availability
Level of Collaboration	Pearson Correlation	-	.380	.345	-.070
	Sig. (2 tailed)		.200	.248	.819
Age of Organization	Pearson Correlation	.380	-	.684**	.297
	Sig. (2 tailed)	.200		.010	.325
Environmental Conditions	Pearson Correlation	.345	.684**	-	.465
	Sig. (2 tailed)	..248	.010		.109
Resource Availability	Pearson Correlation	-.070	.297	.465	-
	Sig. (2 tailed)	.819	.325	.109	

**Significant at the P<0.01 level (2-tailed)

H4. Age will have a greater influence on the Level of Collaboration than environmental conditions and resource availability

Pearson's rank order correlation was examined to determine if a relationship existed between the identified variables (see Table 9). A positive relationship was found to be present between the Level of Collaboration and the age of organization (r=.380). However, it is not statistically significant. Therefore, Hypotheses 4 is not supported. However, the age of organization does have higher coefficient with the Level of Collaboration than environmental conditions and resource availability. In the Foster and Meinhard (2002) study, they found that an organization is more likely to increase the degree of formality of its collaborative activities when it is older. In their study, Guo and Acar (2005) found that an older organization is more likely to develop formal types of collaborations with other nonprofits. In their study [age] had a positive significant coefficient, suggesting that the age of an organization is positively associated with the likelihood that it will develop formal types of collaborative activities. This dissertation study finding is consistent with findings from these previous studies in that the relationship between the Level of Collaboration and the age of organization is positive. Furthermore, the correlation

analysis revealed that there is a significant positive relationship (r=.684) between age of organization and environmental conditions, moreover an inverse relationship was found between Level of Collaboration and resource availability (r=-.070).

Table 10-Correlation of the Level of Collaboration and size, environmental conditions and resources availability

		Level of Collaboration	Size of Organization	Environmental Conditions	Resource Availability
Level of Collaboration	Pearson Correlation	-	.208	.345	-.070
	Sig. (2 tailed)		.495	.248	.819
Size of Organization	Pearson Correlation	.208	-	.276	.519
	Sig. (2 tailed)	.495		.362	.069
Environmental Conditions	Pearson Correlation	.345	.276	-	.465
	Sig. (2 tailed)	.248	.362		.109
Resource Availability	Pearson Correlation	-.070	.519	.465	-
	Sig. (2 tailed)	.819	.069	.109	

H5: Size will have a greater influence on the Level of Collaboration than environmental conditions and resource availability

Pearson's rank order correlation was examined to determine if a relationship existed between the identified variables (see Table 10). A positive relationship was found to be present between the Level or Collaboration and size of organization (r=.208). However, it is not significant. Therefore, Hypotheses 5 is not supported. The size of organization has a weaker relationship with the Level of Collaboration than environmental condition and resource availability. In addition, the correlation analysis did reveal that there is a negative relationship (r=.-070) between the Level of Collaboration and resource availability.

Table 11-Correlation of Level of Collaboration and gender diversity, environmental conditions and resources availability

		Level of Interaction	Gender Diversity	Environmental Conditions	Resource Availability
Level of Interaction	Pearson Correlation	-	.251	.345	-.070
	Sig. (2 tailed)		.408	.248	.819
Gender Diversity	Pearson Correlation	.251	-	.248	.513
	Sig. (2 tailed)	.408		.414	.073
Environmental Conditions	Pearson Correlation	.345	.248	-	.465
	Sig. (2 tailed)	.248	.414		.109
Resource Availability	Pearson Correlation	.-.070	.513	.465	-
	Sig. (2 tailed)	.819	.073	.109	

Hypothesis 6, Gender diversity will have a greater influence of the Level of Collaboration than environmental conditions and resource availability

Pearson's rank order correlation was examined to determine if a relationship existed between the identified variable (see Table 11). A positive relationship was found to be present between the Level of Collaboration and gender diversity (r=.251). However, the relationship is not statistically significant. Therefore Hypothesis 6 is not supported. However, gender diversity has a weaker relationship with the Level Collaboration than environmental conditions (r=.345) and stronger relationship than resource availability (-.070).

Table 12- Correlation of Level of Collaboration and organizational characteristics, housing conditions, resource availability

		Level of Collaboration	Size	Age of Organization	Resource Availability	Housing Conditions
Level of Collaboration	Pearson Correlation	-	.208	.308	-.070	.205
	Sig. (2 tailed)		.495	.200	.819	.501
Size	Pearson Correlation	.208	-	.481	.519	-.210
	Sig. (2 tailed)	.495		.096	.069	.491
Age	Pearson Correlation	.380	.481	-	.297	.182
	Sig. (2 tailed)	.200	.096		.325	.553
Resource Availability	Pearson Correlation	-.070	.519	.297	-	-.010
	Sig. (2 tailed)	.819	.069	.325		.975
Conditions	Pearson Correlation	.205	-.210	.182	-.010	-
	Sig. (2 tailed)	.501	.491	.553	.975	

H7: Housing conditions will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

Pearson's rank order correlation was examined to determine is a relationship existed between the identified variables (see Table 12). A positive relationship was found to be present between the Level of Collaboration and Housing Conditions (r-.205). However, the relationship is not statistically significant. Therefore Hypothesis 7 is not supported. Housing Conditions does not have the higher coefficient with Level of Collaboration. The size of organization (r=208) and age of organization (r=.380) both have a higher coefficient, while resource availability has a negative coefficient. (r=.-070).

Table 13-Correlation of Level of Collaboration and organizational Characteristics, advocacy efforts, resource availability

		Level of Collaboration	Size	Age	Advocacy	Resource Availability
Level of Collaboration	Pearson Correlation	-	.208	.380	.205	-.070
	Sig. (2 tailed)		.495	.200	.504	.819
Size	Pearson Correlation	.208	-	.481	.438	.519
	Sig. (2 tailed)	.495		.096	.135	.069
Age	Pearson Correlation	.380	.481	-	.438	.297
	Sig. (2 tailed)	.200	.096		.135	.325
Advocacy	Pearson Correlation	.204	.438	.438	-	.152
	Sig. (2 tailed)	.504	.135	.135		.619
Resource Availability	Pearson Correlation	-.070	.519	.297	.152	-
	Sig. (2 tailed)	.819	.069	.325	.619	

H8: Advocacy efforts will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

Pearson's rank order correlation was examined to determine is a relationship existed between the identified variables (see Table 13). A positive relationship was found be present between Level of Collaboration and Advocacy (r=.205). However, it is not statistically significant. Therefore Hypothesis 8 is not supported. Advocacy does not have the higher coefficient with the Level of Collaboration. Both age of organization (r=.380) and size of organization (r=208) have higher coefficients.

Table 14-Correlation of the Level of Collaboration and organizational characteristics, funding problems, and resource availability

		Level of Collaboration	Size	Age of Organization	Resource Availability	Funding Problems
Level of Collaboration	Pearson Correlation	-	.208	.380	-.070	.303
	Sig. (2 tailed)		.495	.200	.819	.315
Size	Pearson Correlation	.208	-	.481	.519	.196
	Sig. (2 tailed)	.495		.096	.069	.522
Age	Pearson Correlation	.380	.481	-	.297	.663*
	Sig. (2 tailed)	.200	.096		.325	.014
Resource Availability	Pearson Correlation	-.070	.519	.297	-	.602*
	Sig. (2 tailed)	.819	.069	.325		.029
Funding Problems	Pearson Correlation	.303	.196	.663*	.602*	-
	Sig. (2 tailed)	.315	.522	.014	.029	

*Significant at the P<0.01 level (2-tailed)

H9: Problems with funding will have a greater influence on the Level of Collaboration than organizational characteristics and resource availability

Pearson's rank order correlation was examined to determine if a relationship existed between the identified variable (see Table 14). A positive was found to present between Level of Collaboration and Funding Problems. However, it is not statistically significant. Therefore Hypothesis 9 is not supported. However, funding problems does not have the higher coefficient with the Level of Collaboration. Age of Organization has the higher coefficient between the identified variables. In addition, the correlation analysis did reveal that there is a significant positive relationship between funding problems and age of organization (r=.663) and resource availability (r=602).

Resource Capacity

Table 15-Correlation of the Level of Collaboration and organizational characteristics, funding diversity, environmental conditions

		Level of Collaboration	Size	Age of Organization	Environmental Conditions	Funding Diversity
Level of Collaboration	Pearson Correlation	-	.208	.380	.345.	.255
	Sig. (2 tailed)		.495	.248	.245	.400
Size	Pearson Correlation	.208	-	.481	.276	.736**
	Sig. (2 tailed)	.495		.096	.362	.004
Age	Pearson Correlation	.208	.481	-	.684**	.450
	Sig. (2 tailed)	.345	.096		.010	.123
Environmental Conditions	Pearson Correlation	.248	.276	.684**	-	.463
	Sig. (2 tailed)	.255	.362	.010		.111
Funding Diversity	Pearson Correlation	.255	.736**	.450	.463	-
	Sig. (2 tailed)	.0400	.004	.123	.111	

*Significant at the P<0.01 level (2-tailed)

H10: Diversity in funding will have a greater influence on the Level of Collaboration than organizational characteristic and environmental conditions

Pearson's rank order correlation was examined to determine is a relationship existed between the identified variables (see Table 15). A positive relationship was found to be present between Level of Collaboration and Diversity in Funding (r=255). However, the relationship is not statistically significant. Therefore Hypothesis 10 is not supported. However, diversity in funding does not have the higher coefficient with Level of Collaboration. Age of organization (r=.380) and environmental conditions (r=.345) each have a higher coefficient. Size of organization has a lower coefficient (r=.208). In addition, funding diversity has a significant positive (r=736) relationship with size of organization.

Table 16- Correlation of the Level of Collaboration and organizational characteristics, environmental conditions and construction resources

		Level of Collaboration	Size	Age of Organization	Environmental Conditions	Construction Resources
Level of Collaboration	Pearson Correlation	-	.208	.380	.345	-.033
	Sig. (2 tailed)		.495	.200	.248	.914
Size	Pearson Correlation	.208	-	.481	.276	.466
	Sig. (2 tailed)	.495		.096	.362	.109
Age	Pearson Correlation	.380	.481	-	.684**	.275
	Sig. (2 tailed)	.200	.096		.010	.364
Environmental Conditions	Pearson Correlation	.345	.276	.684**	-	.467
	Sig. (2 tailed)	.0248	.362	.010		.107
Construction Resources	Pearson Correlation	-.033	.466	.275	.467	-
	Sig. (2 tailed)	.914	.109	.364	.107	

*Significant at the P<0.01 level (2-tailed)

H11: Construction Management will have a greater influence on the Level of Collaboration than organizational characteristics and environmental conditions

Pearson's rank order correlation was examined to determine if a relationship existed between the identified variables (see Table 16). An inverse relationship was found between the Level of Collaboration and Construction Management resources. (r=.-033) However, the relationship is not statistically significant. Therefore Hypothesis 11 was not supported. Age of organization, size of organization, and environmental conditions all have a higher coefficient with the Level of Collaboration.

Table 17-Correlation of the Level of Collaboration and project management, organizational characteristic, and environmental conditions

		Level of Collaboration	Size	Age of Organization	Environmental Conditions	Project Management Resources
Level of Collaboration	Pearson Correlation	-	.208	.380	.345	-.188
	Sig. (2 tailed)		.495	.200	.248	.538
Size	Pearson Correlation	.208	-	.481	.276	.424
	Sig. (2 tailed)	.495		.096	.362	.149
Age	Pearson Correlation	.380	.481	-	.684**	.242
	Sig. (2 tailed)	.200	.096		.010	.426
Environmental Conditions	Pearson Correlation	.345	.276	.684**	-	.416
	Sig. (2 tailed)	.248	.362	.010		.158
Project Management Resources	Pearson Correlation	-.188	.424	.242	.416	-
	Sig. (2 tailed)	.538	.149	.426	.158	

*Significant at the P<0.01 level (2-tailed)

H12: Project Management will have a greater influence on the Level of Collaboration than organizational characteristics and environmental conditions

Pearson's rank order correlation was examined to determine if a relationship existed between the identified variables (see Table 17). An inverse relationship was found between the Level of Collaboration and project management resources. (r=-.188) However, the relationship is not statistically significant. Therefore Hypothesis 12 is not supported. Age of organization, size of organization, and environmental conditions all have a higher coefficient with the Level of Collaboration.

Interorganizational Relationships

H13: There is a difference between an organization's perceived level of interaction, as measured by the Level Collaboration Scale and actual types of interactions.

In order to determine if there is a difference between an organization's perceived Level of Collaboration Scale categories and actual types of interorganizational relationships, the researcher conducted an analysis to determine if survey participants selected the category that best describes the actual type of interorganizational relationship. The survey responses are displayed in Table 15. The interorganizational relationships for this dissertation stemmed from previous research studies. In their research study, Kohm, La Piana, and Gowdy (2000) suggested that nonprofit organizations work together in three ways. In order of decreasing autonomy and increasing formality, they range from collaboration (information sharing, program coordination, and joint planning), through alliances (administrative consolidation and joint programming), to integrations (management service organization [MSO], parent subsidiary, joint venture, and merger). In a similar vein, Guo and Acar (2005) collapsed them into two major categories: informal collaboration (information sharing, referral of clients, sharing of office spaces, and MSO) and formal collaboration (joint program, parent subsidiary, joint venture, and merger). This dissertation study identified eleven types of interorganizational relationships: formal contract, joint advocacy, share staff, information exchange, send or receive referrals, share workspace, joint program development, joint recruitment of staff/volunteers, joint procurement of good and services, share equipment, and joint fundraising. Below are the results of the analysis conducted to determine if participants selected the most appropriate category.

1. Formal Contract- a formal contract is made legally enforceable by following a prescribed format, and by incorporating standardized conditions and provisions in its

body. Based on this definition, a formal contract is considered to be a type of collaboration. In this dissertation study, slightly more than fifty percent of participants selected collaboration.

