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Social Networks and Sense of Community Effects on Psychological Distress Among Community X Residents

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Walden University
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Abstract

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MS, Walden University, 2013

BS, Mountain State University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

A certain community within the southern region of Texas has consistently been linked to escalating poverty, high crime rates, low educational achievement, and poor physical and mental health. For the purpose of this research, this community will be referred to as Community X. Although some researchers have found that sense of community and supportive social networks are associated with healthy mental and physical functioning, others have suggested that in a debilitated community social networks can facilitate psychological distress and a strong sense of community is difficult to develop. Guided by Bronfenbrenner's ecological model, the purpose of this quantitative correlational study was to examine the combination of 3 Social Network Index (SNI) scores and 4 Sense of Community Index 2 (SCI-2) scores that affect Kessler Psychological Distress Scale (K10) scores. For the 106 Community X resident participants, as the SNI number of embedded networks increased, K10 scores tended to increase, indicating higher levels of psychological distress (consistent with the negative effect research). In a cluster analysis, two clusters emerged in which one cluster ($n = 67$) had positive z-score means on all SNI indices and all SCI-2 subscales, while the other cluster ($n = 39$) had all negative z-score means. The cluster with all positive scores had lower K10 psychological distress scores (consistent with the positive effect research), but the difference was not statistically significant. The mixed results indicated that comparative research is needed to control for communities of varying ecological distress to better relate psychological distress to sense of community and the valence of social networks to facilitate positive social change health policies and interventions that are ecological-distress sensitive.

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Dedication

To my beautiful daddy (James Juan Sparks) who has recently entered the Forever. A part of the last correspondence we had, you told me to keep my world BIG and not to let it get reduced to a tiny corner; to do things, go places, see things, be amazed and be amazing; to touch, smell, and hear, and find and know, until my world is about to burst with wonder and knowledge and experiences. You told me what we [humans] become must find its own way, and to fully embrace this reality. You reminded me to not go gentle into that good night, and to fight for every millimeter of a life worth living. You told me to stay curious and be open to new information, even if its contradictory. You said if I can do all of these things, I would have then crafted a life worthy of an Enlighted Spirit. Well daddy, that is exactly what I am doing, one exploration at a time.

Acknowledgments

So much thanks goes to my soulmate, Robert Salone. You made so many opportunities possible for me. Thank you very much. And thank you Dr. Diebold and Dr. Trimble for showing compassion and extending your time, knowledge, and expertise. It has all been an honor for me. I am eternally grateful.

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Chapter 1: Introduction to the Study

Introduction

Many studies have shown that supportive social networks can have positive influences on an individual's overall well-being and his or her quality of life (Cohen, Gottlieb, & Underwood, 2000; Stansfield, 2006). This is especially true if such relationships take place within the neighborhood where the person resides and operates (Dozier et al., 2011). Having a supportive social network that supplies emotional support provides a form of protection from the negative consequences of stressful situations and also has been shown to contribute to improved mental well-being (Krause, 2002; Stockdale et al., 2007). Alternatively, a debilitating social network has been linked to increases in psychological disorders, mortality rates, life expectancy, suicidality, homicide rates, poverty, and sexually transmitted diseases (Kawachi, Kim, Coutts, & Subramanian, 2004; Nakayama et al., 2014), and even a strong social network in a debilitated community can facilitate, rather than ameliorate, psychological distress (Cohen, 2004).

A strong sense of community can foster the development of a social network and serve to protect against the negative consequences of a social network within a disadvantaged community (McMillan & Chavis, 1986). However, because there are several social network domains (e.g., family, friends, coworkers, and the like) and four areas that inform sense of community (membership, influence, meeting needs, and shared emotional connection (McMillan & Chavis, 1986), it is not clear what combination of

social network domains and sense of community areas affect, positively or negatively, one's level of psychological distress within a debilitated community.

In this research, I examined a debilitated and disadvantaged community in the southern region of Texas in order to determine what social network domains and sense of community areas impact one's overall well-being. For the purpose of this research, this area will be referred to as Community X. In Chapter 2 I discuss the community makeup and elements currently found in the Community X area according to local research. Community and social network are explored at greater lengths in Chapter 2, as well as defining what constitutes psychological distress.

Problem Statement

The Community X area faces unique challenges and is well-known as a disadvantaged community. Community X has high rates of unemployment, poverty, and crime (AreaVibes, 2016), all of which have shown to be closely associated with mental illness (Corrigan, Pickett, Kraus, Burks, & Schmidt, 2015; Sellstrom & Bremberg, 2006; Tendulkar, Koenen, Dunn, Buka, & Subramanian, 2012). According to a Dallas Morning News editorial, there are few mental health resources in Community X and many emotional and behavioral issues experienced within the community ("We're Thinking Big," 2017). A sense of community and supportive networks have shown to act as buffers and protectors against crime, mental dysfunction, poverty, and abuse (Greenfield & Marks, 2010; Pretty et al., 2007). The gap in the psychology literature lies in the limited research regarding the associations between sense of community, social networks, and mental well-being (Pretty et al., 2007). In this study, I aimed to identify the social

network domains and sense of community areas that impact psychological distress among Community X residents.

Purpose of the Study

Extensive research has shown a positive relationship between supportive social networks and sense of community with healthy mental and physical functioning (Hendryx, Green, & Perrin, 2009; Kogstad, Monness, & Sorensen, 2013; McMillan & Chavis, 1986; Perry & Pescosolido, 2015; Uchino, 2009). In a debilitated community, social networks can facilitate psychological distress (Cohen, 2004), and a strong sense of community could be difficult to develop. The purpose of this study was to examine the combinations of social network domains and sense of community areas that positively or negatively affect the level of psychological distress within the disadvantage community of South Dallas.

Research Question and Hypotheses

I developed the following research question for this study:

Research Question: What is the combined and relative effect of a set of social network predictors and a set of sense of community predictors in accounting for variance in a measure of Community X residents' psychological distress?

Null Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological distress is zero (multiple-$R = 0$).

Alternative Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological stress is not zero (multiple-$R > 0$, $p < .05$).

Null Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are equal (i.e., semipartial r's are equal).

Alternative Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are not equal (i.e., semipartial r's are not equal).

In addition to analyses to test these hypotheses and answer the research question an exploratory cluster analysis was conducted to profile distinct groups of participants on the set of network and sense of community predictors and to examine group mean differences on psychological distress.

Conceptual Framework

The framework of this study was ecological in nature and served to direct attention to individuals and the environment in which they occupy. Specifically, I used Bronfenbrenner's (1994) social ecological model as the framework. Bronfenbrenner's ecological model comprises five socially influenced subsystems addressing human development in relation to the immediate environment and the overall larger environment. These consist of microsystems (personal aspects of the individual, such as age, gender, neighborhood, education, and employment), mesosystems (the connection between the structures of a person's microsystem), exosystems (systems that influence the individual indirectly through microsystems), macrosystems (social ideologies,

cultural values, and customs), and chronosystems (encompasses change or consistency over time as it relates to an individual's environment). I used an ecological model as a conceptual framework for this study to illustrate how healthy functioning is contingent on a plurality of interacting factors between individuals and their overall environment. Also, the model is used to direct attention to the role that the immediate and larger environment serves in facilitating dysfunction amongst individuals and entire communities. According to Berkman, Glymour, and Kawachi (2014), the social environment influences behavior by shaping norms, enforcing patterns of social control, providing or not providing environmental opportunities, and reducing or producing stress for which behaviors may be effective coping strategies. The ecological metaphor suggests communities are open systems with many different levels and connections (Nelson & Prilleltensky, 2010). An ecological stance views human problems and competencies as an interdependency between characteristics of the individual (e.g., coping skills), family and friends, the community (e.g., work settings, school, church), and larger society (e.g., social class, social norms, social policies). Ecological conceptualization of issues and problems encountered by disadvantaged individuals promotes liberation and well-being, while failure to think and practice ecologically encourages the tendency to engage in victim-blaming (Nelson & Prilleltensky, 2010). I used an ecological framework to illustrate the dynamics of the relationship between Community X residents and the overall Community X community.

Nature of Study

I used survey methods to collect quantitative data for this correlational study. Quantitative research is consistent with examining the relationships between social networks, sense of community, and psychological distress. I needed to quantifying these relationships to answer the research question and address the research problem. The tools of measurement included the Kessler Psychological Distress Scale (K10), the Sense of Community Index 2 (SCI-2), and the Social Network Index (SNI). The K10 is designed to measure anxiety and depression through a 10-item questionnaire with symptoms experienced within the past 4 weeks. The K10 is used in annual government health surveys in the United States and Canada, as well as in the World Health Organization (WHO) World Mental Health surveys (Kessler et al., 2002). The SCI-2, an often used quantitative measure of sense of community in the social sciences, consists of a Likert-type scale with 24 items that measures a sense of community within four areas: membership, influence, meeting needs, and shared emotional connection (McMillan & Chavis, 1986). The SNI measures (a) the number of high-contact roles, (b) the number of people in social network, and (c) the number of embedded networks by assessing participation in 12 types of social relationships: spouse, parents, parents-in-law, children, other close family members, close neighbors, friends, workmates, schoolmates, fellow volunteers, members of groups without religious affiliation, and religious affiliation (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997).