2. Joint advocacy - advocacy involves identifying, embracing and promoting a cause. Advocacy is an effort to shape public perception or to effect change that may or may not require legislation. Based on this definition, joint advocacy is considered to be type of coalition. In this dissertation study, slightly more than fifty percent of the participants selected coalition.
3. Share staff- typically aimed at increasing efficiency, and includes formal agreement for contracting, exchanging, or sharing services. Organizations involved in administrative consolidations share decision-making powers. Based on this definition, share staff is considered to be type of collaboration. In this dissertation study, slightly more than fifty percent of the participants selected collaboration.
4. Information exchange- communicating for a common understanding and clearinghouse for information. Based on this definition, information exchange is considered to be type of networking. In this dissertation study, slightly more than two-thirds of the participants selected networking.
5. Send or receive referrals -this is to direct to a source for help or information or receive a request for help or information. Based on this definition, send or receive referrals is considered to be type of cooperation. In this dissertation study, slightly more than forty percent of the participants selected cooperation.
6. Share workspace-, typically aimed at increasing efficiency, and includes formal agreement for contracting, exchanging, or sharing services. Organizations involved in administrative consolidations share decision-making powers. Based on this definition, share staff is considered to be type of collaboration. In this dissertation study, slightly more than fifty percent of the participants selected collaboration.
7. Joint program development-, restructuring where organizations share the launch and management of one or more programs. Organizations involved in joint programming share decision-making powers for the program while maintaining their independence in managing their own programs. Based on this definition, joint program development is

considered to be type of coordination. In this dissertation study, slightly less than twenty percent of the participants selected coordination.

8. Joint recruitment of staff/volunteers – restructuring where organizations share the launch and management of one or more programs. Organizations involved in joint programming share decision-making powers for the program while maintaining their independence in managing their own programs. Based on this definition, joint recruitment of staff/volunteers is considered to be type of coordination. In this dissertation study, none of the participants selected coordination.
9. Joint procurement of goods and services- restructuring where organizations share the launch and management of one or more programs. Organizations involved in joint programming share decision-making powers for the program while maintaining their independence in managing their own programs. Based on this definition, procurement of goods and services is considered to be type of coordination. In this dissertation study, none of the participants selected coordination.
10. Share equipment-typically aimed at increasing efficiency, includes formal agreement for contracting, exchanging, or sharing services. Organizations involved in administrative consolidations share decision-making powers. Based on this definition, share equipment is considered to be type of collaboration. In this dissertation study, slightly more than fifty percent of the participants correctly selected collaboration.
11. Joint fundraising- restructuring where organizations share the launch and management of one or more programs. Organizations involved in joint programming share decision-making powers for the program while maintaining their independence in managing their own programs. Based on this definition, joint fundraising is considered to be type of collaboration. In this dissertation study, slightly over eighty percent of the participants selected collaboration.

Table 18-Survey Responses to Question 18

	Networking	Cooperation	Coordination	Coalition	Collaboration
Formal Contract		1 (9.1 percent)	3 (27.3 percent)	1 (9.1 percent)	6 (54.5 percent)
Joint Advocacy		2 (18.2 percent)	2 (18.2 percent)	6 (54.5 percent)	1 (9.1 percent)
Share Staff		2 (18.2 percent)	3 (23.7 percent)		6 (54.5 percent)
Information Exchange	8 (66.7 percent)	3 (25.0 percent)		1 (8.3 percent)	
Send or Receive Referrals	3 (27.3 percent)	5 (45.5 percent)	2 (18.2 percent)	1 (9.1 percent)	
Share Workspace		1 (10 percent)	5 (50 percent)	2 (20 percent)	2 (20 percent)
Joint program development	2 (18.2 percent)		2 (18.2 percent)	2 (18.2 percent)	5 (45.5 percent)
Joint Recruitment of Staff/Volunteers	1 (10 percent)	1 (10 percent)		3 (30 percent)	5 (25 percent)
Joint procurement of goods and services	1 (10 percent)	1 (10 percent)		3 (30 percent)	6 (50 percent)
Share Equipment		3 (30 percent)		4 (40 percent)	3 (30 percent)
Joint Fundraising		1 (9.1 percent)	1 (9.1 percent)		9 (81.8 percent)

Overall, network organizations selected the correct category seven out of eleven activities (63.3 percent). Out of the remaining four activities, the correct category was not selected for joint recruitment of staff/volunteer, joint program development, and joint procurement of goods and services and less than 50 percent selected the correct category for share equipment. Therefore, this dissertation study has failed to reject the null hypothesis and thereby reject hypothesis 13.

Table 19-Comparison of Hypothesized Relationships of Study Variables to Observed Relationships for Correlation Analysis Utilizing Level of Collaboration Scale

Variables	Predicted Relationship	Observed Relationship
Age of Organization	Positive	Moderate Positive
Size of Organization	Positive	Weak Positive
Gender Diversity	Positive	Moderate Positive
Environmental Conditions	Positive	Moderate Positive
Housing Conditions	Positive	Weak Positive
Advocacy Efforts	Positive	Weak Positive
Problems with Funding	Positive	Moderate Positive
Resource Availability	Positive	Weak Negative
Diversity in Funding	Positive	Weak Positive
Construction Management Resources	Positive	Weak Negative
Project Management Resources	Positive	Weak Negative

As displayed in Tables 9 to Table 17, none of the variables in the model came close to obtaining statistical significance and, therefore, none of the hypotheses were supported. Table 19 presents a summary of the hypothesized direction of the variables included in the model compared to the findings of the analysis.

Qualitative Data Analysis

Twelve interviews were conducted for this dissertation study. Interviews were conducted from April to May 2013. Each interview lasted approximately 45 minutes to 1 hour. This research employed the inductive process to analyze the qualitative data to shift from specific responses from the participants to the identify themes that were centered on the benefits and drawbacks of collaboration, as well as the challenges of establishing and maintaining relationships with other organizations. NVivo 10 software was used for qualitative analysis.

The qualitative analysis was a multi-step process. The first step entailed transcribing each of the tape-recorded interviews. The transcriptions include all hand-written notes taken during the interview. Transcribing interviews occurred on an on-going basis throughout the qualitative

data collection process. Upon the completion of each interview the tape-recording was transcribed. This provided the researcher the opportunity to reflect on the interview responses and began to identify and categorize any emerging themes. As discussed earlier in Chapter 3, the primary themes for the qualitative interviews centered on the participant's attitudes and perception of collaboration. Therefore, the interview questions were designed to obtain qualitative data from the participants on the following themes: drawbacks to collaboration and challenges to establishing and maintaining relationships. These themes were entered into NVivo to create nodes. The next step involved importing the transcripts into NVivo. Relationship nodes were created in NVivo to identify categories that had a relationship with the theme nodes. The following categories were identified as being either predominant in all of the interview transcripts or across several transcripts (see Table 16). The qualitative data was grouped into these categories using NVivo to enable the researcher to compare statements made by participants. These results were analyzed in the context of findings from the network and quantitative analysis results and findings.

This section offers a description of the attitudes of executive directors and senior level management and their perceptions about the benefits and drawbacks of collaboration, as well as challenges of maintaining and establishing relationships. The same interview protocol was used for each interview. Participants were asked a series of questions related to collaboration. The following are major categories explored in further detail:

Table 20-Qualitative Themes with Corresponding Categories/Nodes

Themes	Categories/Nodes
Benefits	Experience/Expertise Resources
Drawbacks	Time Personalities
Challenges establishing/maintaining relationships	Time Personal Characteristics 1. Personalities 2. Trust Communication Trust Expectations

Theme: Benefits of Collaboration

The participant's comments regarding benefits of collaboration referred primarily to experience/expertise and resources. These were the most prominent categories. They viewed collaboration as a way to share tangible and intangible resources. While the participants did identified additional categories of benefits of collaboration, many were too broad to create a separate category/node. However, those statements were utilized in the qualitative analysis because they were important in understanding the participant's attitudes and perceptions regarding the benefits of collaboration.

Resources. Participants reported that collaboration allows them an opportunity to share with and receive resources from other organizations. Discussion items for this category centered on both tangible and intangible resources, such as access to funding sources. During the qualitative analysis of resources it was evident that participants' felt that they gain considerable knowledge based on the shared experiences and expertise of other organizations. As a result expertise and experience are a sub-category of resources.

> I think the first benefit I can see relates to not replicating the same services to be provided. You know we all develop certain niches and specialties in a providing affordable housing and the services that go along with them and I think that replicating the same think over again and again is a waste of community resources and a waste of effort. *Representative from Organization D*

> The first would be a just from a planning benefit and that we all have different sets of eyes and see different challenges and opportunities and your know by talking over your own plans I think they get much better informed when I have been able to talk things over with the other nonprofits. *Representative from Organization H*

Comments were also made regarding the impact of working together

> Wonderful benefits it's just like what I always says about the [another organization] a group can make a more powerful impact than one person. *Representative from Organization L*

> Well I think benefits are that you bring together a group of people that have a shared passion and shared mission broadly defined on affordable housing. *Representative for Organization M*

Sub Category: Experience/Expertise. Participants reported that collaboration allowed them to not only share their experience and expertise with other organizations but also learn from them. As discussed earlier in this chapter, this network consists of organizations who interact on an informal basis, networking and exchanging information. The general consistency of the comments suggested that participants find value in other's experiences whether they are good or bad.

> Because we don't need to reinvent the wheel. If we were trying to do project and it didn't work out and we can share that experience with someone else and prevent them from wasting money and time. You know just that sort of exchange information and experience. I think has value because these are some hard tasks. *Representative from Organization D*

> The benefits are that we can do a better job if we don't go at it blind without knowing what the others are doing what we excel at where we can be additive to what the other organizations are doing. *Representative from Organization J*

> That some economies of scales have been achieved….finance department or human resources sharing consultant who has expertise in one of those areas. *Representative for Organization D*

> To those the other ways I would reach out to nonprofits if they can add to the program some way by offering their expertise. *Representative from Organization J*

> Benefits are shared expertise and you learn from other colleagues that have potentially more or different perspectives and you learn. *Representative from Organization H*

> I think the relationships has benefits that go long term so not just expertise but to having the relationship, the building of relationships has all kinds of benefits for the staff involved in organizations for leadership networking it helps also for funders to know that you collaborate and have good relationships with other organizations. So I see lots of benefits and positives to having working relationships. Representative from Organization K

> I think the first benefit I can see relates to not replicating the same services to be provided. *Representative from Organization B*

This participant felt that the benefit of experience is a doubled-edge sword because in a couple of years many of the organizations will experience a change in leadership due to retirements

> One of the benefits we have really experienced leadership, one of the drawbacks is that leadership core is all going to be retiring within about 5 years. You have TK, Alice, Dianna, and probably me in 5 years. One of the other benefits of having longtime relationships with folks. *Representative from Organization G*

One participant shared an example of collaborating with an organization based on their expertise or niche.

> We did not really have the know-how or capacity to run a child care center so we actually kind of partnered with someone who had expertise. *Representative from Organization F*

Other Benefits

> The biggest benefits right off has been increased understanding of housing groups about the needs of people with extremely low incomes. *Representative from Organization E*

> Well there are some benefits because were as our nonprofit we hire contractors that we may you know actually contract a nonprofit that may can actually develop or build the product we need a little bit cheaper than a fort profit contractor, so that could be a benefit. *Representative from Organization I*

> You know so when I started I have been with [my organization] for ten years and when I started the housing organizations were like homeless is a separate issue and because I have been a part of some of the coordinating we have really seen that it is a housing needs, it is just a very specific so that has been the biggest benefit**.** *Representative for Organization E*

Theme: Drawbacks to Collaboration.

Participant responses to the drawbacks to collaboration identified two categories, time and personalities as the most prominent. During the qualitative analysis, the data revealed that there was an overlap between the two drawbacks to collaboration identified by participants, time and personalities with the challenges to establishing and maintaining relationships. Research has revealed that drawbacks that concern partners include the diversion of time and resources from their other priorities and obligations (Lasker, et al 2001). Therefore, the drawbacks will be discussed in the context of establishing and maintaining relationships.

While time and personalities were seen as drawbacks to collaboration, one participant felt otherwise.

> To me there are no drawbacks–*Representative from Organization J*

Discussion items for this theme encompassed resources in a negative way because as they continue to decline, competition is a drawback of collaboration.

> Working with nonprofit that do community development we are all competing against each other It's a drawback because each nonprofit may have a way of doing different ways different you know we develop homes or how we handle our clientele even trying to market to the people to purchase the homes because ultimately the nonprofit needs to survive so everyone if after the same money. Representative of *Organization I*

> So I think the drawback if we continue to lose resource it is going to pit the groups we serve against one another its likes rats in cage. *Representative from Organization G*

Theme: Challenges to Establishing and Maintaining Relationships

Several issues were raised by participants in terms of barriers to establishing and maintaining relationships. Barriers discussed by them include time, personalities, trust, communication and expectation. These were the most prominent categories identified. An interesting finding during the qualitative analysis is that two of the categories require a change in behavior; personalities and trust. However, in terms of participant's experiences and expectations, the general consensus was that there were opportunities available to establish and maintain relationships. Many of the executive directors do not actively participate in the bi-monthly meetings of the Richmond Community Development Alliance (RCDA), which is hosted by the Partnership for Housing Affordability. RCDA is a trade association that hosted by the Partnership for Housing Affordability. Middle managers from the larger organizations attend RCDA meetings and executive directors of smaller organizations attend the meetings. This was

> In Richmond, some of the challenges I think RCDA was strong it was very strong and impactful when we became something that junior staff it lost you didn't have decision makers at the table for any collaboration to be effective you need the decision makers around the table. *Representative from Organization G*

Time. The participants reported that establishing and maintaining relationships was very important, but time consuming. Their comments referred primarily to time as a challenge.

> Time, not enough hours in the day. *Representative from Organization J*

> The drawback it is time consuming anytime you want to do a collaborative effort rather than a top down. *Representative from Organization M*

> So we kind of took a long time to really forge an agreement with [this organization] outlining what our clients' needs were, what our tenants needs were *Representative from Organization F*

> I would think some of the challenges are just time and communication *Representative from Organization J*

Comments were also made that spoke to the importance of the awareness of other organizations.

> It is a learning process and the time it takes to finding out who you should be talking to *Representative from Organization J*

> For me it is just taking and having the time to get to know other organizations and the people that are running especially. *Representative from Organization A*

> Some of the challenges with establishing is really clearly defining who is in the space, we talked about this years ago- *Representative from Organization M*

In addition, many felt that meeting in a large group setting is beneficial, because it provided network members with opportunities to establish and maintain relationships with network members. They believed that this was a more efficient use of their time.

In general participants expressed the importance of RCDA and the important role it plays of keeping them connected and informed.

> I would say it always limited by the time you have available to be doing that to have face to face meeting to have a substantive conversation with a number of people at once, actually getting the meetings together and having it be a priority with one. We have solved a lot of that with our relationship with RCDA.
> *Representative from Organization J*

> Time to spend with all potential partners and relationships needed but networking at things like RCDA, having coffee once a month with some of my peers who both taught me more about the housing world-*Representative for Organization L*

> The group comes together for example RCDA every other month had no staff so everybody goes back to their day jobs which has to be their priority and you get back two months later and every one had good intentions about doing that they would do what they said they were going would do but their day job got top billing. So whatever they were going volunteered to do for the collaborative process got pushed to the side. So I think time is real difficultly- *Representative from Organization M*

> In a lot different ones we try to do a lot of networking so we go to RCDA, we go to the meeting where we feel like it is important to share what we are doing and hear what others are doing . *Representative from Organization K*

One participant expressed frustration with their inability to actively participate in RCDA.

> "I just use myself as an RCDA is a perfect organization in which to interact and you have regular meetings to find out what's other people going for two years I have barely been able to attend one meeting because of I'm too busy off developing so it's not helping [my organization] maintain relationships at my level so that there is the potential for more collaboration." *Representative from Organization D*

> There are other opportunities besides RCDA and I find I do better establishing relationship and maintaining in smaller groups. *Representative from Organization*

Additionally, participants made comments that spoke to a general sense of the importance of establishing and maintaining relationships. In contrast to the tone of the discussion that centered primarily on time, with respect to participants experiences in maintaining relationships, further discussion did reveal that some members of the network are finding time to maintain relationships. However, this is a small sub-group of the network.

> "I maintain individual relationship so I will meet with Jane Helfrich once a month for 45 minutes to just check in with Habitat and try and meet with T.K. quarterly either formally or informally. We have informal social network, we do happy hour every now and then and then the conference and we try to go to each other's events".

Communication. Discussion items for this category centered on communication in two different aspects: the lack of communication and unclear communication. Stegelin and Jones (1991) identified lack of communication and unclear goals and objectives as factors that inhibit the success of collaboration.

> The downside that I'm most familiar with completing the communication loop keeping each other well informed of our status and progress. If we inquire for a client for a particular need sometimes it is very difficult to find out what happened or assist with the application. *Representative from Organization J*

> I would think some of the challenges are just time and communication. *Representative from Organization J*

> The drawbacks are unless these really formal arrangement and agreements sometimes it's very hard to hold partners responsible so we just need to kind of be aware of those types of communication issues and making sure that the working agreements are clearly spelled out as to the responsibilities of each partner so that we can really keep all confusion to the minimum. *Representative of Organization F*

Personal Characteristics: Personal characteristics relevant to interdisciplinary collaboration include the ways collaborators view each other as people, outside of their professional role. Mattessich and Monsey (1992) revealed that personal characteristics are extremely significant components of successful collaborative endeavors. In their study they reviewed relevant personal characteristics such as trust, respect, understanding, and informal communication between collaborators.

Personalities. Discussion items for this category centered on the leadership perceptions of personal characteristics, and what role it plays in challenges in establishing and maintaining relationships.

> Challenges could be your personalities letting go. *Representative from Organization D*

> Then there is the personalities is a barrier to establishment everyone's different some people are open that some you know……specifically in Richmond you have different levels of leadership styles so some of the older leaders are like I've been there done that I'm tired of doing it. Younger leaders are potentially I know it all myself I don't need help or I do want help and no one wants to help me all these interesting barriers to establishment.-*Representative from Organization K*

> Challenges ……Resources issues come up like rats in cage, the second is personalities. *Representative from Organization G*

Trust. Another category that emerged throughout the interviews was Trust. This finding was consistent with previous research studies on collaboration. In previous research studies, trust has been highlighted frequently as a prerequisite for successful

collaborative relationships (Goodman et al. 1998; Himmelman 1996; Kreuter, Young, and Lezin 1998; Taylor-Powell, Rossing, & Geran 1998; Waddock 1988). *Trust* has been the focus of a large amount of research on IORs, especially since attention over the past 15 years has turned to the study of networks. Trust is a key element of "bonding" social capital, and is generally seen as being both critical for holding a network together and as an outcome of network involvement (Adler and Kwon, 2002).

> I think good collaboration takes time to build trust and relationships, you can't do that over email whether we are working with other nonprofit whether government or other folks it takes meetings A really good partnership is going to be when you like each other really good partnerships is going to be when you like each other just won't happened over email or phone calls and its takes time to do that.
> *Representative from Organization G*

> I think good collaboration takes time to build trust and relationships; you can't do that over email *Representative from Organization* D

> We have built a lot of trust because of that track record. *Representative from Organization H.*

> I think trust is the biggest factor so my groundwork right now is yes building relationships and trust with our sister housing partners organization as well as social service nonprofits and governments as well as nonprofit building relationships so that there is more trust which makes a collaboration a lot easier. *Representative from Organization L*

> In the work that we do trust building is an essential component so that challenges are to make sure we pay a lot of attention to having mutual trust with each other and respect each other organizations and again. *Representative from Organization F*

Expectations. Participants reported that expectations vary depending on the situation. They felt that responsibilities and outcomes need to be clear before forgoing a collaborative effort.

> Well not I think the name of your project definitely leads you to say not everyone wants to play in the same Sandbox and whether it's the visionary leader, who expects to get the credit and wants to speak for everybody who doesn't like it when the have to fade into the background. That's always going to happen. Everyone has to agree to who is going to be the voice and what the message is going to be. I think the working together is difficulty. Sometimes I think it can be the difficult working together divvying of responsibility making sure everyone is contributing on even amounts and if someone going to contributes more that, the reward for them should be more-*Representative from Organization D*

> Another challenge is really to make sure that the partners are and the board members in this partnership they understand what it takes to kind of achieve these outcome, so it's a lot of education that needs to happen and also finding the resources sometimes when you do a tax credit the allotment there is always this challenges of providing guarantees and each partner needs to understand what they need to bring to the table and a lot of it is really educating each other on mutual expectations-*Representative from Organization F*

Overall, the participant's discussion regarding collaboration ranged from positive to negative. While this may be partly attributed to the interview questions, which centered on benefits and drawback and challenges to establishing and maintaining relationships, it did reveal that greatest barrier is Time. It emerged consistently through the interviews. Analysis of this data suggests that there are opportunities for establishing and maintaining relationships, especially through RCDA. However, negative attitude about establishing and maintaining relationships may have an influence on their willingness to participate in collaborations that are more formal. In Chapter 3, we discussed finding from the analysis of network data, which indicated that the network primarily consists relationships that are informal, primarily networking.

CHAPTER 5: CONCLUSION, LIMITATIONS, FURTHER RESEARCH

Introduction

This study contributes several important findings to furthering the understanding of collaboration within the nonprofit sector. The findings of this study suggest that there are two key factors that influence nonprofit organizations participation in collaborations: interorganizational learning and personal characteristics. The second area in which this dissertation study contributes is through the examination of the network itself. Specifically, the structural characteristics, particularly revealing the connections and relationships, as well as prominent actors are in the network. Understanding more about the relationships and roles that exist between the nonprofit housing organizations operating in the Richmond metropolitan area will provide a useful set of tools for assisting the network in managing tasks and challenges, as well as identify opportunities for collaboration. Lastly, another important finding is the relationship between organizational characteristics, environmental conditions, and resource availability and the Level of Collaboration.

Foster and Meinhard (2002) found that organizational factors, such as size and type (feminist or not), were related to the extent of formal collaborative activity. Yet the strength of these factors as predictors was moderated by the intervening perception of the impact of environmental changes. They considered that lack of external factors in their model (such as community characteristics) and acknowledged that they may influence the motivation to collaborate. They recommended that future research identify additional structural, attitudinal and environmental variables that may act as predictors to collaboration. Guo and Acar (2005) found that an organization is more likely to increase the degree of formality of its collaborative activities when its older, has a larger budget size, receives government funding, has more board

linkages with other nonprofits, and is not operating in the education of social service industry. This dissertation study contributes to the existing body of research because it takes into consideration various levels of collaboration between the nonprofit organizations. The previous studies, Foster and Meinhard studied motivations for collaboration and the Guo and Acar studied various types of interorganizational relationships but collapsed them into two categories, informal and formal. This dissertation study utilizes the out-degree measure from social network analysis as the variable for collaboration.

Network Findings

The key finding that emerged from the examination of the network of nonprofit housing organizations in this dissertation research is that relationships in the network are more informal than formal. This is supported by the qualitative data obtained during the interviews with executive directors of the nonprofit organizations.

> I think the first benefit I can see relates to not replicating the same services to be provided. You know we all develop certain niches and specialties in a providing affordable housing and the services that go along with them and I think that replicating the same think over again and again is a waste of community resources and a waste of effort. *Representative from Organization D*

Another finding related to the mapping of the networks is based on examining the differences between the five types of networks. The connections and relationships appear to be very different. The networks produced pendants and isolated actors as the Level of Collaboration Scale ratings increased. The network consisted of 13 organizations with 141 ties. The collaboration network consisted of 9 organizations with 9 ties, containing only 69.2 percent of the organizations in the whole network. The pendants and isolates appeared for two main reasons; the pendants exist because a relationship is not reciprocal at the same level or at all and the isolates exist because some organizations have no connection at all. The final finding relates

to the analyses of the network using the centrality measures, degree, betweenness, and closeness and reciprocity. The most apparent difference is: in reciprocal relationships, which is due to a difference in out-degree and in-degree measures between organizations. 83.2 percent of the ties in the network are reciprocal, the value of the ties are different for several organizations. The in-degree for organizations F, H, I, J, L, and M are higher than their outdegree. The outdegree for organizations A, B, C, E and G are higher than their indegree. Organization C has the greatest disparity between its outdegree and indegree, respectively, 35 percent and 15 percent. For the closeness centrality, while there are several organizations who have the same closeness measures, organizations A and C have the lowest measures are considered autonomous from the network. This is an important finding because Organization A who did participate in the qualitative portion of the dissertation study discussed that they are focused primarily in one area of the City of Richmond and survey results indicated that this organization does not have a diversity it is funding sources. This organization also had the lowest outdegree and indegree measures in the network and has the second lowest betweenness measure. The executive director during the interview stated that:

> "For me it is just taking and having the time to get to know other organizations and the people that are running especially." Representative from Organization A

This is an important finding because this organization has been in existence for over 13 years and is very disconnected to the network. Despite, that this organization along with several others are working the same section of the City of Richmond, due to a city-sponsored initiative. However, this organization does not compete with other organizations in the network for funding. This may also have contributed to their being disconnected and isolated from the network at the different level of collaboration.

It has long been established that women can bring a different set of interpersonal skills to group dynamics than can men. Fine (2007) summarized scholarly work on the leadership characteristics of female managers to suggest that women have a more collaborative outlook on their work. This dissertation study sought to determine if this would hold true for this network. This study examined if organizations with females in leadership positions will have more formal connections than those with men in leadership positions organizations by network mapping including attribute data (gender of leader). However, due to both the limitations in size and lack of gender diversity of the executive directors, 3 males and 10 females, this study was unable to determine if female leaders were more connected in the network than male leaders. While the network findings did not support the hypothesized relationship through correlation analysis this study was able to establish that gender diversity does have a non-significant positive influence on the Level of Collaboration.

In the Foster and Meinhard (2002) study, they found that an organization is more likely to increase the degree of formality of its collaborative activities when it is older. In their study, Guo and Acar (2005) found that an older organization is more likely to develop formal types of collaborations with other nonprofits. This dissertation sought to determine if more established organizations as measured by key organizational characteristics (age, financial diversity, and more in-house resources) will be more connected in the network than less established organizations by network mapping including attribute data. Unfortunately, mapping the network including attribute data does not support the hypothesized relationship for Hypothesis 1 and more established organizations are not more connected in the nonprofit housing network . While the network findings did not support the hypothesized relationship through correlation analysis

this study correlation analysis was able to establish that gender diversity does have a non-significant positive influence on the Level of Collaboration.

Lastly, this study sought to determine if organizations with less in-house resources will have a higher closeness centrality by network mapping including attribute data. Closeness centrality is most frequently used to measure relative access to network resources and information, and can also be interpreted as measuring the degree of independence from others in the network. While this dissertation study has been able to determine that an organization with less resources will have a higher closeness centrality. Unfortunately, mapping the network including attribute data does not support the hypothesized relationship for Hypothesis 3 and organization with less resources do not have a higher closeness centrality. This study found that an organization with high resources can also has a higher closeness centrality. While the network findings did not support the hypothesized relationship through correlation analysis this study was able to establish that resource availability has a non-significant negative influence on the Level of Collaboration.

Correlation Analysis

In their research study Foster and Meinhard (2002) recommended that future research identify additional structural, attitudinal, and environmental variables that may act as predictors to collaboration. In this dissertation study none of the variables in the hypothesized relationships with the Level of Collaboration Scale came close to obtaining statistical significance. Resulting in failing to reject the null hypotheses, Hypotheses 4 to Hypotheses 13, thereby rejecting those hypothesized relationships.

Table 19-Comparison of Hypothesized Relationships of Study Variables to Observed Relationships for Correlation Analysis Utilizing Level of Collaboration Scale

Variables	Predicted Relationship	Observed Relationship
Age of Organization	Positive	Moderate Positive
Size of Organization	Positive	Weak Positive
Gender Diversity	Positive	Moderate Positive
Environmental Conditions	Positive	Moderate Positive
Housing Conditions	Positive	Weak Positive
Advocacy Efforts	Positive	Weak Positive
Problems with Funding	Positive	Moderate Positive
Resource Availability	Positive	Weak Negative
Diversity in Funding	Positive	Weak Positive
Construction Management Resources	Positive	Weak Negative
Project Management Resources	Positive	Weak Negative

Qualitative Analysis

The qualitative findings of this study suggest that there are two key factors that influence nonprofit organizations participation in collaborations; interorganizational learning and personal characteristics. Research has revealed that organizational learning can occur through vicariously learning and interacting with other firms through alliance and joint ventures (Bajuli &Crossman, 2004). Vicarious learning is learning from the experience of other firms. These organizational relationships offer a much higher and more relevant learning opportunity because of the interaction that exists in such relationships. Participants in the study interviews discussed how important it was to not only learn from the experience and expertise of other organizations but also share their experience and expertise. In addition, time was found to be the most prominent reason as a drawback and challenge in establishing and maintaining relationships and two personal characteristics, trust and personalities were seen as additional barriers to collaboration. It was discussed that they could make or break a relationship or partnership. This is consistent with research findings. Mattessich and Monsey (1992) revealed that personal characteristics are extremely significant components of successful collaborative endeavors. In their study they

reviewed relevant personal characteristics such as trust, respect, understanding, and informal communication between collaborators. While, the Richmond Community Development Alliance offers an opportunity for organizations to get together on a consistent basis. The participation of very few of the executive directors makes it more information exchange and coalition building, advocacy group when needed, rather than a source for establishing more formal relationships

Policy Implications

While, the nonprofit housing sector in the United States has been praised for mastering the complexity of tax credits, complicated financing, and subsidy layering, the system itself has become a barrier for the development of affordable housing. The continuing decline in public subsidies has resulted in increased competition between nonprofit and for-profit organizations. Nonprofit housing organizations must begin to adopt market culture strategies to compete and leverage private capital. A key market strategy is collaboration. Findings from this dissertation are consistent with other research studies, revealing that interorganizational relationships do not just happen there are several factors that influence a nonprofit organizations willingness to establish a relationship with other organizations. In this study, resources, organizational learning, time, and personal characteristics were key factors. This is an important implication for public policy, particularly as many local, state and federal governments and private foundations are increasingly requiring some form of collaboration for funding. Bentley (2004) found that the speed to which the [mandated] collaborations were organized did not allow for social bonding and collaborative development. These are key components in not only the establishment but also the sustainability of relationships. This is an additional implication for public policy because while it is the intent of most funders that collaborative programs or project become self-sustaining over time often that is not the outcome. HUD's Continuum of Care program (CoC)

required planning as a component of qualifying for additional funding. This has been very successful mandated collaboration federal grant-funded program. This model cannot be replicated due to funding. However, social network analysis is a very useful tool for assessing existing relationships between people and organizations. This tool coupled with the Level of Collaboration, which has been primarily utilized in evaluation of grant funded programs is an excellent tool for conducting a baseline study of interorganizational relationships in communities. The findings from this dissertation study indicated that the nonprofit housing organizations have an informal relationships within the network and very few relationships are reciprocal.