Variables

The dependent variables for this study were participants' composite psychological distress score of depressive and anxiety-related symptomology determined by the total score of the K10. The independent variables in this study were the three SNI index scores (number of high-contact roles, number of people in social network, number of embedded networks) and the four SCI-2 subscale scores (membership, influence, meeting needs, and shared emotional connection). The specific operationalization of each of these variables is presented in Chapter 3.

Limitations

A realistic limitation of the study was a limited number of reachable participants representative of an entire community. Another possible limitation concerns immigrant groups, disabled populations, and individuals with serious mental illnesses. These groups may not be part of the networks studied and local social cohesiveness may be at their expense, which causes further generalizability concerns. I aimed to incorporate a diverse representative sample and used multi-site sampling strategies.

Significance of Study

This study is significant for how I designed it to directly address the residents of South Dallas, a disadvantaged community, and investigate matters relevant to their sense of community, social networks, and psychological distress. Assessment of this community provides quantitative data that could be linked to other data sources in efforts of community redevelopment or policy changes. Examining the residents' sense of community aspects and social support systems aid in fulfilling the social engagement

needs that at one time was expressed by representatives of the Community X area (CHNA, 2016). Further, this study addresses the difficulty some psychologists have with accepting the need to examine sense of community. As Sarason (1974) noted,

> The concept "psychological sense of community" is not a familiar one in psychology...it does not sound precise, it obviously reflects a value judgment, and does not sound compatible with "hard" science. It is a phrase which is associated in the minds of many psychologists with a kind of maudlin togetherness, a tearsoaked emotional drippiness that misguided do-gooders seek to experience (Sarason, as cited in Pretty et al, 2007, p. 6).

Pretty et al (2007) also indicated that within the discipline of psychology, "sense of community has not been positioned as a key factor in understanding or changing human behavior. The extent to which it has been deeply conceptualized and implemented is still limited when compared to other psychological constructs" (p. 4). My study of the psychological sense of community among the residents of Community X contributes to the psychology literature by showing that sense of community has a sound conceptual foundation and should be built upon.

Social Change

This study not only contributes to social change in how it begins to build a theoretical framework regarding sense of community and social networks in psychology, but also how it provides a foundation to understanding these mechanisms. Policy makers and community stakeholders can use the findings to embed a sense of community in public health policies and interventions. In addition, the findings can help guide

empirically supported treatments aimed at utilizing social networks and social capital for mental health support and psychological treatment. According to Townley and Kloos (2011), interventions directed at enhancing sense of community and community integration are needed among individuals with serious mental illness. I hope that findings from this study will raise consciousness about issues happening in Community X and about the positive implications of targeting psychological distress from a socio-ecological perspective. Finally, findings from this study can be generalized to similar neighborhoods in efforts to improve community relations and facilitating positive social change.

Chapter 2: Literature Review

Introduction

According to local reports in the Dallas area, residents of Community X have high levels of mental illnesses along with a decreased quality of life in comparison to residents residing in northern Dallas ("We're Thinking Big," 2017; "It's Just Plain Wrong," 2017). The same reports also indicated that it is common to see depression, anxiety, and post-traumatic stress disorder among children residing in Community X stemming from a lack of parental involvement, hunger, domestic violence, sexual abuse, and drug use by adults and teenage siblings. Researchers have concluded that the state of one's neighborhood and the components of one's social network have a great influence on overall quality of life (Sampson, Morenoff, & Gannon-Rowley, 2002; Brynes & Miller, 2012). Additionally, social networks and community factors function both as predictors of mental dysfunction as well as outcomes of such dysfunctions (Sampson, Morenoff, & Gannon-Rowley, 2002; Tracy & Johnson, 2007). As I noted in Chapter 1, it is not clear what combination of social network domains and sense of community areas positively or negatively affect one's level of psychological distress within a debilitated community. It was thus necessary to examine these combinations.

Literature Search Strategy

To obtain articles for the literature review, I accessed academic databases via Walden library and the U.S. National Library of Medicine. I searched the databases to locate articles pertaining to social networks and community factors as well as social networks and mental health outcomes. Some of the databases and search engines I used

were PsycARTICLES, ProQuest, PsycINFO, SocINDEX, PubMed, National Center for Biotechnology Information (NCBI), and Google Scholar. I evaluated articles to ensure validity, reliability, and credibility. The most relevant peer-reviewed articles were selected, most of which were published within the last 5 years. However, I did include a few older articles that were pioneering in the field. I also reviewed scholarly books written by leading experts and degreed professionals in their field. Search terms included *social support networks, low-income communities, perceived social support, thriving communities, mental well-being, sense of community, social capital,* and *social intergration.*

Role of Social Networks

A social network is a type of social structure of specific ties made up of connected individuals by one or more types of interdependencies such as friendship, kinship, common interest, financial exchange, dislike, sexual relationship, or relationship of belief, knowledge, or prestige (Crisp & Turner, 2014). In other words, a social network consists of an individual's family, friends, coworkers, neighbors, and any other associates who interact with the individual. Although each member circulates within the network, it does not necessarily mean that all members know or interact with one another. Whether each member in the network interacts with one another or not, they all have the ability to influence and be influenced by one another. Emile Durkheim was one of the founding figures in sociology and one of the first researchers to study suicidality in relation to social integration. Durkheim did not view suicidality as an individually isolated tragedy, but instead saw it as a reflection of conditions of society as a whole (Berkman, Glymour,

& Kawachi, 2014), particularly in relation to the degree in which an individual is tied to a group. Durkheim posited that individuals who have stronger ties to a group or network are more protected against suicidality and other health disparities. For instance, when accessing the effects of individual and neighborhood characteristics on dental health, one study showed that the prevalence of dental issues was significantly lower in neighborhoods with higher social integration (Pattussi, Hardy, & Sheiham, 2006). There is a meaningful connection between social ties to the health and welfare of individuals, communities, and societies—even if all members do not directly interact. Researchers have shown that situations such as infectious diseases, suicidality, obesity, happiness, and violence spread within the same network where all members did not directly know or interact with one another (Berkman, Glymour, & Kawachi, 2014; Christakis & Fowler, 2011; Durkheim, 1951; Institute Medicine, 2003; Nelson & Prilleltensky, 2010). The fact is networks are complex with no defining boundaries. A network can consist of one group of individuals who are much more connected to one another than they are to other members within that same network (Christakis & Fowler, 2011). Nevertheless, each member of the network has the power to impel and be impelled. Social networks, as a whole, play a critical role in health outcomes, community aspects, happiness, problem solving and management, as well as in individual and collective goal attainment. In the simplest form, a social network is a specific set of connections between people in a group.

Christakis and Fowler (2011) are two leading scientists in the study of human connections, particularly the study of social networks. In their book *Connected*,

Christakis and Fowler state that there are two fundamental aspects of social networks: connection and contagion. Connection has to do with who is connected to whom (e.g., family ties, friends, co-workers, etc.), while contagion pertains to what (if anything) flows across the ties of connection (e.g., germs, money, behaviors, happiness, obesity, etc.). For the most part, a social network benefits the individual and the community as a whole. According to Christakis and Fowler, social networks allow groups to do and obtain things that a disconnected collection of individuals cannot do nor obtain. A social network can facilitate a sexual partner, a spouse, a new job, and even an approval for a car or home. Ultimately, it is the ties between individuals that offer opportunities to influence and be influenced, such as when a spouse married to a health-conscious spouse becomes more health conscious or when an individual gains weight when living with other overweight individuals. As Berkman, Glymour, and Kawachi (2014) noted, "By assessing actual ties between network members, one can empirically test whether that community is defined on the basis of neighborhood, kinships, friendships, institutional affiliation, or other characteristics" (p. 237). Social networks are responsible for the spread of norms, beliefs, ideas, values, and behaviors. Consequently, it is social networks that shape individuals' lives and communities.

Sense of Community

Communities are made up of social networks. Social networks are essential to every aspect of community engagement, from the health of a community to economic prosperity (Dozier et al., 2011). The social networks in a community can be defined as a group of individuals, families, friends, co-workers, as well as various organizations and

associations. Typically, members of a community share geographical boundaries, common norms, culture and language, values, sense of membership, and common health risk or conditions (Ruderman, 2000). Each member of the community is in a position to influence and be influenced by the physical, economic, and social factors within that environment. Therefore, establishing a sense of community depends on the ties between networks within that community.