Limitations

As discussed in Chapter Three, the research design for social network analysis is different from the traditional survey research design in terms of sampling; the research for social network analysis design does not draw samples (Hanneman and Riddle, 2005; Wasserman and Faust 1994). This is because network research focuses on relations among actors and actors cannot be independently sampled to be included as observations. Therefore, the population is selected based on a boundary. This population was selected based on the following boundary criteria; must be a nonprofit housing organization located in the Richmond Metropolitan area. This limits the generalizability of the research findings to a specific geographic setting. However, this does offer an understanding of the structural characteristics of the nonprofit housing organizations in the Richmond metropolitan area, as well as greater understanding into the reasons a network have taken on the structural properties uncovered in the dissertation research.

The next limitation is that not all organizations in the network participated in the dissertation study. A total of sixteen organizations were identified as members of the network and only

thirteen organizations participated in the dissertation study, 81.3 percent response rate. This resulted in a limitation in data analysis for this dissertation study. The nonparticipation of these three organizations were problematic for the study because not only is the node level data missing but also survey data. While, there are imputation methods than can be employed to obtain network data responses through using the responses from other actors in the network. Based on consultation with two of the dissertation committee members, Dr. Julia Honnold and Dr. Jennifer Johnson it was decided that these organizations should be omitted from the study. Not having all network actors participate in the study limits the generalizability of the research finding for the network population. In addition, it also limited the dissertation study's quantitative data analysis. The researcher was limited to descriptive statistics and correlation analysis.

Directions for Future Research

Findings from this dissertation study suggests that there are several directions for future research about studying collaborations between nonprofit organizations. The first area in which research needs to be advanced is to begin to utilize a standardized tool for measurement of collaboration. Currently there are numerous measures of the concept of collaboration, from types of collaboration such as referrals and formal contracts to interorganizational relationship such as networking, cooperation, and coordination. The Level of Collaboration Scale is a useful tool that can be used in future research studies. While this dissertation study examines factors that influence an organization's Level of Collaboration, it does not examine the relationship between the study's Level of Collaboration at the individual level and the independent variables (examine the influence of organizational characteristics, environmental conditions, and resource availability). This is due to the limitation in the quantitative analysis because of the study's

population (missing three members of the network), as well as the use of out-degree centrality measure for the collaboration measurement. Research conducted by of Guo and Acar (2005) and Foster and Meinhard (2002) laid the foundation for the examination of the determinants of why organizations choose different types of collaborative arrangements, these studies do not fully investigate the intensity of the relationships just the presence of a relationship. Future research can expand on this dissertation study by utilizing multivariate statistics in examine the influence of organizational characteristics, environmental conditions, and resource availability on the Level of Collaboration.

The second area is to determine what factors influence collaboration between nonprofit organizations. This will require that network data be gathered from all network members, moreover, research, should be conducted in different communities so that we can more fully understand the role that networks have in different settings. More research needs to occur on the nonprofit sector's use of collaboration at different levels. A great deal of research has primarily been done on collaboration in the private sector which has helped inform nonprofit studies, but does not account for the uniqueness of the nonprofit sector. The nonprofit sector is hybrid of the private and government sector. They are required to have the management discipline of the private sector and the commitment of local governments (Koebel and Hardin, 1999). Future research on the nonprofit sector will help to build better theory about collaboration because there is still a lack of comprehensive theory of collaboration, as well as a theory of nonprofit collaboration. Future research could develop a theory of nonprofit by expanding on network research by examining network position and structural characteristics for nonprofits in area of research that has already been studied in the for-profit sector, such as control and distribution of resources (Brass 1992; Krackhardt 1990) and organizational survival and the creation of

successful outcomes (Bordieau & Wacquant; Burt 1992). This may reveal the ways in which structural characteristics of the nonprofit sector differ from the for-profit sector.

The third area is expanding community capacity. As costs continue to escalate and funding decline, future research has the potential to assist communities to identify opportunities for collaboration. For example, the development of affordable housing in the nonprofit housing sector requires a myriad of financial and non-financial resources, SNA will enable the community to see the extent to which every organization is connected with other organizations, the network's structure and processes. This may also enable networks to pool resources or pursue additional funding opportunities. This may address the issue of organizational capacity and help the nonprofit sector manage environmental uncertainties through examining network of local organizations.

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Vita

Tamarah Aundrena Holmes was born on May 14, 1974, in Summit, New Jersey, and is an American citizen. She graduated from Arts High School, Newark, New Jersey in 1992. She received her Bachelor of Arts in Political Science from Drew University, Madison, New Jersey in 1996. She received her Master of Science in Urban Policy Analysis and Management from the Milano Graduate School at the New School for Social Research in 1998. For the past 15 years, she has worked in the field of research and evaluation in New York, New York and in the human services field (environmental health) in local government in both Newark, New Jersey and Richmond, Virginia and currently works in housing and community development in Chesterfield County, Virginia.

Appendix A

Survey Instrument

<STRONG>Playing in the Sandbox: Using Mixed Methods Design and

Dissertation Study Participant Instructions

Purpose of the Study:

The purpose of this dissertation study is to examine interorganizational relationships between nonprofit housing organizations in the Richmond Metropolitan area. This dissertation study will also examine the influence of organizational characteristics, environmental conditions, and resource capacity on these relationships. This dissertation study is being conducted by Tamarah Holmes, Doctoral Candidate at Virginia Commonwealth University, Richmond, VA.

What will be done:
You will complete a survey, which will take 30-40 minutes to complete. The survey includes questions about your organization, as well as questions about your relationship with other nonprofit housing organizations.

Benefits of this Study:
This research study is an exploratory study that seeks to contribute to furthering the understanding of relationships among organizations in the nonprofit sector using social network analysis. You will be contributing to knowledge about interorganizational relationships between nonprofit organizations, as well as the influence of attitudes and expectation of collaboration

Risks or discomforts:
No risks or discomforts are anticipated from taking part in this study. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether. If you decide to quit at any time before you have finished the questionnaire, your answers will NOT be recorded.

Confidentiality:
Your responses will be kept completely confidential. We will NOT know your IP address when you respond to the Internet survey. We will ask you your organization's name so that we can connect your survey answers to the data we will collect from your organizational documents. However, your title will not be stored with data from your survey. Instead, you will be assigned a participant number, and only the participant number will appear with your survey responses and organizational documents. Only the researchers will see your individual survey responses. The list of e-mail addresses of participants will be stored electronically in a password protected folder; a hard copy will be stored in a locked filing cabinet. After I have finished data collection and have sent you a copy of the results of the study, I will destroy the list of participants' e-mail addresses.

Decision to quit at any time:
Your participation is voluntary; you are free to withdraw your participation from this study at any time. If you do not want to continue, you can simply leave this website. If you do not click on the "submit" button at the end of the survey, your answers and participation will not be recorded.

How the findings will be used:
The results of the study will be used for scholarly purposes only. The results from the study will be presented in educational settings and at professional conferences, and the results might be published in a professional journal.

Contact information:
If you have concerns or questions about this study, please contact Tamarah Holmes at holmesta@vcu.edu or (804)840-2974. By beginning the survey, you acknowledge that you have read this information and agree to participate in this research.

Section I: Organizational Profile

The following questions relate to the history, structure, and general activities of your organization.

***1. In what year was your organization established?**

***2. What are the geographic areas served by your organization?**

***3. Please select from the list below the types of housing activities your organization engages in?**

- [ ] Land or building acquisition
- [ ] New construction
- [ ] Condo or co-op conversion
- [ ] Housing acquisition to prevent displacement
- [ ] Special needs housing
- [ ] Housing rehabilitation
- [ ] Home repair, weatherization
- [ ] Management of organization-owned residential property
- [ ] Administration of loan funds
- [ ] Administration of grant(s)
- [ ] Residential clean-up or paint-up campaigns
- [ ] Management of residential property of other owners
- [ ] Tenant organizing
- [ ] Rental assistance
- [ ] Tenant counseling
- [ ] Homeownership counseling

Other (please specify)

***4. Is your organization a certified Community Housing Development Organization (CHDO)?**

- ◯ Yes
- ◯ No

***5. How many paid staff does your organization currently employ?**

Number of Full time:	
Of this staff how many are women:	
Number of Part time:	
Of this staff how many are women:	

***6. Briefly describe your organization's financial management control program**

***7. Does you organization have a seperate housing budget?**

- [ ] Yes
- [ ] No

***8. Does your organization have a Business Plan?**

- [ ] Yes
- [ ] No

***9. Does your organization have a Strategic Plan?**

- [ ] Yes
- [ ] No

Section II: Environmental Characteristics

***10. Considering current housing conditions, please rate the following issues in terms of their importance to the communities you serve.**

	Very Important	Somewhat Important	Not very Important	Please select your top 3 most significant housing issues
Housing Affordability	☐	☐	☐	☐
Housing Quality	☐	☐	☐	☐
Neighborhood Conditions	☐	☐	☐	☐
Housing Availability	☐	☐	☐	☐
Availability of rental housing	☐	☐	☐	☐
Owner- occupied housing	☐	☐	☐	☐
Stability of housing values	☐	☐	☐	☐
Neighborhood diversity	☐	☐	☐	☐
Household income	☐	☐	☐	☐
Other	☐	☐	☐	☐

Other (please specify)

***11. Through what means does your organization have an impact on local, state, and federal housing policy?**

	Local Level	State Level	Federal Level
Meeting housing officials	◯	◯	◯
Providing input on official housing plans	◯	◯	◯
Providing testimony at legislative committee	◯	◯	◯
Sending letters to officials	◯	◯	◯
Assessing housing community needs	◯	◯	◯
Analyzing housing public policy	◯	◯	◯
Advocating for housing policy reform	◯	◯	◯
Participating in housing planning meetings	◯	◯	◯
Answering housing surveys and questionnaires	◯	◯	◯
Other:	◯	◯	◯

Other (please specify)

***12. What problems have you encountered to obtaining funding for operations or projects?**

	Significant difficulty	Some difficultly	No difficulty
Paperwork	◯	◯	◯
Insufficient funds from development fees	◯	◯	◯
Cost of repairs or rehabilitation	◯	◯	◯
Operating funds	◯	◯	◯
Lack of collateral	◯	◯	◯
Government regulations	◯	◯	◯
Land acquisition	◯	◯	◯
Lack of information	◯	◯	◯
High interest rate	◯	◯	◯
Cash shortfalls/lack of credit lines	◯	◯	◯
Lack of experience with donor	◯	◯	◯
Lack of financial experience	◯	◯	◯
Lack of long-range plan or business plan	◯	◯	◯
Sustainability concerns	◯	◯	◯
Financing agencies' inexperience w/ nonprofits	◯	◯	◯
Other : specify	◯	◯	◯

Other (please specify)

Section III: Resource Capacity

***13. Which sources has your organization used to finance your operations and projects (Please check all that apply)?**

- [ ] Government grants
- [ ] Foundation grants
- [ ] Conventional bank loans
- [ ] Development fees
- [ ] Project income
- [ ] In-kind contribution
- [ ] Fundraising
- [ ] Membership dues
- [ ] Equity
- [ ] Other

Other (please specify)

***14. Does your organization manage construction or rehabilitation projects?**

- ◯ Yes
- ◯ No

15. Please indicate below which of the following construction management activities your organization has been engaged in.

	Yes, using in-house resources	Yes, using outside resources	No, organization has not done
Selection of architect/engineer	◯	◯	◯
Value engineering and cost benefit analysis	◯	◯	◯
Development of specifications	◯	◯	◯
Choosing contractors	◯	◯	◯
Choosing project manager	◯	◯	◯
Determine insurance and bonding requirements	◯	◯	◯
Executing construction contracts	◯	◯	◯
Obtaining building permit	◯	◯	◯
Compliance with government regulation	◯	◯	◯
Other (specify):	◯	◯	◯

Other (please specify)

16. Please indicate below which of the following project management activities your organization has been engaged in.

	Yes, using in-house resources	Yes, using outside resources	No, organization has not done
Cost estimating	◯	◯	◯
Scheduling	◯	◯	◯
Monitoring time and cost	◯	◯	◯
Coordinating subcontractors	◯	◯	◯
Pavement approval	◯	◯	◯
Change order management	◯	◯	◯
Supervision	◯	◯	◯
Construction safety	◯	◯	◯
Other(specify):	◯	◯	◯

Other (please specify)

Section IV. The following questions are regarding interorganizational rela...