Seymour Sarson (1974) was one of the first researchers to study a psychological sense of community (as cited in Nelson & Prilleltensky, 2010). Many other researchers have since continued to explore the phenomenon (Fisher, Sonn, & Bishop, 2002; Hill, 1996; McMillian & Chavis, 1986; Wilkinson, 2007). However, nearly all the researchers put an emphasis on length of residency, feelings of boundedness, safety, home ownership, and community satisfaction as being precursors of sense of community. In the mid-1980s, McMillian and Chavis (1986) indicated that much of the research lacked a direct definition of sense of community and a coherent conceptualization. McMillian and Chavis stated that a theoretical understanding of what sense of community is and how it worked was still needed. They went on to provide a definition and a theory of sense of community, and they created the Sense of Community Index (SCI) tool to quantitatively measure the matter (McMillian & Chavis, 1986). McMillian and Chavis' definition and theory of sense of community is the most widely used framework on the topic (Nelson & Prilleltensky, 2010).

Membership

McMillian and Chavis (1986) defined sense of community as a feeling that members have of belonging and that members matter to one another and to the group. Further, members have a shared faith that members' needs will be met through their commitment to being together. Their definition of sense of community has four defining elements: membership, influence, integration and fulfillment of needs, and shared emotional connection. They defined membership as "the feeling of belonging or of sharing a sense of relatedness" (p. 9). It implies belonging to or being a member of something. However, membership also implies boundaries and access given to a selected few. The researchers indicated that there were five attributes of membership: boundaries, emotional safety, a sense of belonging and identification, personal investment, and common symbol system. I explain each of the five attributes of membership in the following subsections.

Boundaries. Boundaries consist of members having the emotional safety necessary for needs and feelings to be exposed and for intimacy to develop. Boundaries are also a form of protection against certain threats and may serve to protect personal space or group intimacy.

Emotional safety. Emotional safety has to do with a broader notion of security within the group, such as members' willingness to reveal how they feel or there being a tolerance for diverse opinions or beliefs within the group.

Sense of belonging and identification. A sense of belonging and identification are essential to membership because it is the notion that one fits or belongs in the group

and is accepted by the group. Sense of belonging and identification facilitate members' willingness to sacrifice for the group and that they have a place there. It is necessary for a group member to feel he or she has earned a place within the group in order to feel a sense of community.

　　Personal investment. Earning a place within the group has to do with personal investment. The feeling that one has earned a place contributes to membership being more meaningful and valued. The work of many cognitive dissonance theorists has shown that a person's actions are ultimately driven by unseen psychological factors that seem to contradict the current situation. For an example, the ritual of hazing by many college fraternities has shown to strengthen group cohesiveness despite its often dangerous and humiliating tasks (Baier & Williams, 1983; Winslow, 1999). Ultimately, a person's beliefs, attitudes, and the overall social environment affect decision making and are significant factors among those who engage in hazing behavior.

　　Common symbol system. McMillian and Chavis (1986) explored how a common symbol system serves several important functions in creating and maintaining sense of community, such as how it maintains group boundaries via social convections (e.g., rites of passage, language, dress, etc.) to create social distance between members and nonmembers. For example, black leaders have used symbols, such as the clenched fist or other Black Power logos, to unify the black community while defying white populations (Benard, 1973 as cited in McMillian & Chavis, 1986). Ultimately, symbols for a neighborhood could be anything from a logo, landmark, or even an architectural style.

Nevertheless, embracing of such symbols aid in facilitating one's membership in a community.

To summarize, Millian and Chavis (1986) described five attributes of membership that contribute to a sense of community: boundaries, emotional safety, sense of belonging and identification, personal investment, and a common symbol system. Together these attributes contribute to a sense of membership within a community but also aid in identifying nonmembers.

Influence

According to Millian and Chavis (1986), influence in a group is bidirectional; one direction pertains to the notion that members of a group must have some influence over what the group does (otherwise group members likely would not feel motivate to participate) and the other direction pertains to how group cohesiveness is contingent on the group's ability to influence its members (e.g., the ability to attend to general problems within the community). In other words, not only must members feel that they have some influence over group matters, they must also feel that the group can influence its members. The authors summarized their research with the four following conclusions regarding influence and group cohesiveness:

1. Members are more interested in a community in which they feel influential.

2. The bond or cohesiveness of a community depends on both conformity and community influence on its members.

3. The force toward conformity and uniformity comes from the individual as well as from the community, meaning that conformity facilitates closes as well as serves as an indicator of cohesiveness.

4. Influence from both a member on the community and influence of the community on a member take place in cooperation, and is likely that both operate at the same time in close knit communities.

Integration and Fulfillment of Needs

The third element of Millian and Chavis (1986) research regarding sense of community had to do with the integration and fulfillment of needs that the researchers believed had everything to do with reinforcement of needs. Reportedly, "for any group to maintain a positive sense of togetherness, the individual-group association must be rewarding for its members" (p.12). It is important to note that the word "needs" here means more than survival needs but also needs relating to desires and values. Millian and Chavis went on to acknowledge that it is nearly impossible to identify all the reinforcements that bind individuals together in a close community due to the complexity of individuals and groups; however, the *status* (rewards) of being a member, *competence* (capable individuals within the group that can be of assistance if needed), successfulness of the community, and *shared values* were identified as potent reinforcers. The researchers finalized their findings regarding integration and fulfillment of needs in a sense of community with the four following points:

1. Strong, close communities function on reinforcement and need fulfillment.

2. Status of membership, competency of other members, success of the community, and shared values are some of the rewards that are effective reinforcers of a community.

3. Among the many needs that communities fill, individual values that are shared among community members are the most significant needs that will determine the ability of a community to organize and prioritize its need-fulfillment activities.

4. Sustainable communities are those that fit people together so that everyone needs are met with the help of each other.

Shared Emotional Connection

The last defining element that facilitates a sense of community according to Millian and Chavis (1986) is the shared emotional connection between members of a community. According to the researchers, a shared emotional connection is, for the most part, based on a shared history; however, it is not necessary that group members have taken part in that history in order to share it. Group members would, however, have to identify with it. Equally important, a shared emotional connection within the group "seems to be the definitive element for true community" (p.14). Millian and Chavis listed the seven features that are important to the principle of shared emotional connection:

1. *Contact hypothesis*: Frequent contact between groups can promote closeness and acceptance.

2. *Quality of Interaction*: Positive relationships and experiences contribute to a greater bond, and success facilitates cohesion.

3. *Closure to events.* Questionable interactions and unresolved community tasks, inhibit group cohesiveness.

4. *Shared valent event hypothesis:* Shared events that are considered important to the group, greatly increase the community bond. This may explain why crisis situations tend to bring communities closer.

5. *Investment:* Members whom have given a great amount of time and energy to a community, the more important that community becomes to him or her. An example would be members whom have purchased a home in the community and have taken the time to participate in community events. Similarly, those who donate money to community organizations tend have high interest in the community. Intimacy was also identified as a form of investment. Intimacy within the community has to do with the amount of interpersonal risk members take with other members and the extent to which they are vulnerable to community experiences. All of which means the more their general sense of community will be affected.

6. *Effect of honor and humiliation on community members:* Whether a member has been rewarded or humiliated in front of community members will determine if that member feels more attracted to the community or less attracted. Obviously, being rewarded will increase attraction and humiliation will decrease it.

7. *Spiritual bond:* Despite Millian and Chavis indicating that spiritual bond is a quality that is difficult to describe, they indicated that it was present to some

degree in all communities. An example of a spiritual bond that the authors

provided was the concept of "soul" as it relates to African Americans and its

role black communities.

In conclusion, many researchers in the area of community have tried to operationalize and identify the meaning of sense of community; however, most failed to provide a sound conceptualization of the term and how it worked. Milian and Chavis are credited with introducing the most accepted model of sense of community, including a full description and theory of the phenomenon (Pretty, Bishop, Fisher, & Sonn, 2007). A sense of community was identified as having four defining elements: membership, influence, integration and fulfillment of needs, and shared emotional connection (Milian & Chavis, 1986). Ultimately, a strong community was recognized as one that offered members positive ways to interact, the ability to share important events, ways to resolve issues positively, opportunities to invest in the community while honoring members, and opportunities to experience a spiritual connection among members (Milian & Chavis, 1986).

Social Cohesion and Social Capital

As previously mentioned, sense of community encompasses a need for affiliation, a need for sharing, and an overall need to be with other individuals, particularly those who share the same values. Wilikinson (2007) indicated that the psychological sense of community and neighboring aspects (being helpful, kind, and accommodating) defines the cohesiveness of a group. Social cohesion refers to the extent of connectedness and solidarity among group members (Berkman, Glymour, & Kawachi, 2014). Stanley (2013)

explained how social cohesion has to do with the willingness of group members to cooperate with each other in order to achieve prosperity and for their overall survival. He also stated that group members have a reasonable chance of accomplishing goals due to other group members' willingness to assist and share the fruits of their endeavors equally (Stanley, 2013). Ultimately, Stanley (2013) indicated social cohesion contributes to a wide range of social outcomes, particularly health outcome and economic prosperity. Perhaps a broad way of defining social cohesion is to describe it as group members working to fight exclusion and marginalization, members working towards creating a sense of belonging and towards the well-being of the group, and members working to promote trust and the promotion of opportunities and upward mobility for all members. (OECD, 2011). If these mentioned concepts are actively in place and enforced, the group it is said to be richly supplied with stocks of social capital.

It is important to note that social cohesion within a group typically consists of two things: (a) the absence of latent social conflicts, and (b) the presence of strong social ties. These two features give rise to social capital. One can think of social capital as stocks and bonds; however, social capital is invisible assets (e.g., trust, reciprocity, social organizations, and information channels). Kawachi (1999) referred to social capital as levels of interpersonal trust and norms of reciprocity and mutual aid in social relationships that benefit the group as a whole. Extensive research has indicated that cohesive communities and group participation in community events enhance the well-being of participating members, particularly in terms of better health outcomes, education, income, crime, and public policy (Boxman, De Graaf, & Flap, 1991; Kawachi,

Kennedy, & Glass, 1999; McKenzie & Harpham, 2006; Putnam, 2000; Stone & Hughes, 2002). James Coleman (1990) suggested that social capital is like any other form of capital in that it makes possible the achievement of certain ends that would not be attainable if it was not present. The workings of social capital have been linked to improved parenting, the enhancement of self-government, and the exertion of social control over certain deviant behaviors (Berkman et al., 2014). Social capital in action can be found in certain examples like learning about a particular job lead, a neighbor taking another neighbor to a doctor's appointment or helping with car repairs, a neighbor contacting the police when she realizes she has not seen her next-door neighbor in over a week, or a local teen in the neighborhood providing childcare for parents who work outside of the home. Simply put, social capital is the collective value of all the social networks in a community. There were interesting findings, however, by Putnam (2000) and Berkman et al. (2014) that revealed social capital has been on the decline in American society for the last 25 years. According to Putnam (2000), families having dinner together has dropped by 43%, having friends or neighbors over has dropped by 35%, attending club meetings has decreased 58%, and that every ten minutes of comminuting reduces all forms of social capital by 10%. Ultimately, communities are stronger when they fight against exclusion and work to increase the well-being of all members. Cohesive communities facilitate supportive networks, and it is these networks that are the communities' irreplaceable social capital.

Psychological Distress

There is a vast difference between psychological disorder (mental disorder) and psychological distress. This study aims to conceptualize psychological distress as the outcome variable; however, it should not be confused with the outcome variable being psychological disorder. The DSM defined mental disorder as a syndrome that has shown to display clinically significant disturbances in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental dysfunction (American Psychiatric Association, 2013). The manual also limits mental disorders to conditions that are disproportionate to external stressful situations and not merely an expectable and culturally sanctioned response to a particular event. In other words, dysfunction of behavior—having no psychological, biological, or developmental origin—that arise in response to certain social stressors and for which the behavior only persists as long as the stressors are present does not fit with the definition of mental disorder. On the other hand, stressful situations or stressful life events that compromise psychological functioning in which symptoms are present only during the duration of the stressor and the dysfunction has no psychological, biological, or developmental origin, the individual is said to be experiencing psychological distress. It is important to note, however, that social factors play a major role in both mental disorders and psychological distress. According to Horwitz (2007), chronic intense situations can lead to very serious psychological conditions, and certain stressful social arrangements can cause mental disorders. Both traumatic life events and chronic social strains can facilitate mental disorders, as evident

in victims of violent crimes or individuals who have endured chronic poverty conditions (Seligman, 1975; Horwitz, 2007). These finding reinforce the significance role that supportive networks, sense of community, and social capital have on mental health outcomes. Following are discoveries from the literature in which ties have been made between mental well-being or the lack thereof and social factors, particularly in regard to networks and community.

Social Networks and Stressors

In 1976, the stress-buffering hypothesis was introduced by John Cassel and Sidney Cobb to indicate that individuals with strong social ties are somewhat protected from the potential pathogenic effects of stressful events. Cassel posited stressors that put a person at risk for disease and distress were often accompanied by confusing or absent feedback from the social community, and that stressors were mitigated when a person's network provided (a) consistent communication of what is expected of them, (b) evaluation of their performance, (c) assistance with tasks, and (d) appropriate rewards (Cassel, 1976). Cobb on the other hand, deemed major life transitions and crisis placed people at risk for disease and distress and that protection comes from a caring and supportive network where the person felt valued and a sense of belonging (Cobb, 1976). Similarly, Cohen and Willis' (1985) view regarding the stress- buffering hypothesis indicated that support from the network aids in the person not viewing the event as stressful beyond their ability to manage because the person believes he or she has sufficient instrumental resources (e.g., financial assistance, childcare assistance, and/or help with transportation) and emotional resources to cope with the event. For instance, in

a migration study by Cheung (2014), a lack of supportive ties to buffer social stressors were contributed to poor psychological health for both rural migrant and urban native adolescents.

Characteristics of Social Networks

Networks must be deemed sufficient in order to be effective in relieving psychological distress. A study by Kogstad, Monness, and Sorensen (2013) examined mental health problems in regards to how networks contribute to assistance from mental health professionals. The study was aimed at exploring the degree to which social networks provide assistance with mental health issues as well as how the networks interact with professional assistance. Findings from the study concluded the following regarding the participants' networks: (1) trust within networks proved to be helpful in severe trauma cases and situations where an individual needed to talk about traumatic experiences, (2) individuals with less social supports had more negative experiences with treating professionals, which was implied as a double burden, i.e., having a lack of social supports and experiencing negative encounters with professional services (Kogstad et al., 2013). An interesting discovery that the researchers made reference to was how networks provided more assistance with talking through situations for more people than even the help of psychologists or psychiatrists. In the end, Kogstad et al. concluded that their findings indicated the importance of mental health treatment to go beyond traditional methods and to examine additional ways in which people are helped through mental dysfunctions, particularly exploring informal support from their social networks.

The quality of the networks also matter, and not all networks are created equal. Seeman (1996) discovered that non-supportive social interactions among groups resulted in a decrease of healthy functioning similar to the degree of which is see with social isolation. In the end, Seeman (1996) concluded that although social integration generally contributes to better health outcomes, it is the quality of the social ties that will determine the magnitude of such health benefits. To pursue these findings even further, in an extensive research review by Seeman (2001) marital turmoil was associated with an increased risk for psychological distress, as well as kinships and friendships that exhibit high demands, conflict, envy, devaluation, and even disappointment. Although the above findings pertain to individuals embodied within a network, the social ties between the individuals are not conducive to healthy mental functioning, resulting in the individuals experiencing psychological distress similar to results seen in socially isolated individuals (Cornwall & Waite, 2009).

Social Capital and Sense of Community Within Networks

As stated, social capital pertains to cohesion, reciprocity, trust, and support within networks, and together these aspects contribute to a sense of community. Communities rich in social capital have shown to have healthier mental functioning than communities with little to no social capital (McPherson et al., 2014). According to Browne-Yung and Baum (2013), social capital influences health through the membership of networks by providing access to information, better resources, and buffering stress in adverse circumstances. In their study examining social capital in low-income neighborhoods, the researchers made a destination between various forms of social capital by differentiating

between three types of social ties that join networks: bonding, bridging, and linking