Levels of Collaboration Scale (Adapted with permission from Cross, J.E.., Dickmann, E., Newman-Gonchar R.., and Fagan, J.S., (2009) Using Mixed Methods Design and Network Analysis to Measure Development of Interagency Collaboration, American Journal of Evaluation, 30,3,310-329)

17. Please select the characteristic that best describes your relationship with the each organization listed below

Networking-Communicate for a common understanding –Clearinghouse for information - Informal communication

Cooperation-Match needs and provide information –Limit duplication of services-Formal communication within a central group

Coordination-Share resources to address common issues –Merge resource base to create something new –Communication is frequent and clear

Coalition-Share ideas and willing to pull resources –Develop commitment (minimum 3 years) –Roles and time defined -Communication is common and prioritized

Collaboration-Accomplish shared vision and impact benchmarks *Roles, time, and evaluation formalized -Ideas and decisions equally shared -Highly developed communication

	Networking	Cooperation	Coordination	Coalition	Collaboration
Virginia Supportive Housing	◯	◯	◯	◯	◯
Southside Community Development Housing and Community Development	◯	◯	◯	◯	◯
Better Housing Coalition	◯	◯	◯	◯	◯
project:HOMES	◯	◯	◯	◯	◯
Housing Opportunities Made Equal, Inc.	◯	◯	◯	◯	◯
Community Housing Partners	◯	◯	◯	◯	◯
Urban Hope	◯	◯	◯	◯	◯
Richmond Redevelopment and Housing Authority	◯	◯	◯	◯	◯
Virginia LISC	◯	◯	◯	◯	◯
Rebuilding Together Richmond	◯	◯	◯	◯	◯
Richmond Metropolitan Habitat for Humanity	◯	◯	◯	◯	◯
VA Community Development Corporation	◯	◯	◯	◯	◯
Boaz and Ruth	◯	◯	◯	◯	◯
Neighborhood Housing Services of Richmond	◯	◯	◯	◯	◯
Partnership for Housing Affordability	◯	◯	◯	◯	◯
Homeward	◯	◯	◯	◯	◯

18. Based on the following definitions, please select the category for each activity listed below that best describes the activity.

Networking-Communicate for a common understanding –Clearinghouse for information -Informal communication

Cooperation-Match needs and provide information –Limit duplication of services-Formal communication within a central group

Coordination-Share resources to address common issues –Merge resource base to create something new –Communication is frequent and clear

Coalition-Share ideas and willing to pull resources –Develop commitment (minimum 3 years) –Roles and time defined *Communication is common and prioritized

Collaboration-Accomplish shared vision and impact benchmarks *Roles, time, and evaluation formalized -Ideas and decisions equally shared -Highly developed communication

	Networking	Cooperation	Coordination	Coalition	Collaboration
Formal Contract	◯	◯	◯	◯	◯
Joint advocacy to local/state/federal governments	◯	◯	◯	◯	◯
Share staff	◯	◯	◯	◯	◯
Information exchange	◯	◯	◯	◯	◯
Send or receive referrals	◯	◯	◯	◯	◯
Share workspace	◯	◯	◯	◯	◯
Joint program development	◯	◯	◯	◯	◯
Joint recruitment of staff/volunteers	◯	◯	◯	◯	◯
Joint solicitation of consultants/contractors	◯	◯	◯	◯	◯
Joint procurement of goods/services	◯	◯	◯	◯	◯
Share equipment	◯	◯	◯	◯	◯
Joint fundraising	◯	◯	◯	◯	◯

***19. What is the name of your organization?**

Closing Statement

Thank you for taking time out of your busy schedule to complete this survey. Please remember that your response is confidential and will only be used for the purpose described earlier

Qualitative: Interview Questions

1. What are the benefits and drawbacks of working with other nonprofit housing organizations in the Richmond metropolitan area?

2. What are some of the challenges in establishing and maintaining relationships with other nonprofit housing organizations in the Richmond metropolitan area?

3. Is what ways is your organization working with other nonprofit organizations?

4. What are areas that your organization is interested in working with other nonprofit housing organizations?

Appendix B

Letters of Permission to Use Survey Instruments from Principal Investigators

myVCUmail

Tamarah Holmes <holmesta@mymail.vcu.edu>

Fw: Request Permission to Use Survey Instrument

4 messages

Tamarah Holmes <holmesta@mymail.vcu.edu> Thu, Jul 7, 2011 at 7:25 AM
Reply-To: holmesta@mymail.vcu.edu
To: Work voicemail <holmesta@chesterfield.gov>

-----Original Message-----
From: Tamarah Holmes
To: mfoster@ryerson.ca
To: meinhard@ryerson.ca
Subject: Request Permission to Use Survey Instrument
Sent: Jul 5, 2011 3:54 PM

My name is Tamarah Holmes and I am currently a PhD Candidate in the Public Policy and Administration Program at Virginia Commonwealth University in Richmond, VA. I am currently writing my first three chapters of my dissertation. During my search of journal articles for my literature review I obtained a copy of your journal article "A Regression Model Explaining the Predisposition to Collaborate" which was published in the Nonprofit and Voluntary Sector Quarterly in 2002. I am very interested in obtaining a copy of your survey instrument used to collect the data on perceived environmental impact, motivation for collaboration, collaboration obstacles, and competitive outlook. In your article you hypothesized that collaborating is increasing formal ways is a function of the interaction of organizational characteristics, perceptions of the environment and the attitudes of organizational leaders towards collaboration and competition, you found that the predisposition to engage in formal interorganizational activities is the result of a combination of organizational and attitudinal factors that work together to intensify the need to collaborate. For my dissertation research I will be examining collaboration among nonprofit organizations in the Richmond metropolitan area. I am also seeking permission to use your survey instrument for my dissertation research if I find it suitable for my research. I look forward to hearing from you. Thanks in advance.

Tamarah Holmes
(804) 840-2974

Sent from my Verizon Wireless BlackBerry

Holmes, Tamarah <HolmesTa@chesterfield.gov> Thu, Jul 7, 2011 at 7:43 AM
To: Tamarah Holmes <holmesta@mymail.vcu.edu>

Your message

To: Holmes, Tamarah
Subject: Fw: Request Permission to Use Survey Instrument
Sent: Thu, 7 Jul 2011 07:25:13 -0400

Fw: Survey Instrument

Inbox

Tamarah Holmes <holmesta@mymail.vcu.edu> Fri, Mar 18, 2011 at 12:35 AM

Reply-To: holmesta@mymail.vcu.edu
To: Work voicemail <holmesta@chesterfield.gov>

Sent from my Verizon Wireless BlackBerry

From: "Cross,Jeni" <Jeni.Cross@colostate.edu>
Date: Thu, 17 Mar 2011 22:49:04 +0000
To: 'Tamarah Holmes'<holmesta@mymail.vcu.edu>
Cc: 'Ellyn Dickmann'<ellyn.dickmann@gmail.com>
Subject: RE: Survey Instrument

Tamarah:

Good luck with your dissertation. I have attached a document that fully describes the process we used to gather data for that project.

You should recognize that we gathered this data by conducting focus group discussions with various organizations. We did not survey individual members of organizations. When you survey individuals it can lead to very low inter-rater reliability because individuals hold such different positions in organizations that individuals do not reliably report levels of linkage between their organization and others. Depending on what you are studying you want to carefully consider if you want to collect individual or group ratings.

Best, Jeni

~.~.~.~.~.~.~.~.~.~

Jennifer E. Cross, Ph.D.
Assistant Professor

Department of Sociology
Colorado State University
Fort Collins, CO 80523-1784

jeni.cross@colostate.edu

FAX: (970) 491-2191

****NEW PHONE****

ph: (970) 491-0483

Please consider the environment before printing this email.

----Original Message----
From: Tamarah Holmes [mailto:holmesta@mymail.vcu.edu]
Sent: Thursday, March 17, 2011 2:42 PM
To: Cross,Jeni
Subject: Survey Instrument

Dear Dr. Cross,

My name is Tamarah Holmes and I am currently a PhD Candidate in the Public Policy and Administration Program at Virginia Commonwealth University in Richmond, VA. I am currently writing my first three chapters of my dissertation. During my search of journal articles for my literature review I obtained a copy of your journal article "Using Mixed-Methods Design and Network Analysis to Measure Development of Interagency Collaboration" which was published in the American Journal of Evaluation in 2009. I am very interested in obtaining a copy of your survey instrument used to collect the strength of interagency collaborations. In your article you discussed using the community linkages matrix by Hogue et al (1995) as an ordinal scale for measuring the strength of interagency linkages. For my dissertation research I will be examining collaboration among nonprofit

organizations in the Richmond metropolitan area. I am also seeking permission to use your survey instrument for my dissertation research if I find it suitable for my research. I look forward to hearing from you. Thanks in advance.

Tamarah Holmes

(804) 840-2974

---

jc5-Levels of Collaboration Process.doc
137K View as HTML Scan and download

Reply | Reply to all | Forward | Print | Delete | Show original

Holmes, Tamarah <HolmesTa@chesterfield.gov> Fri, Mar 18, 2011 at 8:35 AM
To: Tamarah Holmes <holmesta@mymail.vcu.edu>

Reply | Reply to all | Forward | Print | Delete | Show original

Your message

To: Holmes, Tamarah
Subject: Fw: Survey Instrument
Sent: Fri, 18 Mar 2011 00:35:32 -0400

was read on Fri, 18 Mar 2011 08:35:05 -0400

Quick Reply

To: "Holmes, Tamarah" <HolmesTa@chesterfield.gov> More Reply Options

Send Save Draft Include quoted text with reply

« Back to Search results More Actions... Go ‹ Newer 140 of hundreds Older ›

Use the search box or **search options** to find messages quickly!
You are currently using 277 MB (1%) of your 25600 MB
Last account activity: 3 minutes ago at IP 128.172.13.21. Details

Request Permission to Use Survey Instrument Inbox

Tamarah Holmes <holmesta@mymail.vcu.edu> Fri, Mar 18, 2011 at 12:25 PM
To: lamore@msu.edu

Dear Dr. Cross,

My name is Tamarah Holmes and I am currently a PhD Candidate in the Public Policy and Administration Program at Virginia Commonwealth University in Richmond, VA. I am currently writing my first three chapters of my dissertation. During my search of journal articles and reports for my literature review I obtained a copy of Michigan State University Center for Urban Affairs Community and Economic Development Program's " Organizational Capacity and Housing Production: a Study of Nonprofit Organizations in Michigan -Final Research Report". I have obtained a copy of your survey instrument used to collect data on Capacity and Production from Appendix B of your report. For my dissertation research I will be examining levels of collaboration among nonprofit organizations in the Richmond metropolitan area. I will be collecting data on organizational capacity to determine what impact, if any capacity has on an organization's willingness to collaborate. I am seeking permission to use your survey instrument for my dissertation research. If you grant permission to use your survey instrument and the instrument has has been revised can you please provide me a copy? I look forward to hearing from you. Thanks in advance.

Tamarah Holmes
(804) 840-2974

Rex L. LaMore <lamore@msu.edu> Mon, Mar 21, 2011 at 2:33 PM
To: Tamarah Holmes <holmesta@mymail.vcu.edu>

Ms. Holmes, this came to my attention, and I will grant permission to use our instrument on two conditions,

1.) that we are appropriately referenced in your research so that others who may wish to replicate our shared work, can source our original study
and,
2.) that you share a copy of your final research report and findings with us.

If you agree to these pre-conditions, please respond to this e-mail so indicating.

We have not made any modifications to our instrumentation since our study.
Good luck in your work I look forward to hearing from you in this regard.

Please do not hesitate to contact me should you have any questions regarding our study on Organizational Capacity and Housing Production.

Rex L. LaMore, Ph.D.
Director
Center for Community and Economic Development
University Outreach and Engagement
Michigan State University
1615 E. Michigan Ave.
Lansing, Michigan 48912
tel: 517/353-9555
fax: 517/884-6489
e-mail: lamore@msu.edu
web: http://www.ced.msu.edu

"If we are to achieve results never before accomplished,
we must employ methods never before attempted."
Sir Francis Bacon

- Show quoted text -

Reply | Reply to all | Forward | Print | Delete | Show original

Tamarah Holmes <holmesta@mymail.vcu.edu> Mon, Mar 21, 2011 at 2:43 PM
To: "Rex L. LaMore" <lamore@msu.edu>

Reply | Reply to all | Forward | Print | Delete | Show original

Dr. LaMore,

Thank you for your quick response. I agree to your conditions set forth in your email. I will appropriately reference your study in my research and will share my final research report and findings with you. Thank you for permission to use your survey instrument. I look forward to sharing my finding with you.

Tamarah Holmes

- Show quoted text -

Quick Reply

To: "Rex L. LaMore" <lamore@msu.edu> More Reply Options

Send Save Draft Include quoted text with reply

« Back to Search results More Actions... Go 1 of 2 Older ›

Appendix C

SPSS Output

Organizational Characteristics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
How old is your organizations	13	9	42	24.31	9.313
Q5_ How many paid staff_FTE?	13	0	350	50.85	97.153
Q5_FTE_Women	13	0	180	30.15	52.806
Q5_How many paid part-time?	13	0	20	3.92	5.171
Q5_PT_Women	13	0	12	2.62	3.228
How connected is your organization?	13	9.00	40.00	20.9231	8.46031
Valid N (listwise)	13				

Q4_Is your organization a certified Community Housing Development Organization (CHDO)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	38.5	38.5	38.5
	No	8	61.5	61.5	100.0
	Total	13	100.0	100.0	

Q7_Does you organization have a seperate housing budget?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	46.2	46.2	46.2
	No	7	53.8	53.8	100.0
	Total	13	100.0	100.0	

Q8_Does your organization have a Business Plan?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	69.2	69.2	69.2
	No	4	30.8	30.8	100.0
	Total	13	100.0	100.0	

Q9_Does your organization have a Strategic Plan?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	100.0	100.0	100.0

Correlations: Hypothesis 4-Age will have a greater influence on Level of Interaction than Environmental Conditions and Resource Availability

Descriptive Statistics

	Mean	Std. Deviation	N
How connected is your organization?	20.9231	8.46031	13
How old is your organizations	24.31	9.313	13
EnvTotal	29.3846	9.70857	13
ResTotal	23.0769	15.35937	13

Correlations

		How connected is your organization?	How old is your organizations	EnvTotal
How connected is your organization?	Pearson Correlation	1	.380	.345
	Sig. (2-tailed)		.200	.248
	N	13	13	13
How old is your organizations	Pearson Correlation	.380	1	.684**
	Sig. (2-tailed)	.200		.010
	N	13	13	13
EnvTotal	Pearson Correlation	.345	.684**	1
	Sig. (2-tailed)	.248	.010	
	N	13	13	13
ResTotal	Pearson Correlation	-.070	.297	.465
	Sig. (2-tailed)	.819	.325	.109
	N	13	13	13

Correlations

		ResTotal
How connected is your organization?	Pearson Correlation	-.070
	Sig. (2-tailed)	.819
	N	13
How old is your organizations	Pearson Correlation	.297
	Sig. (2-tailed)	.325
	N	13
EnvTotal	Pearson Correlation	.465
	Sig. (2-tailed)	.109
	N	13
ResTotal	Pearson Correlation	1
	Sig. (2-tailed)	
	N	13

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations:Hypothesis 5-Size will have a greater influence on Level of Interaction than Environmental Conditions and Resource Availablity