(Browne-Yung & Baum, 2013). The following summarizes Browne-Yung and Baum

(2013) explanation of the three forms of social ties: (a) bonding ties are made up of

informal networks and are the ties between family and friends; these networks are often

regard as a means of "getting by" and frequently serve as a buffer to stress, (b) bridging

ties consist of networks between heterogeneous groups, dissimilar in socio-demographic

or social identity, such as ethnicity, age, or income. Bridging networks are thought to

have the most influence on improving socio-economic status by generating resources and

helping people "get ahead," and (c) linking ties make up networks of institutionalized

power or authority gradients in society who interact in a sort of vertical formation and

brings together bridging capital and vertical networks, such as connections with bankers,

social workers, psychologists, and law enforcement officers. According to Browne-Yung

and Baum (2013), there is an excessive of bonding social capital (networks between

family and friends) in disadvantage areas that does little to benefit its residents. This is

notion is referred to as poverty concentration. Being surrounded by only other poor

individuals and no productive social networks that can facilitate fertile connections and

other methods that might help individuals escape poverty contributes to generational

socioeconomic limitations and community deprivation (Rothenberg, 2010). Affluent

neighborhoods, on the other hand, have been shown to consist more of bridging and

linking networks with the potential of generating more resources (Browne-Yung &

Baum, 2013). Ultimately the results of Browne-Yung and Baum (2013) study concluded

that one of the low-income neighborhoods (<$20,000) with fewer available resources

perceived their neighborhood to have a poor reputation, be unfriendly and unsafe, and lack neighborhood cohesion. Residents of this neighborhood reported less involvement in community groups or socializing opportunities and poorer health outcomes than the compared neighborhood. It is important to note that both neighborhoods studied by Browne-Yung and Baum (2013) were classified as being low-income. The difference was one neighborhood was initially identified as having more neighborhood resources and opportunities—in what the researchers defined as *cultural capital* (the accumulation of knowledge, behaviors, skills, and social positions that facilitate social mobility). The findings from this study imply that social capital is much more than economic matters and is perhaps the intertwinement of social aspects, particularly, the crafting of social networks that have the potential to link and bridge resources and connect people. Successful intertwinement of such diversities is social capital at work. Without such mentorships and inclusion efforts being made in disadvantaged neighborhoods, isolation and disconnection among residents will be all too common.

Utilizing social capital in mental health treatment reduces psychological distress (Pretty et al., 2007). In order to build social capital within social networks, the psychological sense of community within those networks will need to be explored. According to Townley & Kloss (2011), sense of community among the mental illness health population is a largely unexamined area. This may be due to the concept being described as illusive and "efforts to define, assess and develop a sense of community have been ongoing" (Pretty et al., 2007, p. 6). Although sense of community involves a network of people, it is a personal feeling that, for the most part, is subjective in nature.

In other words, two people may not have the same definition of what a sense of community is. However, according to Sarason (1974), people are very much aware when they have it and also when they do not (as cited in Pretty et al., 2007).

Several explanatory variables emerged in the literature from studies examining the relationship between sense of community and well-being. The variables were (a) neighbor relations, (b) neighborhood satisfactory, (c) neighborhood safety, (d) neighborhood tolerance for mental illness, (e) neighborhood history, (f) work opportunities, (g) local resources and opportunities for participation, and (h) mutual aid and exchange of information, that is, reciprocity (Cattell, 2001; Townley & Kloss, 2011). Most of the time, sense of community is the desired state or the outcome variable; however, Pretty et al. (2007) suggested researchers studying communities to think about it differently in order to accurately conceptualize actual social interactions reflected in that community. Pretty et al. (2007) stated instead of looking at sense of community as some type of end state necessary to achieve a series of benefits, researchers should explore sense of community from the perspectives of the residents, using a narrative approach with qualitative methods. Furthermore, to understand a particular community's nature, process, and expectations of sense of community, it is necessary for researchers to have some appreciation for the community's history, and although it may not seem relevant in a psychological sense, it is crucial to understanding some of its present characteristics and cultural identity (Pretty et al., 2007). Utilizing these types of measurements to examine community networks have provided insight into how a strong sense of community serves as a protection factor against family violence, how it fosters

resiliency among adults who have experienced childhood abuse, how it encourages social

cohesion and neighborhood safety, as well as how it promotes a general well-being

(Greenfield & Marks, 2010; Nelson & Prilleltensky, 2010). In fact, empirical evidence

warrants further investigation into how to apply social capital towards the improvement

of population health and addressing health disparities (Carlson & Chamerlain, 2003).

Many researchers are encouraging practitioners and policy makers alike to really delve

into efforts aimed at strengthening social capital within communities in efforts of

reducing socioeconomic health disparities (Carlson & Chamerlain, 2003; Kawachi, 1999;

McPherson et al., 2014). Perry and Pescosolido (2015) discussed how individuals employ

decision-making strategies (either by rational choice or habitus logic) to evaluate support

needs and then to identify the best possible match within their network of resources to

activate ties that are most likely to be useful for the particular purpose. The researchers

indicated that this type of network selection is a largely overlooked coping mechanism

that could be encouraged by mental health professionals to aid in the treatment of mental

illnesses (Perry & Pescosolido, 2015). Ultimately, individuals experiencing mental

dysfunctions are more likely to discuss their mental health with other individuals

experiencing similar distress (Perry & Pescosolido, 2015). Therefore, treating

professionals could enhance network activation strategies aimed at addressing mental

dysfunctions by fostering mental health discussion groups, utilizing technology to make

professionals and professional advice from treating doctors more accessible, and by

promoting mental health awareness in disadvantaged communities in efforts aimed at

strengthening community capital and fostering a greater sense of community.

The Community X Area

For the purposes of understanding this section pertaining to the history of South Dallas, it necessary to know Community X is commonly referred to as Fair Park due to Fair Park being located in the Community X area ("Forward Dallas", n.d.). It has been stated that Community X was once one of the most impressive areas in Dallas, and was home to some of the wealthiest entrepreneurs. According to one historian, "The community was home to some of Dallas' most prominent citizens, like the Sanger Brothers (Sanger - Harris Department Stores) and Linz family (Linz Jewelers). Many of the homes were designed by the most noted architects of the era" (Louis, 2011). Reportedly, the area encompassed "the finest and best equipped high school in the city" (Louis, 2011). It is believed that the once compelling characteristics of the community started to change after World War II in which the neighborhood began to rapidly decline.

Community Health Needs Assessment (CHNA)

In an effort to access the needs of the Dallas County populations, Parkland Hospital in partnership with Dallas County Health and Human Services assembled a Community Health Needs Assessment (CHNA) for Dallas County residents. The CHNA was an extensive study aimed at reflecting the diversity, strengths and challenges of the community by using primary qualitative data sources that included 55 key informant interviews (CHNA, 2016). When informants were asked which Dallas County population groups have the most challenges, Community X was frequently identified as having the most challenges regarding behavioral health treatment. The number one barrier in receiving behavioral treatment was identified as lack of transportation, including the cost

of transportation. The second significant barrier mentioned was the cost of behavioral treatment, followed by certain social determinants: cultural ignorance by professionals in providing treatment and ignorance of economic, and sociological differences among communities in regards to public health. Other barriers cited in receiving health treatment were health literacy, stigma, fear, and trust. To reflect the composition of the southern sectors of Dallas and identify some of the challenges, significant key findings from the CHNA study are summarized below:

- The Community X community is the poorest of the 13 communities in Dallas County, with a per capita income of $13,660 (versus $25,108 across Dallas County). 29.2% of Community X households are below the poverty level, the highest rate in the county.

- 28.3% of Community X residents age 25 and over have less than a high school education, the fourth lowest rate of the 13 Dallas County communities.

- The community has the second highest proportion of African Americans in the population, 66.4%. Hispanics make up 28.1% of the community's population.

- Community X has the highest mortality rates for the top three causes of death (heart disease, cancer and cerebrovascular disease/stroke) among the 13 communities. It also has the highest Years of Potential Life Lost rate, 13,829 YPLL's per 100,000, compared with 6,974 YPLL's per 100,000 for all of Dallas County.

- The community also has the highest homicide mortality rate, at 18.4 deaths per 100,000. The Dallas County overall rate is 6.0 per 100,000.

- Southwest Dallas has the highest percentage of people age 25 and over without a high school diploma, 41.6%, compared with 22.4% for Dallas County.

- The Southwest Dallas community has one of the highest rates of births to girls ages 15-17, 27.8 births per 1,000 girls 15-17. It also has the second lowest infant mortality rate in the county, at 6.2 per 1,000 live births, compared to 7.4 for Dallas County overall.

Southwest Dallas had the highest motor vehicle accident mortality rate in 2014, at 13.0 per 100,000 populations, compared with 7.8 per 100,000 for Dallas County. In sum, the above staggering statistics concerning Community X residents reinforces the sentiment that the social environment has a powerful influence on behavior. It is likely negative outcomes are being enforced by ecological interactions taking place between individuals, relationships, the community, and society. Assessments conducted from a community ecological approach will likely provide a greater understanding of social determinants of mental health and the overall phenomenon taking place in Community X neighborhoods. On a final note, when participants of the CHNA study were asked what ways in which the community can provide leadership to create a healthier environment, social engagement was identified as an important factor to enhance health outcomes. The participants' response stresses the necessity of accessing social networks and sense of community in Community X areas.