Descriptive Statistics

	Mean	Std. Deviation	N
How connected is your organization?	20.9231	8.46031	13
What is the size of your organization	54.77	99.209	13
EnvTotal	29.3846	9.70857	13
ResTotal	23.0769	15.35937	13

Correlations

		How connected is your organization?	What is the size of your organization	EnvTotal
How connected is your organization?	Pearson Correlation	1	.208	.345
	Sig. (2-tailed)		.495	.248
	N	13	13	13
What is the size of your organization	Pearson Correlation	.208	1	.276
	Sig. (2-tailed)	.495		.362
	N	13	13	13
EnvTotal	Pearson Correlation	.345	.276	1
	Sig. (2-tailed)	.248	.362	
	N	13	13	13
ResTotal	Pearson Correlation	-.070	.519	.465
	Sig. (2-tailed)	.819	.069	.109
	N	13	13	13

Correlations

		ResTotal
How connected is your organization?	Pearson Correlation	-.070
	Sig. (2-tailed)	.819
	N	13
What is the size of your organization	Pearson Correlation	.519
	Sig. (2-tailed)	.069
	N	13
EnvTotal	Pearson Correlation	.465
	Sig. (2-tailed)	.109
	N	13
ResTotal	Pearson Correlation	1
	Sig. (2-tailed)	
	N	13

Correlations: Hypothesis 6-Gender Diversity will have a greater influence on Level of Interaction than Environmental Conditions and Resource Availability

Descriptive Statistics

	Mean	Std. Deviation	N
How connected is your organization?	20.9231	8.46031	13
Total Females employed by organization	32.77	54.265	13
ResTotal	23.0769	15.35937	13
EnvTotal	29.3846	9.70857	13

Correlations

		How connected is your organization?	Total Females employed by organization
How connected is your organization?	Pearson Correlation	1	.251
	Sig. (2-tailed)		.408
	N	13	13
Total Females employed by organization	Pearson Correlation	.251	1
	Sig. (2-tailed)	.408	
	N	13	13
ResTotal	Pearson Correlation	-.070	.513
	Sig. (2-tailed)	.819	.073
	N	13	13
EnvTotal	Pearson Correlation	.345	.248
	Sig. (2-tailed)	.248	.414
	N	13	13

Correlations

		ResTotal	EnvTotal
How connected is your organization?	Pearson Correlation	-.070	.345
	Sig. (2-tailed)	.819	.248
	N	13	13
Total Females employed by organization	Pearson Correlation	.513	.248
	Sig. (2-tailed)	.073	.414
	N	13	13
ResTotal	Pearson Correlation	1	.465
	Sig. (2-tailed)		.109
	N	13	13
EnvTotal	Pearson Correlation	.465	1
	Sig. (2-tailed)	.109	
	N	13	13

Correlations:Hypothesis 7-Housing Conditions will have a greater influence on Level of Interaction than an Organization's Characteristics and Resource Availability

Descriptive Statistics

	Mean	Std. Deviation	N
How connected is your organization?	20.9231	8.46031	13
What is the size of your organization	54.77	99.209	13
How old is your organizations	24.31	9.313	13
ResTotal	23.0769	15.35937	13
ConditionsScore	13.4615	2.47034	13

Correlations

		How connected is your organization?	What is the size of your organization
How connected is your organization?	Pearson Correlation	1	.208
	Sig. (2-tailed)		.495
	N	13	13
What is the size of your organization	Pearson Correlation	.208	1
	Sig. (2-tailed)	.495	
	N	13	13
How old is your organizations	Pearson Correlation	.380	.481
	Sig. (2-tailed)	.200	.096
	N	13	13
ResTotal	Pearson Correlation	-.070	.519
	Sig. (2-tailed)	.819	.069
	N	13	13
ConditionsScore	Pearson Correlation	.205	-.210
	Sig. (2-tailed)	.501	.491
	N	13	13

Correlations

		How old is your organizations	ResTotal	ConditionsScore
How connected is your organization?	Pearson Correlation	.380	-.070	.205
	Sig. (2-tailed)	.200	.819	.501
	N	13	13	13
What is the size of your organization	Pearson Correlation	.481	.519	-.210
	Sig. (2-tailed)	.096	.069	.491
	N	13	13	13
How old is your organizations	Pearson Correlation	1	.297	.182
	Sig. (2-tailed)		.325	.553
	N	13	13	13
ResTotal	Pearson Correlation	.297	1	-.010
	Sig. (2-tailed)	.325		.975
	N	13	13	13
ConditionsScore	Pearson Correlation	.182	-.010	1
	Sig. (2-tailed)	.553	.975	
	N	13	13	13

Correlations:Hypothesis 8-Advocacy Efforts will have a greater influence on Level of Interaction than Organizational Characteristics and Resource Availability

Descriptive Statistics

	Mean	Std. Deviation	N
How connected is your organization?	20.9231	8.46031	13
What is the size of your organization	54.77	99.209	13
How old is your organizations	24.31	9.313	13
ResTotal	23.0769	15.35937	13
PolicyScore	5.6154	4.42603	13

Correlations

		How connected is your organization?	What is the size of your organization
How connected is your organization?	Pearson Correlation	1	.208
	Sig. (2-tailed)		.495
	N	13	13
What is the size of your organization	Pearson Correlation	.208	1
	Sig. (2-tailed)	.495	
	N	13	13
How old is your organizations	Pearson Correlation	.380	.481
	Sig. (2-tailed)	.200	.096
	N	13	13
ResTotal	Pearson Correlation	-.070	.519
	Sig. (2-tailed)	.819	.069
	N	13	13
PolicyScore	Pearson Correlation	.204	.438
	Sig. (2-tailed)	.504	.135
	N	13	13

Correlations

		How old is your organizations	ResTotal	PolicyScore
How connected is your organization?	Pearson Correlation	.380	-.070	.204
	Sig. (2-tailed)	.200	.819	.504
	N	13	13	13
What is the size of your organization	Pearson Correlation	.481	.519	.438
	Sig. (2-tailed)	.096	.069	.135
	N	13	13	13
How old is your organizations	Pearson Correlation	1	.297	.438
	Sig. (2-tailed)		.325	.135
	N	13	13	13
ResTotal	Pearson Correlation	.297	1	.152
	Sig. (2-tailed)	.325		.619
	N	13	13	13
PolicyScore	Pearson Correlation	.438	.152	1
	Sig. (2-tailed)	.135	.619	

N	13	13	13

Correlations:Hypothesis98-Problems with funding will have a greater influence on Level of Interaction than Organizational Characteristics and Resource Availability

Descriptive Statistics

	Mean	Std. Deviation	N
How connected is your organization?	20.9231	8.46031	13
What is the size of your organization	54.77	99.209	13
How old is your organizations	24.31	9.313	13
ResTotal	23.0769	15.35937	13
ProblemsScore	10.3077	6.42112	13

Correlations

		How connected is your organization?	What is the size of your organization
How connected is your organization?	Pearson Correlation	1	.208
	Sig. (2-tailed)		.495
	N	13	13
What is the size of your organization	Pearson Correlation	.208	1
	Sig. (2-tailed)	.495	
	N	13	13
How old is your organizations	Pearson Correlation	.380	.481
	Sig. (2-tailed)	.200	.096
	N	13	13
ResTotal	Pearson Correlation	-.070	.519
	Sig. (2-tailed)	.819	.069
	N	13	13
ProblemsScore	Pearson Correlation	.303	.196
	Sig. (2-tailed)	.315	.522
	N	13	13

Correlations

		How old is your organizations	ResTotal	ProblemsScore
How connected is your organization?	Pearson Correlation	.380	-.070	.303
	Sig. (2-tailed)	.200	.819	.315
	N	13	13	13
What is the size of your organization	Pearson Correlation	.481	.519	.196
	Sig. (2-tailed)	.096	.069	.522
	N	13	13	13
How old is your organizations	Pearson Correlation	1	.297	.663
	Sig. (2-tailed)		.325	.014
	N	13	13	13
ResTotal	Pearson Correlation	.297	1	.602
	Sig. (2-tailed)	.325		.029
	N	13	13	13
ProblemsScore	Pearson Correlation	.663	.602	1*
	Sig. (2-tailed)	.014	.029	
	N	13	13	13

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations:Hypothesis 10-Diversity in Funding will have a greater influence on Level of Interaction than Organizational Characteristics and Environmental Conditions

Descriptive Statistics

	Mean	Std. Deviation	N
How connected is your organization?	20.9231	8.46031	13
What is the size of your organization	54.77	99.209	13
How old is your organizations	24.31	9.313	13
EnvTotal	29.3846	9.70857	13
Funding	4.4615	2.33150	13

Correlations

		How connected is your organization?	What is the size of your organization
How connected is your organization?	Pearson Correlation	1	.208
	Sig. (2-tailed)		.495
	N	13	13
What is the size of your organization	Pearson Correlation	.208	1
	Sig. (2-tailed)	.495	
	N	13	13
How old is your organizations	Pearson Correlation	.380	.481
	Sig. (2-tailed)	.200	.096
	N	13	13
EnvTotal	Pearson Correlation	.345	.276
	Sig. (2-tailed)	.248	.362
	N	13	13
Funding	Pearson Correlation	.255	.736**
	Sig. (2-tailed)	.400	.004
	N	13	13

Correlations

		How old is your organizations	EnvTotal	Funding
How connected is your organization?	Pearson Correlation	.380	.345	.255
	Sig. (2-tailed)	.200	.248	.400
	N	13	13	13
What is the size of your organization	Pearson Correlation	.481	.276	.736
	Sig. (2-tailed)	.096	.362	.004
	N	13	13	13
How old is your organizations	Pearson Correlation	1	.684	.450
	Sig. (2-tailed)		.010	.123
	N	13	13	13
EnvTotal	Pearson Correlation	.684	1	.463**
	Sig. (2-tailed)	.010		.111
	N	13	13	13
Funding	Pearson Correlation	.450	.463**	1

	Sig. (2-tailed)	.123	.111	
	N	13	13	13

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations:Hypothesis 11-Construction Management Resources will have a greater influence on Level of Interaction than Organizational Characteristics and Environmental Conditions

Correlations

		How connected is your organization?	What is the size of your organization	How old is your organizations
How connected is your organization?	Pearson Correlation	1	.208	.380
	Sig. (2-tailed)		.495	.200
	N	13	13	13
What is the size of your organization	Pearson Correlation	.208	1	.481
	Sig. (2-tailed)	.495		.096
	N	13	13	13
How old is your organizations	Pearson Correlation	.380	.481	1
	Sig. (2-tailed)	.200	.096	
	N	13	13	13
ConstuctRes	Pearson Correlation	-.033	.466	.275
	Sig. (2-tailed)	.914	.109	.364
	N	13	13	13
EnvTotal	Pearson Correlation	.345	.276	.684**
	Sig. (2-tailed)	.248	.362	.010
	N	13	13	13

Correlations

		ConstuctRes	EnvTotal
How connected is your organization?	Pearson Correlation	-.033	.345
	Sig. (2-tailed)	.914	.248
	N	13	13
What is the size of your organization	Pearson Correlation	.466	.276
	Sig. (2-tailed)	.109	.362
	N	13	13

	Pearson Correlation	.275	.684
How old is your organizations	Sig. (2-tailed)	.364	.010
	N	13	13
	Pearson Correlation	1	.467
ConstuctRes	Sig. (2-tailed)		.107
	N	13	13
	Pearson Correlation	.467	1
EnvTotal	Sig. (2-tailed)	.107	
	N	13	13

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations:Hypothesis 12-Project Management Resources will have a greater influence on Level of Interaction than Organizational Characteristics and Environmental Conditions

Correlations

		How connected is your organization?	What is the size of your organization	How old is your organizations
How connected is your organization?	Pearson Correlation	1	.208	.380
	Sig. (2-tailed)		.495	.200
	N	13	13	13
What is the size of your organization	Pearson Correlation	.208	1	.481
	Sig. (2-tailed)	.495		.096
	N	13	13	13
How old is your organizations	Pearson Correlation	.380	.481	1
	Sig. (2-tailed)	.200	.096	
	N	13	13	13
EnvTotal	Pearson Correlation	.345	.276	.684**
	Sig. (2-tailed)	.248	.362	.010
	N	13	13	13
PMresource	Pearson Correlation	-.188	.424	.242
	Sig. (2-tailed)	.538	.149	.426
	N	13	13	13

Correlations

		EnvTotal	PMresource
How connected is your organization?	Pearson Correlation	.345	-.188
	Sig. (2-tailed)	.248	.538
	N	13	13
What is the size of your organization	Pearson Correlation	.276	.424
	Sig. (2-tailed)	.362	.149
	N	13	13
How old is your organizations	Pearson Correlation	.684	.242
	Sig. (2-tailed)	.010	.426
	N	13	13
EnvTotal	Pearson Correlation	1	.416
	Sig. (2-tailed)		.158
	N	13	13
PMresource	Pearson Correlation	.416	1
	Sig. (2-tailed)	.158	
	N	13	13

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple Response

$HousingActivities Frequencies

		Responses		Percent of Cases
		N	Percent	
Q3_Housing Activities[a]	1	7	8.9%	58.3%
	2	6	7.6%	50.0%
	3	1	1.3%	8.3%
	4	3	3.8%	25.0%
	5	4	5.1%	33.3%
	6	9	11.4%	75.0%
	7	7	8.9%	58.3%
	8	5	6.3%	41.7%
	9	5	6.3%	41.7%
	10	7	8.9%	58.3%
	11	4	5.1%	33.3%
	12	3	3.8%	25.0%
	13	2	2.5%	16.7%
	14	3	3.8%	25.0%
	15	5	6.3%	41.7%
	16	8	10.1%	66.7%
Total		79	100.0%	658.3%

a. Group

Statistics

Q14_Does your organization manage construction or rehabilitation projects?

N	Valid	13
	Missing	0

Q14_Does your organization manage construction or rehabilitation projects?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	69.2	69.2	69.2
	No	4	30.8	30.8	100.0
	Total	13	100.0	100.0	

Statistics

		Current Housing Conditions	Q10_Affordability_Very Imp	Affordabilty_Somewhat Important	Affordability_Not Very Important	Housing Affordability
N	Valid	13	11	2	0	13
	Missing	0	2	11	13	0

Statistics

		Rank_Affordability	Quality-Very Important	Quality_Somewhat Important	Quality_Not Very Important	Housing Quality
N	Valid	2	8	5	0	13
	Missing	11	5	8	13	0

Statistics

		Quality_Rank	Neighborhood_Very Important	Neighborhood_Somewhat Important	Neighborhood_Not Very Important	Neighborhood Conditions
N	Valid	1	7	6	0	13
	Missing	12	6	7	13	0

Statistics

		Neighborhood_Rank	Availability_Very Important	Availability_Somewhat	Availability_Not Very Important	Housing Availability
N	Valid	0	5	6	2	13
	Missing	13	8	7	11	0

Statistics

		Availability_Rank	RentalAvail_Very Important	RentalAvail_Somewhat Important	RentalAvail_Not Important	Availability of Rental Housing
N	Valid	1	8	3	2	13
	Missing	12	5	10	11	0

Statistics

		RentalAvail-Rank	Owner Occupied_Very Important	Owner Occupied_Somewhat Very Important	Owner Occupied_Not Very Important	Owner-Occupied Housing
N	Valid	1	9	2	2	13
	Missing	12	4	11	11	0

Statistics

		Owner Occupied Rank	Housing Value_Very Important	Housing Value_Somewhat Important	Housing Value_Not Very Important	Housing Value
N	Valid	0	6	4	3	13
	Missing	13	7	9	10	0

Statistics

		Housing Value_Rank	Diversity_Very Important	Diversity_Somewhat Important	Diversity_Not very important	Neighborhood Diveristy
N	Valid	1	7	5	1	13
	Missing	12	6	8	12	0

Statistics

		Diversity_Rank	Income1	Household Income_Somewh at Important	Household Income_Not very imporant	Household Income
N	Valid	0	7	6	0	13
	Missing	13	6	7	13	0

Statistics

		Household Income_Rank	Other_Very important	Other_Somewhat Important	Other_Not Important	Other_Rank
N	Valid	13	13	13	13	13
	Missing	0	0	0	0	0

Statistics

		Other_Open Ended Response	Q11_Through what means does your organization have an impact on local,state, and federal housing policy_Meeting Housing Officials	Through what means does your organization have an impact on local,state, and federal housing policy_Provide input on official housing plans	Through what means does your organization have an impact on local,state, and federal housing policy_Providing testimony at legislative committee	Through what means does your organization have an impact on local,state, and federal housing policy_Senidng letters to officials
N	Valid	13	9	9	7	10
	Missing	0	4	4	6	3

Statistics

		Through what means does your organization have an impact on local,state, and federal housing policy_Assessing housing community needs	Through what means does your organization have an impact on local,state, and federal housing policy_Analyzing housing policy	Through what means does your organization have an impact on local,state, and federal housing policy_Advocating for housing policy reform	Through what means does your organization have an impact on local,state, and federal housing policy_Partcipating in housing planning meetings	Through what means does your organization have an impact on local,state, and federal housing policy_Answering housing surveys and Questionnaires
N	Valid	9	7	8	10	10
	Missing	4	6	5	3	3

Statistics

		Through what means does your organization have an impact on local,state, and federal housing policy_Other	Through what means does your organization have an impact on local,state, and federal housing policy_Other Open-Ended	Q12_What problems have you encountered to obtaining funding for operations or projects?_Paper work	Q12_What problems have you encountered to obtaining funding for operations or projects?_Insufficient funds from development fees	Q12_What problems have you encountered to obtaining funding for operations or projects?_Cost of repair or rehabilitation
N	Valid	4	13	11	10	11
	Missing	9	0	2	3	2

Statistics

Current Housing Conditions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	11	84.6	84.6	84.6
	Somewhat Important	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Q10_Affordability_Very Imp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	11	84.6	100.0	100.0
Missing	System	2	15.4		
Total		13	100.0		

Affordabilty_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	2	15.4	100.0	100.0
Missing	System	11	84.6		
Total		13	100.0		

Affordability_Not Very Important

		Frequency	Percent
Missing	System	13	100.0

Housing Affordability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	11	84.6	84.6	84.6
	Somewhat Important	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Rank_Affordability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	2	15.4	100.0	100.0
Missing	System	11	84.6		
Total		13	100.0		

Quality-Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	8	61.5	100.0	100.0
Missing	System	5	38.5		
Total		13	100.0		

Quality_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	5	38.5	100.0	100.0
Missing	System	8	61.5		
Total		13	100.0		

Quality_Not Very Important

		Frequency	Percent
Missing	System	13	100.0

Housing Quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	8	61.5	61.5	61.5
	Somewhat Important	5	38.5	38.5	100.0
	Total	13	100.0	100.0	

Quality_Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	7.7	100.0	100.0
Missing	System	12	92.3		
Total		13	100.0		

Neighborhood_Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	7	53.8	100.0	100.0
Missing	System	6	46.2		
Total		13	100.0		

Neighborhood_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	6	46.2	100.0	100.0
Missing	System	7	53.8		
Total		13	100.0		

Neighborhood_Not Very Important

		Frequency	Percent
Missing	System	13	100.0

Neighborhood Conditions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	7	53.8	53.8	53.8
	Somewhat Important	6	46.2	46.2	100.0
	Total	13	100.0	100.0	

Neighborhood_Rank

		Frequency	Percent
Missing	System	13	100.0

Availability_Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	5	38.5	100.0	100.0
Missing	System	8	61.5		
Total		13	100.0		

Availability_Somewhat

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	6	46.2	100.0	100.0
Missing	System	7	53.8		
Total		13	100.0		

Availability_Not Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	2	15.4	100.0	100.0
Missing	System	11	84.6		
Total		13	100.0		

Housing Availability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	5	38.5	38.5	38.5
	Somewhat Important	6	46.2	46.2	84.6
	Not very important	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Availability_Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	7.7	100.0	100.0
Missing	System	12	92.3		
Total		13	100.0		

RentalAvail_Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	8	61.5	100.0	100.0
Missing	System	5	38.5		
Total		13	100.0		

RentalAvail_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	3	23.1	100.0	100.0
Missing	System	10	76.9		
Total		13	100.0		

RentalAvail_Not Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	2	15.4	100.0	100.0
Missing	System	11	84.6		
Total		13	100.0		

Availability of Rental Housing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	8	61.5	61.5	61.5
	Somewhat Important	3	23.1	23.1	84.6
	Not very important	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

RentalAvail-Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	7.7	100.0	100.0
Missing	System	12	92.3		
Total		13	100.0		

Owner Occupied_Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	9	69.2	100.0	100.0
Missing	System	4	30.8		
Total		13	100.0		

Owner Occupied_Somewhat Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	2	15.4	100.0	100.0
Missing	System	11	84.6		
Total		13	100.0		

Owner Occupied_Not Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	2	15.4	100.0	100.0
Missing	System	11	84.6		
Total		13	100.0		

Owner-Occupied Housing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	9	69.2	69.2	69.2
	Somewhat Important	2	15.4	15.4	84.6
	Not very important	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Owner Occupied Rank

		Frequency	Percent
Missing	System	13	100.0

Housing Value_Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	6	46.2	100.0	100.0
Missing	System	7	53.8		
Total		13	100.0		

Housing Value_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	4	30.8	100.0	100.0
Missing	System	9	69.2		
Total		13	100.0		

Housing Value_Not Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	3	23.1	100.0	100.0
Missing	System	10	76.9		
Total		13	100.0		

Housing Value

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	6	46.2	46.2	46.2
	Somewhat Important	4	30.8	30.8	76.9
	Not very important	3	23.1	23.1	100.0
	Total	13	100.0	100.0	

Housing Value_Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	1	7.7	100.0	100.0
Missing	System	12	92.3		
Total		13	100.0		

Diversity_Very Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	7	53.8	100.0	100.0
Missing	System	6	46.2		
Total		13	100.0		

Diversity_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	5	38.5	100.0	100.0
Missing	System	8	61.5		
Total		13	100.0		

Diversity_Not very important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	1	7.7	100.0	100.0
Missing	System	12	92.3		
Total		13	100.0		

Neighborhood Diveristy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	7	53.8	53.8	53.8
	Somewhat Important	5	38.5	38.5	92.3
	Not very important	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Diversity_Rank

		Frequency	Percent
Missing	System	13	100.0

Income1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	7	53.8	100.0	100.0
Missing	System	6	46.2		
Total		13	100.0		

Household Income_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	6	46.2	100.0	100.0
Missing	System	7	53.8		
Total		13	100.0		

Household Income_Not very imporant

		Frequency	Percent
Missing	System	13	100.0

Household Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	7	53.8	53.8	53.8
	Somewhat Important	6	46.2	46.2	100.0
	Total	13	100.0	100.0	

Household Income_Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	13	100.0	100.0	100.0

Other_Very important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	11	84.6	84.6	84.6
	1	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Other_Somewhat Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	13	100.0	100.0	100.0

Other_Not Important

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not very important	13	100.0	100.0	100.0

Other_Rank

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13	100.0	100.0	100.0

Other_Open Ended Response

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		9	69.2	69.2	69.2
	Housing Discrimination	1	7.7	7.7	76.9
	Preservation of affordable housing	1	7.7	7.7	84.6
	Proximity of housing to job opportunities	1	7.7	7.7	92.3
	Supportive housing	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Q11_Through what means does your organization have an impact on local,state, and federal housing policy_Meeting Housing Officials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	5	38.5	55.6	55.6
	State Level	1	7.7	11.1	66.7
	Federal Level	3	23.1	33.3	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Provide input on official housing plans

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	7	53.8	77.8	77.8
	State Level	2	15.4	22.2	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Providing testimony at legislative committee

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	1	7.7	14.3	14.3
	State Level	5	38.5	71.4	85.7
	Federal Level	1	7.7	14.3	100.0
	Total	7	53.8	100.0	
Missing	System	6	46.2		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Senidng letters to officials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	3	23.1	30.0	30.0
	State Level	4	30.8	40.0	70.0
	Federal Level	3	23.1	30.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Assessing housing community needs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	7	53.8	77.8	77.8
	State Level	2	15.4	22.2	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Analyzing housing policy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	2	15.4	28.6	28.6
	State Level	4	30.8	57.1	85.7
	Federal Level	1	7.7	14.3	100.0
	Total	7	53.8	100.0	
Missing	System	6	46.2		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Advocating for housing policy reform

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	2	15.4	25.0	25.0
	State Level	5	38.5	62.5	87.5
	Federal Level	1	7.7	12.5	100.0
	Total	8	61.5	100.0	
Missing	System	5	38.5		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Partcipating in housing planning meetings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	7	53.8	70.0	70.0
	State Level	1	7.7	10.0	80.0
	Federal Level	2	15.4	20.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Answering housing surveys and Questionnaires

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	7	53.8	70.0	70.0
	State Level	2	15.4	20.0	90.0
	Federal Level	1	7.7	10.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local Level	2	15.4	50.0	50.0
	State Level	2	15.4	50.0	100.0
	Total	4	30.8	100.0	
Missing	System	9	69.2		
Total		13	100.0		

Through what means does your organization have an impact on local,state, and federal housing policy_Other Open-Ended

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		8	61.5	61.5	61.5
	Education of affordable housing	1	7.7	7.7	69.2
	National policy teams works daily with federal officials and elected representatives	1	7.7	7.7	76.9
	we do not have an impact on housing policy at this time	1	7.7	7.7	84.6
	We do these on all governmental levels, but most often state.	1	7.7	7.7	92.3
	we provide feedback on all of these items at all levels in our role as the Continuum of Care-- the community planning body working to prevent and end homelessness.	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Q12_What problems have you encountered to obtaining funding for operations or projects?_Paperwork

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	3	23.1	27.3	27.3
	Some Difficultly	5	38.5	45.5	72.7
	No Difficulty	3	23.1	27.3	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Insufficient funds from development fees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	4	30.8	40.0	40.0
	Some Difficultly	1	7.7	10.0	50.0
	No Difficulty	5	38.5	50.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Cost of repair or rehabilitation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	3	23.1	27.3	27.3
	Some Difficultly	4	30.8	36.4	63.6
	No Difficulty	4	30.8	36.4	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Operating funds

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	7	53.8	70.0	70.0
	Some Difficultly	2	15.4	20.0	90.0
	No Difficulty	1	7.7	10.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Lack of Collateral

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	3	23.1	33.3	33.3
	Some Difficultly	3	23.1	33.3	66.7
	No Difficulty	3	23.1	33.3	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Government Regulations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	5	38.5	45.5	45.5
	Some Difficultly	5	38.5	45.5	90.9
	No Difficulty	1	7.7	9.1	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Land acquisition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	3	23.1	30.0	30.0
	Some Difficultly	2	15.4	20.0	50.0
	No Difficulty	5	38.5	50.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Lack of Information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	1	7.7	10.0	10.0
	Some Difficultly	5	38.5	50.0	60.0
	No Difficulty	4	30.8	40.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_High interest rate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	1	7.7	10.0	10.0
	Some Difficultly	3	23.1	30.0	40.0
	No Difficulty	6	46.2	60.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Cash shortfalls/lack of credit lines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	2	15.4	20.0	20.0
	Some Difficultly	4	30.8	40.0	60.0
	No Difficulty	4	30.8	40.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Lack of experience with donor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	3	23.1	27.3	27.3
	Some Difficultly	5	38.5	45.5	72.7
	No Difficulty	3	23.1	27.3	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Lack of financial experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	1	7.7	10.0	10.0
	Some Difficultly	3	23.1	30.0	40.0
	No Difficulty	6	46.2	60.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Lack of long-range plan or business plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some Difficultly	3	23.1	30.0	30.0
	No Difficulty	7	53.8	70.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Sustainability concerns

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	2	15.4	20.0	20.0
	Some Difficultly	7	53.8	70.0	90.0
	No Difficulty	1	7.7	10.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Financing agencies inexperience with nonprofits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	3	23.1	30.0	30.0
	Some Difficultly	4	30.8	40.0	70.0
	No Difficulty	3	23.1	30.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Significantly Difficulty	3	23.1	100.0	100.0
Missing	System	10	76.9		
Total		13	100.0		

Q12_What problems have you encountered to obtaining funding for operations or projects?_Open Ended responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		10	76.9	76.9	76.9
	LISC is an intermediary so our challenges is describing our role to develop CDC capacity by providing the first money into a project, supporting CDC innovation, and building relationships for neighborhood residents with CDCs and others.	1	7.7	7.7	84.6
	Reduction in federal support and vouchers	1	7.7	7.7	92.3
	we use private investor dollars	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Q13_Which sources has your organization used to finance your operations and projects_Government Grants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	69.2	100.0	100.0
Missing	System	4	30.8		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_Foundation Grants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	84.6	100.0	100.0
Missing	System	2	15.4		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_Conventional Bank Loans

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	30.8	100.0	100.0
Missing	System	9	69.2		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_Development fees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	38.5	100.0	100.0
Missing	System	8	61.5		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_Project Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	38.5	100.0	100.0
Missing	System	8	61.5		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_In-Kind Contribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	61.5	100.0	100.0
Missing	System	5	38.5		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_Fundrainsing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	76.9	100.0	100.0
Missing	System	3	23.1		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_Membership dues