Chapter 3: Research Method

Introduction

The purpose of this study was to examine the combinations of social network domains and sense of community areas that positively or negatively affect the level of psychological distress within the disadvantage community of South Dallas. The dependent variable was the participants' level of psychological distressed measured by the K10. The independent variables consisted of the three SNI scores (number of high-contact roles, number of people in social network, and number of embedded networks) and the four SCI-2 subscale scores (membership, influence, meeting needs, and shared emotional connection). This chapter includes a description of this study's design, sample, instrumentation, data analysis, and ethical considerations. This overview of the study's design includes my rationale for why I selected this particular research design. I present the sample characteristics and size and provide a description of the instrumentation. I also discuss he data collection and analysis process.

Research Design and Rationale

In this study, I aimed to better understand the relationship between the realms of social networks, community aspects, and psychological distress. I used a quantitative, correlational approach to examine the relationship. The correlational approach aims to explore and observe a phenomenon. This approach was appropriate for this study because the study is aimed at better understanding the connection between community, social networks, and psychological distress. Participants were not randomly assigned to a particular group and no manipulation took place. Prior research has indicated a need for

future research designed at better understanding the connection between social

environments and well-being (Stevens, Jason, & Ferrari, 2011). According to Stevens,

Jason, and Ferrari (2011), it is possible that some communities provide a greater capacity

for individuals to fulfill their potential in spite of stressors. Stevens et al. noted that future

research is needed in effort to better understand the ties between social environments,

sense of community, and well-being. The correlational approach was useful in examining

the possible relationships that exist between social network predictors, sense of

community predictors, and psychological distress among the residents of South Dallas.

Ultimately, this approach contributed to better understanding the ties between

Community X communities and residential well-being and was appropriate in answering

the research question.

Population

The population consisted of adult residents of the Community X neighborhoods.

Neighborhoods in the Community X area lack well-defined boundaries and may overlap

with neighborhoods not technically classified as belonging to the Community X region

(South Dallas, 2017). The specific Community X neighborhoods I studied were in the zip

codes 75215 and 75210.

The total population size for zip code 75215 is approximately 14,600, with

African Americans making up more than 80% of the population (Zip Data, 2017).

Median household income is $20,240 (Zip Data, 2017). Zip code 75210 has an

approximate total population of 7,482, with African Americans making up nearly 75% of

the population (Zip Data, 2017). Median household income for zip code 75210 is $18,567

(Zip Data, 2017).

Sampling and Sampling Procedures

The participants in this study comprised a purposive sample of male and female

residents of Community X neighborhoods. A purposive sample targets a population that

fits the purpose of the study and eligibility criteria (Daniel, 2012). Using a purposive

sample was fitting for this study given that my primary goal was to better understand

relationships that may exist between social network predicators, sense of community

area, and psychological distress among residents of South Dallas. Participants were

targeted for the following reasons: (a) they were of age to provide informed consent; (b)

they were available; (c) they had resided in the Community Xarea for at least 6 months;

(d) they had the educational skills necessary to complete the questionnaires.

A power analysis for planning sample size depends on the alpha and power levels,

the specific statistical analysis, and the expected or minimum practical effect size. I used

traditional alpha and power levels of .05 and .80, respectively. I used multiple linear

regression analysis with seven predictors. In multiple regression, there are two distinct

effect sizes: the overall squared multiple correlation (R^2) and the individual predictor

squared semipartial correlation (sr^2). R^2 represents the total proportion of variance in the

criterion variable explained by the entire set of predictors, while sr^2 represents the

proportion of variance in the criterion that a particular predictor uniquely explains. A

medium-sized R^2 is .13, and a medium-sized sr^2 is .06. If these are the minimally

important effect sizes in the population, then a sample of 116 would have an 80% chance of detection (Charles T. Diebold, personal communication, September 26, 2017).

Recruitment and Data Collection

I originally proposed recruited participants from available residents occupying homes, apartments, churches, clinics, community agencies, or shopping areas within Community X neighborhoods. I used a convenience sampling method, which involved approaching individuals as they walked along shopping centers, churches, clinics, and apartments and homes. Revisions to this proposed method, based on Walden IRB concerns, are detailed in the Data Collection section of Chapter 4. Because this is a very low-income area, many of the residents do not have internet access or transportation to libraries with internet access, compromising the success of an internet-based data collection approach; thus, I used a pen-and-paper approach.

Each of the participants received written information introducing the study as well as an informed consent form prior to giving the participants any testing forms. The informed consent form included brief background information on the study, the procedures for participation, a discussion of confidentiality, the voluntary nature of the study, and ethical concerns. Once a participant read the information regarding the study and signed the informed consent form, the participant was issued a coded packet of testing forms that included an instruction sheet for completing all enclosed forms. Participants were asked to complete all forms there on the spot and to give them to an administrator once completed.

When exiting the study, participants were offered the contact information to a local mental health treatment facility. Participants were that the local mental health treatment facility was in no way affiliated with the study or organizations governing the study. Providing contact information to a participant was merely an act making it easier for the participant to call (by readily providing the phone number) the treatment facility if they saw fit. Also, the K10 administration instructions suggest providing referral information to individuals who rate most commonly "Some of the time" or "All of the time" as their responses when answering questions from the K10. It is also suggested in the description of the K10 that individuals who rate most commonly "A little of the time" or "None of the time" may also benefit from early intervention and promotional information to assist raising awareness of the conditions of depression and anxiety as well as strategies to prevent future mental health issues. This information about the K10 can be found in Appendix A.

Instrumentation

Demographics

I used a demographic questionnaire to assess basic information regarding the participants' age, gender, education, household income, and ethnicity. A copy of the demographic form is provided in Appendix B.

Kessler Psychological Distress Scale (K10)

Kessler designed the K10 as part of mental health component of the U.S. National Health Interview Survey (Yiengprugsawan, Kelly, & Tawatsupa, 2014). The K10 is a 10-item Likert type scale designed to measure anxiety and depression symptoms experienced

within the past four weeks. Item response is on a 5-point scale of 1 (*none of the time*), 2 (*a little of the time*), 3 (*some of the time*), 4 (*most of the time*), and 5 (*all of the time*). The following are two questions taken from the K10: Over the past 30 days, about how often did you feel everything was an effort? Over the past couple of days, how often did you feel so sad that nothing could cheer you up? A mean composite score from the K10 constituted an overall scale score of psychological distress. A high score reflects a higher level of psychological distress, and a low score represents lower levels of psychological distress.

Several researchers have analyzed the reliability and construct validity of the K10. Assessing the reliability of the K10, the 2000 Collaborative Health and Well-Being Survey found that the ending kappa and weighted kappa scores ranged from 0.42 to 0.74, concluding that the scale was a moderately reliable instrument (Department of Health, 2002). Andrews and Slade (2001) conducted a study aimed at comparing the K10 to the General Health Questionnaire (GHQ) with the overall objective of providing normative data on the K10. The researchers concluded that the results supported the validity of the K10 as an effective measure of psychological distress, and that it was preferred over the GHQ because of the larger range and because the K10 is in the public domain and may be used without charge (Andrews & Slade, 2001). In a study determining validation of the K10, Bougie, Arim, Kohen, and Findlay (2016) indicated that the K10 appeared to be psychometrically sound for use as a broad measure of non-specific psychological distress. The K10 is currently being used in annual government health surveys in the United States and Canada as well as in the WHO World Mental Health (Kessler et al., 2002). Overall,

the K10 has proven to be a reliable and valid tool to screen for symptoms of depression and anxiety. The K10 survey can be found in Appendix A.

Sense of Community Index (SCI-2)

The SCI-2 was introduced in 2008 by Chavis, Lee, and Acosta. Unlike the SCI 12-item scale that had a true-false response set that limited variability and concerned critics (Chavis, Lee, & Acosta, 2008), the SCI-2 consist of a 24-item Likert-type scale with four subscales: membership, influence, meeting needs, and shared emotional connection. There are six items in each of the four subscales, making up a total of 24 questions in all. Example (a) items from the SCI-2 included (a) being a part of this community makes me feel good, (b) community members and I value the same things, and (c) I can trust people in this community. Response options consist of *not at all, somewhat, mostly,* and *completely*. Also, a mean composite score for each subscale constitutes an overall scale score of that specific subscale, such as a mean subscale score that represents reinforcement of needs or shared emotional connection. A high subscale score represents higher success or achievement in a specific subscale, such as a high score representing a higher sense of community membership or a higher sense of shared emotional connection within the community. Low scores represent lack or deficiency in a specific subscale. For instance, membership is measured by asking "I can trust people in this community" and "Being a part of this community is part of my identity." Influence is a reciprocal relationship between individuals and the community, with measurement statements such as "If there is a problem in this community, members can get it solved" and "This community has good leaders." Fulfilment of needs in this study indicates

whether a member of a community perceives association with the community as rewarding or beneficial, such as the possibility to gain membership within the community, the possibility to share in the success of the community, or the perceived competence of other individuals in the community who could help with certain issues if necessary.