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	7.7	100.0	100.0
Missing	System	12	92.3		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects_Equity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	30.8	100.0	100.0
Missing	System	9	69.2		
Total		13	100.0		

Q13_Which sources has your organization used to finance your operations and projects _Other

		Frequency	Percent	Valid Percent	Cumulative Percent
		11	84.6	84.6	84.6
Valid	10	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Q13_Which sources has your organization used to finance your operations and projects_Open Ended Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
		10	76.9	76.9	76.9
Valid	administrative fees for operating loan funds for local government	1	7.7	7.7	84.6
	Legal settlements	1	7.7	7.7	92.3
	private investor dollars	1	7.7	7.7	100.0
	Total	13	100.0	100.0	

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Selction of architct/engineer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	4	30.8	44.4	44.4
	Yes, outside resources	3	23.1	33.3	77.8
	No, organization has not done	2	15.4	22.2	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in_Value of engineering and cost benefit analysis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	5	38.5	55.6	55.6
	Yes, outside resources	3	23.1	33.3	88.9
	3	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Development of specifications

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	7	53.8	77.8	77.8
	No, organization has not done	2	15.4	22.2	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Choosing contractors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	8	61.5	88.9	88.9
	Yes, outside resources	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Choosing project managers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	9	69.2	100.0	100.0
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Determine Insurance and bonding requirements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	7	53.8	77.8	77.8
	Yes, outside resources	1	7.7	11.1	88.9
	No, organization has not done	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Executing constructions contracts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	7	53.8	77.8	77.8
	Yes, outside resources	1	7.7	11.1	88.9
	No, organization has not done	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Obtaining building permits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	9	69.2	100.0	100.0
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in_Compliance with Government Regulation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	8	61.5	88.9	88.9
	No, organization has not done	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q15_Please indicate below which of the following construction management activities your organization has been engaged in._Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	5	38.5	38.5	38.5
	Yes, outside resources	8	61.5	61.5	100.0
	Total	13	100.0	100.0	

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Cost estimating

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	7	53.8	77.8	77.8
	Yes, outside resources	2	15.4	22.2	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Scheduling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	9	69.2	100.0	100.0
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Monitoring time and cost

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	9	69.2	100.0	100.0
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Coordinating subcontractors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	8	61.5	88.9	88.9
	Yes, outside resources	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Payment approval

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	6	46.2	66.7	66.7
	No, organization has not done	3	23.1	33.3	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Change Order management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	6	46.2	66.7	66.7
	No, organization has not done	3	23.1	33.3	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Supervision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	6	46.2	66.7	66.7
	Yes, outside resources	2	15.4	22.2	88.9
	No, organization has not done	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Construction safety

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, using in house resources	6	46.2	66.7	66.7
	Yes, outside resources	2	15.4	22.2	88.9
	No, organization has not done	1	7.7	11.1	100.0
	Total	9	69.2	100.0	
Missing	System	4	30.8		
Total		13	100.0		

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Other

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13	100.0	100.0	100.0

Q16_Please indicate below which of the following construction management activities your organization has been engaged in._Open ended response

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13	100.0	100.0	100.0

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Formal Contract

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperation	1	7.7	9.1	9.1
	Coordination	3	23.1	27.3	36.4
	Coalition	1	7.7	9.1	45.5
	Collaboration	6	46.2	54.5	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Joint advocacy to local/state/federal governments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperation	2	15.4	18.2	18.2
	Coordination	2	15.4	18.2	36.4
	Coalition	6	46.2	54.5	90.9
	Collaboration	1	7.7	9.1	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Share Staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperation	2	15.4	18.2	18.2
	Coordination	3	23.1	27.3	45.5
	Collaboration	6	46.2	54.5	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Information exchange

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Networking	8	61.5	66.7	66.7
	Cooperation	3	23.1	25.0	91.7
	Coalition	1	7.7	8.3	100.0
	Total	12	92.3	100.0	
Missing	System	1	7.7		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Send or receive referrals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Networking	3	23.1	27.3	27.3
	Cooperation	5	38.5	45.5	72.7
	Coordination	2	15.4	18.2	90.9
	Coalition	1	7.7	9.1	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Share Workspace

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperation	1	7.7	10.0	10.0
	Coordination	5	38.5	50.0	60.0
	Coalition	2	15.4	20.0	80.0
	Collaboration	2	15.4	20.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Joint Program Development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Networking	2	15.4	18.2	18.2
	Coordination	2	15.4	18.2	36.4
	Coalition	2	15.4	18.2	54.5
	Collaboration	5	38.5	45.5	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Joint Recruitment of Staff/Volunteers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Networking	1	7.7	10.0	10.0
	Coordination	4	30.8	40.0	50.0
	Coalition	3	23.1	30.0	80.0
	Collaboration	2	15.4	20.0	100.0
	Total	10	76.9	100.0	

Missing	System	3	23.1		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Joint procuremet of staff/volunteers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Networking	1	7.7	10.0	10.0
	Cooperation	1	7.7	10.0	20.0
	Coalition	3	23.1	30.0	50.0
	Collaboration	5	38.5	50.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Joint procurement of goods and services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperation	1	7.7	9.1	9.1
	Coordination	1	7.7	9.1	18.2
	Coalition	3	23.1	27.3	45.5
	Collaboration	6	46.2	54.5	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Share equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Coordination	3	23.1	30.0	30.0
	Coalition	4	30.8	40.0	70.0

	Collaboration	3	23.1	30.0	100.0
	Total	10	76.9	100.0	
Missing	System	3	23.1		
Total		13	100.0		

Q18_Based on the following definitions, please select the category for each activity listed below that best describes the activity._Joint fundraising

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperation	1	7.7	9.1	9.1
	Coordination	1	7.7	9.1	18.2
	Collaboration	9	69.2	81.8	100.0
	Total	11	84.6	100.0	
Missing	System	2	15.4		
Total		13	100.0		

Appendix D

UCINET OUTPUT

FREEMAN'S DEGREE CENTRALITY MEASURES

Diagonal valid? NO
Model: ASYMMETRIC
Input dataset: Final (F:\Dissertation Survey Data\Final)

		1 OutDegree	2 InDegree	3 NrmOutDeg	4 NrmInDeg
3	C	40.000	10.000	66.667	16.667
7	G	26.000	23.000	43.333	38.333
4	D	26.000	24.000	43.333	40.000
6	F	26.000	32.000	43.333	53.333
2	B	24.000	21.000	40.000	35.000
5	E	23.000	16.000	38.333	26.667
8	H	23.000	26.000	38.333	43.333
11	K	20.000	27.000	33.333	45.000
13	M	19.000	22.000	31.667	36.667
10	J	15.000	22.000	25.000	36.667
12	L	11.000	18.000	18.333	30.000
9	I	10.000	23.000	16.667	38.333
1	A	9.000	8.000	15.000	13.333

DESCRIPTIVE STATISTICS

		1 OutDegree	2 InDegree	3 NrmOutDeg	4 NrmInDeg
1	Mean	20.923	20.923	34.872	34.872
2	Std Dev	8.128	6.354	13.547	10.591
3	Sum	272.000	272.000	453.333	453.333
4	Variance	66.071	40.379	183.531	112.163
5	SSQ	6550.000	6216.000	18194.443	17266.666
6	MCSSQ	858.923	524.923	2385.897	1458.120
7	Euc Norm	80.932	78.842	134.887	131.403
8	Minimum	9.000	8.000	15.000	13.333
9	Maximum	40.000	32.000	66.667	53.333
10	N of Obs	13.000	13.000	13.000	13.000

Network Centralization (Outdegree) = 37.576%
Network Centralization (Indegree) = 21.818%

```
Note: For valued data, the normalized centrality may be larger than 100.
      Also, the centralization statistic is divided by the maximum value in the input dataset.

Actor-by-centrality matrix saved as dataset F:\Dissertation Survey Data\Correct Ucinet\Final-deg7213

----------------------------------------
Running time:  00:00:01
Output generated:  02 Jul 13 20:55:20
Copyright (c) 2002-12 Analytic Technologies
```

FREEMAN BETWEENNESS CENTRALITY

Input dataset: Final (F:\Dissertation Survey Data\Final)

Important note: This routine cannot handle valued data, so it binarizes your data automatically.
It DOES handle directed (non-symmetric) data, so it does NOT symmetrize.

Un-normalized centralization: 11.645

		1 Betweenness	2 nBetweenness
6	F	2.050	1.553
13	M	1.472	1.115
2	B	1.335	1.012
4	D	1.335	1.012
5	E	1.335	1.012
7	G	1.335	1.012
9	I	1.250	0.947
3	C	1.228	0.930
10	J	1.125	0.852
12	L	1.125	0.852
8	H	0.937	0.709
1	A	0.250	0.189
11	K	0.222	0.168

DESCRIPTIVE STATISTICS FOR EACH MEASURE

		1 Betweenness	2 nBetweenness
1	Mean	1.154	0.874
2	Std Dev	0.463	0.351
3	Sum	15.000	11.364
4	Variance	0.214	0.123
5	SSQ	20.092	11.531
6	MCSSQ	2.784	1.598
7	Euc Norm	4.482	3.396
8	Minimum	0.222	0.168
9	Maximum	2.050	1.553
10	N of Obs	13.000	13.000

Network Centralization Index = 0.74%

Output actor-by-centrality measure matrix saved as dataset F:\Dissertation Survey Data\Final-bet

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Running time: 00:00:01
Output generated: 02 Jul 13 00:20:47
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CLOSENESS CENTRALITY

Input dataset: Final (F:\Dissertation Survey Data\Final)
Method: Geodesic paths only (Freeman Closeness)
Output dataset: Final-clo7213 (F:\Dissertation Survey Data\Correct Ucinet\Final-clo7213)

Note: Data not symmetric, therefore separate in-closeness & out-closeness computed.

WARNING: Data matrix dichotomized such that Xij > 0 was recoded to 1

Closeness Centrality Measures

		1 inFarness	2 outFarness	3 inCloseness	4 outCloseness
13	M	12.000	13.000	100.000	92.308
8	H	12.000	14.000	100.000	85.714
9	I	12.000	15.000	100.000	80.000
6	F	12.000	12.000	100.000	100.000
4	D	13.000	12.000	92.308	100.000
5	E	13.000	12.000	92.308	100.000
7	G	13.000	12.000	92.308	100.000
2	B	13.000	12.000	92.308	100.000
12	L	13.000	13.000	92.308	92.308
10	J	13.000	13.000	92.308	92.308
11	K	13.000	14.000	92.308	85.714
3	C	16.000	12.000	75.000	100.000
1	A	16.000	17.000	75.000	70.588

Statistics

		1 inFarness	2 outFarness	3 inCloseness	4 outCloseness
1	Mean	13.154	13.154	92.012	92.226
2	Std Dev	1.292	1.460	8.013	9.052
3	Sum	171.000	171.000	1196.154	1198.940
4	Variance	1.669	2.130	64.205	81.931
5	SSQ	2271.000	2277.000	110894.969	111638.711

6	MCSSQ	21.692	27.692	834.661	1065.103
7	Euc Norm	47.655	47.718	333.009	334.124
8	Minimum	12.000	12.000	75.000	70.588
9	Maximum	16.000	17.000	100.000	100.000
10	N of Obs	13.000	13.000	13.000	13.000

Network in-Centralization = 18.09%
Network out-Centralization = 17.61%

Output actor-by-centrality measure matrix saved as dataset Final-clo7213 (F:\Dissertation Survey Data \Correct Ucinet\Final-clo7213)

Running time: 00:00:01
Output generated: 02 Jul 13 20:51:15
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RECIPROCITY

Input dataset: Final-Weighted relationship (F:\Dissertation Survey Data\Final-Weighted relationship)
Method: Hybrid
Diagonal valid? No
Output dataset: GroupReciprocity7.1 (F:\Dissertation Survey Data\Ucinet Output\GroupReciprocity7.1)

Hybrid Reciprocity: 0.8312

In the hybrid method, the overall and node-level reciprocity values are the same as in the dyad-based model. I.e., Num(Xij>0 and Xji>0)/Num(Xij>0 or Xji>0)

Node-level Reciprocity Statistics -- All values are Proportions

		1	2	3	4	5	6
		Symmetric	Non-Symme	Out/NonSy	In/NonSym	Sym/Out	Sym/In
1	A	0.364	0.636	0.429	0.571	0.571	0.500
2	B	0.417	0.583	1.000	0.857	0.417	0.455
3	C	0.333	0.667	1.000	0.500	0.333	0.500
4	D	0.250	0.750	1.000	0.889	0.250	0.273
5	E	0.250	0.750	1.000	0.889	0.250	0.273
6	F	0.250	0.750	1.000	1.000	0.250	0.250
7	G	0.333	0.667	1.000	0.875	0.333	0.364
8	H	0.333	0.667	0.750	1.000	0.400	0.333
9	I	0.250	0.750	0.667	1.000	0.333	0.250
10	J	0.500	0.500	0.833	0.833	0.545	0.545
11	K	0.182	0.818	0.889	1.000	0.200	0.182
12	L	0.333	0.667	0.875	0.875	0.364	0.364

		Reciprocity					
13	M		0.417	0.583	0.857	1.000	0.455
0.417							

"Symmetric" gives proportion of ego's *undirected* contacts with whom ego has reciprocated ties.
"Non-Symmetric" is 1 - Symmetric
"Out/Non-Sym" gives proportion of ego's non-symmetric ties that are outgoing
"In/Non-Sym" gives proportion of ego's non-symmetric ties that are incoming
"Sym/Out" gives proportion of ego's outgoing ties that are reciprocated
"Sym/In" gives proportion of ego's incoming ties that are reciprocated

Group reciprocity table saved as dataset: F:\Dissertation Survey Data\Ucinet Output\GroupReciprocity7.1.13
Node-level reciprocity saved as dataset: NodeReciprocity

Running time: 00:00:01
Output generated: 01 Jul 13 19:22:29

Vita

Tamarah Aundrena Holmes was born on May 14, 1974, in Summit, New Jersey, and is an American citizen. She graduated from Arts High School, Newark, New Jersey in 1992. She received her Bachelor of Arts in Political Science from Drew University, Madison, New Jersey in 1996. She received her Master of Science in Urban Policy Analysis and Management from the Milano Graduate School at the New School for Social Research in 1998. For the past 15 years, she has worked in research and evaluation in New York, public health in local governments in both New Jersey and Virginia, and currently works in community development in Chesterfield County, Virginia.