Despite being piloted with 36 culturally different people in seven different settings from Maryland to Hawaii, the SCI-2 still warranted concerns regarding the adequacy as a cross-cultural measure. In effort to address cultural concerns, Chavis et al. (2008) revised the SCI-2 and used it within a larger survey of 1,800 people. The analysis of the revised SCI-2 showed that it is a very reliable measure (coefficient alpha = .94), with subscales coefficient alpha scores of .79 to .86 (Chavis, Lee, & Acosta, 2008). The instrument is offered free of charge to organizations and individuals granted that no changes be made to the SCI-2, for use in either print or electronic form, without the permission of David Chavis. Permission to use the SCI-2 can be found in Appendix C and a copy of the SCI-2 survey can be found in Appendix D.

Social Network Index (SNI)

The SNI measures (a) the number of high-contact roles, (b) the number of people in social network, and (c) the number of embedded networks by assessing participation in 12 types of social relationships: spouse, parents, parents-in-law, children, other close family members, close neighbors, friends, workmates, schoolmates, fellow volunteers, members of groups without religious affiliation, and religious affiliation (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997). Respondents are defined as participating in a

relationship if they report talking to a person at least once every 2 weeks. One point is assigned for each type of relationship in which a person participates, for a total of 12 points. The total number of persons with whom a respondent speaks to provides an estimate of network size. Questions of the SNI are classified as an index as opposed to a scale; therefore, reliability indices such as Cronbach's alpha do not apply.

Several studies have used the SNI to access an individual's number of recognized social positions or social identities. For instance, larger network size has been linked to a decrease in the susceptibility to the common cold (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997). Furthermore, the SNI has also indicated that different types of social ties and more diverse ties are less susceptible to common colds and other infections (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997). In a study by Bolger and Eckenrode (1990), higher SNI was associated with positive mental health outcome in response to a stressful exam. By the same token, a cross-sectional analysis revealed higher SNI scores to be correlated with increased positive affect, less smoking and drinking, better diet, sleep, and exercise, as well as higher self-esteem and personal control (Cohen, 1991). The SNI can be found in Appendix E.

Research Questions and Hypotheses

Research Question: What is the combined and relative effect of a set of social network predictors and a set of sense of community predictors in accounting for variance in a measure of Community X residents' psychological distress?

Null Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological distress is zero (multiple-$R = 0$).

Alternative Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological stress is not zero (multiple-$R > 0$, $p < .05$).

Null Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are equal (i.e., semipartial r's are equal).

Alternative Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are not equal (i.e., semipartial r's are not equal).

Data Analysis Plan

This study used a correlational research design with multiple linear regression analysis, which will allow for the testing of the hypotheses and for answering the research question. IBM SPSS was used for all data analyses.

Prior to the regression analysis, data were screened for missing data and composite variables were checked for outliers, normality, reliability, and multicollinearity. These issues could affect regression results (Cohen, Cohen, West, & Aiken, 2003; Tabachnick & Fidell, 2007). For cases with valid data on approximately 70% of the items that make up a composite scale (i.e., K10 or each of the SCI-2 subscales) I used the case-specific scale mean for any missing data.

Univariate and multivariate outlier cases were screened. Cases with a value exceeding ± 3.29 standard deviations on a particular variable were examined for undue influence (Tabachnick & Fidell, 2007); one such case was excluded from further analysis. With respect to multivariate outliers, cases were screened following Tabachnick & Fidell's (2007) procedure of regressing all seven predictors simultaneously on a random variable and determining if their Mahalanobis value exceeds 24.322 (the critical χ^2 value at alpha = .001 with df = 7). One outlier case that was also severely discontinuous with the distribution of all cases, was eliminated from further analyses.

After addressing missing data and outlier cases, the distribution of each composite variable was checked for skewness and kurtosis values outside the accepted range for normality (i.e., skewness > |2|, kurtosis > |6|). No transformations to reduce excess skewness or kurtosis was needed.

Reliability analyses was conducted to examine Cronbach's alpha and any item-level inconsistencies with the scale score. All subscale reliabilities were satisfactory. Multicollinearity was assessed following Tabachnick and Fidell's (2007) method of regressing the variables of interest on a random criterion and examining their variance inflation factor (VIF) values. No VIF values were outside the acceptable range (> 7.0; Cohen, Cohen, West, & Aiken, 2003. Satisfied with the integrity of the data, a standard multiple linear regression (Tabachnick & Fidell, 2007) was conducted.

In addition to analyses to test the hypotheses and answer the research question, an additional exploratory cluster analysis was conducted to profile distinct groups of

participants on the set of network and sense of community predictors and examine group mean differences on psychological distress.

Threats to Validity

External Validity

Although every effort was made to recruit participants that represent the target population, using nonprobability sampling methods limits the overall generalizability of the findings and pose a threat to external validity. Nevertheless, it is expected that the findings provide a useful context for assessing psychological functioning in similar populations.

Internal Validity

The study used instruments that have been demonstrated to be valid for the specific purpose for which they are being used and fitting for the population under study. However, threat to internal validity may pertain to selection bias since subjects were not selected using proper randomization.

Ethical Procedures

Careful consideration was given to the construction of this study and the potential effects it could have on the participants. It was the idea that this study had minimal risk to participants. Participants were treated ethically and respectfully. A clearly written informed consent was given to all participants discussing the voluntary nature of the study, procedures for participating in the study, confidentiality issues, the risk and benefits for participating in the study, as well as a way to contact the researcher and her advisor with questions regarding the study.

Participants were informed of the purpose of the study, the expected time it would take to participate, the right to quit the study at any time, how data would be stored, and how confidentiality was ensured. Participants were debriefed at the end of the study to assess well-being, address any concerns or questions from the participants, and to provide the name and address to a local clinic specializing in psychological services. To summarize, the study was thought to have minimal risk to the participants. Assurance was made to the volunteer nature of the study and that all information was anonymous.

Chapter 4: Results

Introduction

The purpose of this study was to examine the combinations of social network domains and sense of community areas that positively or negatively affect the level of psychological distress within the disadvantage community of South Dallas. The dependent variable was the participants' level of psychological distressed measured by the K10. The independent variables consist of the three SNI scores (number of high-contact roles, number of people in social network, and number of embedded networks) and the four SCI-2 subscale scores (membership, influence, meeting needs, and shared emotional connection). I investigated the following research question and hypotheses:

Research Question: What is the combined and relative effect of a set of social network predictors and a set of sense of community predictors in accounting for variance in a measure of Community X residents' psychological distress?

Null Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological distress is zero (multiple-$R = 0$).

Alternative Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological stress is not zero (multiple-$R > 0$, $p < .05$).

Null Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are equal (i.e., semipartial r's are equal).

Alternative Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are not equal (i.e., semipartial *r*'s are not equal).

In this chapter, I describe the data collection process, the screening of the data, the descriptive statistics of the sample and the measurement tools, and the multiple regression results of each of the four SCI-2 subscales and of the three SNI indices as predictors of K10, and a cluster analysis.

Data Collection

Data collection for this study began on July 10, 2018 and ended on July 27, 2018. I collected data at an onsite community clinic in the Community X area. The sample population for this particular study consisted of current residents of the Community X area who lived in the Community X area for at least 6 months. The study involved both African American men and women all over the age of 18 having at least a high school diploma or GED.

The method of how data was collected differed from the initial proposed data recruitment and collection previously described in Chapter 3. In Chapter 3, it was stated that data recruitment would involve approaching individuals as they walked along shopping centers, churches, clinics, apartments and homes. The revised version of participant recruitment only took place at a community clinic in South Dallas. This revision was necessary due to concerns regarding participants' privacy and comfort. The community clinic provided a private room to conduct the study and adequate sitting and restroom faculties for the participants. Such amenities would not have been available

when approaching participants as they walked along the described areas, given the timeframe it might have taken the participants to complete the questionnaires. Conducting the study in the clinic also allowed participants the time to decide if they wanted to participate in the study without being put on the spot for an answer or possibly feeling pressured to participate.

Another change I made to the recruitment process regarded the demographic questionnaire. I verbally conducted the demographic assessment of each participant for eligibility purposes and did not use it in the data analysis.

Data Screening and Cleaning

Substantial Missing Data

Surveys were returned by 115 participants. I excluded seven from analysis because of substantial missing data on one or more of the primary study variables, leaving a sample size of 108 for further analyses.

Item Missing Data for Scale Composites

I created mean composite scores for each of the four SCI-2 subscales. Each of these subscales were composed of six items, and a composite score was valid if no more than two of the items on each scale had missing data. I input participant-specific subscale means for the missing item values for 14 participants due to missing data. The K10 mean composite was based on 10 items. One participant had missing data on one item, another had missing data on two items. Participant-specific subscale means were imputed for the missing item values of these two participants.

Univariate and Multivariate Outliers

There were no out-of-range values for any item. All the SCI-2 items had a possible range from 1-4, and all observed values were within this range. The K10 items had a possible range of 1-5, and all observed values were within this range. The SNI index of number of high-contact roles had a possible range from 0-12, and the SNI index of number of embedded networks had a possible range from 0-8; all observed values were within these ranges. The SNI number of people in social network index did not have value limits.

I calculated z-scores for each participant on the four SCI-2 subscales, the K10 composite, and the three SNI indices. Cases with z-scores in excess of ±3.29 are potential outliers (Tabachnick & Fidell, 2007). As important, if not more important, is to examine jumps in values and gaps in the tails of the distribution. One participant had z-score values of 2.6 to 3.2, but more importantly 0.5 to 1.0 points higher than the next closest case, creating a discontinuity in the distribution of values. This participant was excluded from further analyses.

I examined multivariate outliers following Tabachnick and Fidell's (2007) procedure of regressing a random variable on the set of key study variables to examine the Mahalanobis values. For the seven key study variables, the critical chi-square Mahalanobis value is 24.3. One case had a value of 31.1 and a larger gap between it and the next closest case, as shown in Figure 1. This case was excluded from further analyses.
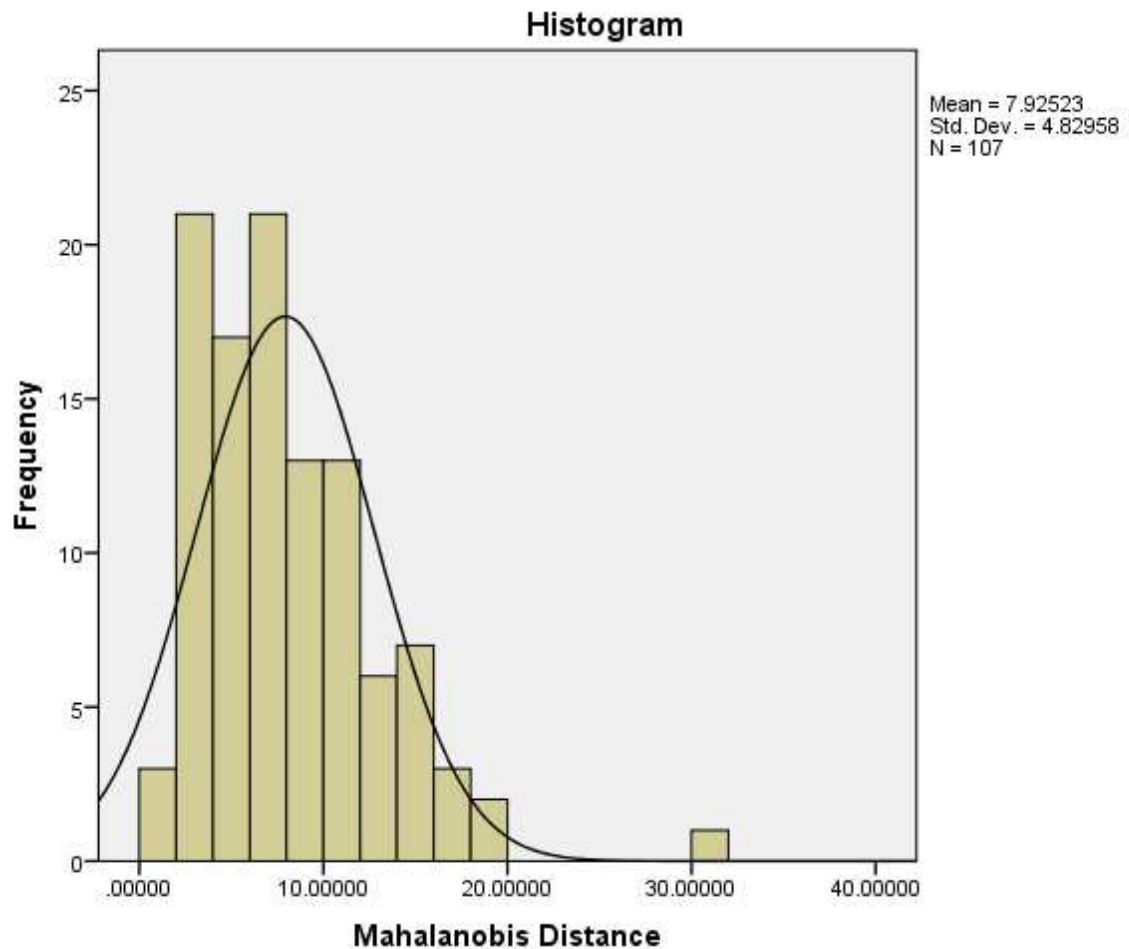
Figure 2. Histogram of multivariate outlier.

Descriptive Statistics of Sample

After data screening and cleaning, data from 106 participants remained for further

analysis. Table 1 provides descriptive statistics of the sample with respect to marital

status, number of children, belonging to a religious group, employment status, and

volunteer involvement. On average, each participant had two children (*SD* = 1.98). The

most common marital status was identified as married or living with a significant other

(36.8%) followed by divorced or formerly lived together (20.8%). There was a small

difference in the number of participants who did not belong to a religious group (56.6%)

and those who did (42.5%). Most of the participants were not employed on a full-time

(50.9%) basis. Many identified as being employed by others (37.7%), and a small number

of participants were self-employed (11.3%). Last, most of the participants did not

participate in any type of volunteer work (81.1%).

Table 1

*Descriptive Statistics of Sample (*N *= 106)*

Variable	Frequency	%
Marital status	27	25.5
Married of living together	39	36.8
Separated	12	11.3
Divorced or formerly lived together	22	20.8
Widowed	1	0.9
No response	5	4.7
Belong to religious group		
No	60	56.6
Yes	45	42.5
No response	1	0.9
Employed full or part-time		
No	54	50.9
Self-employed	12	11.3
Employed by others	40	37.7
Currently do volunteer work		
No	86	81.1
Yes	19	17.9
No response	1	0.9

	M	SD
Number of children	2.09	1.98

Descriptive Statistics of Composite Scales and Indices

I computed composite variables for K10, each of the four SCI-2 scales, and each

of the three SNI indices. Descriptive statistics for these composite variables are provided

in Table 2. Items were rated on the K10 scale from 1 (*none of the time*) to 5 (*all of the*

time), with higher means indicating higher levels of agreement for each statement. The

average inter-item correlations for the K10 was 0.49. The SCI-2 scale rated items from 1

(*not at all*) to 4 (*completely*), also with higher levels of agreement as the item number

increased. The SCI-2 average interitem correlations for the four scales ranged from a low

of .27 to a high of .42. Both the K10 and the all four SCI-2 subscales had adequate to

excellent reliability based on Cronbach's alpha ranging from a low of .69 to a high of .91.

The SNI is not a scale, so items were not rated according to levels of agreement. Instead

an overall score from each of the items represented the participants' overall view.

Reliability is not applicable to the SNI because each is an index, not a scale.

Table 2

*Descriptive Statistics of Composite Scales and Indices (*N *= 106)*

Composite	α	*M*	*SD*	Min.	Mdn.	Max.	*S*	*K*
K10	.91	2.32	0.90	1.00	2.10	5.00	0.77	-0.04
SCI-2 subscales								
Reinforcement of needs	.81	2.19	0.67	1.00	2.17	3.67	0.23	-0.35
Membership	.69	2.05	0.56	1.00	2.00	3.40	0.31	-0.46
Influence	.73	2.00	0.59	1.00	2.00	3.50	0.60	0.19
Shared emotional connection	.75	2.19	0.64	1.00	2.17	3.67	0.17	-0.32
SNI index								
No. of high contact roles	na	3.87	3.31	0.00	4.00	11.00	0.20	-1.12
No. of people in social network	na	16.44	10.35	0.00	14.50	47.00	0.71	0.13
No. of embedded networks	na	3.26	1.88	0.00	3.00	8.00	0.35	-0.53

Note. α = Cronbach's alpha, S = skewness, K = kurtosis. K10 possible values range from 1-5, SCI-2 subscale possible values range from 1-4, number of high contact roles possible values range from 0-12, and number of embedded networks possible values range from 0-8. There is no upper limit for number of people in social network.

Results

In this chapter, I present the multiple regression results of each of the four SCI-2

subscales and of the three SNI indices as predictors of K10, and a cluster analysis.

Because there was no recorded data on age, income, gender, and education level, these

potential covariates could not be screened as I had proposed in Chapter 3. Also,

employment status is an element of one or more of the SNI indices, so it would have been

invalid to include it separately as a covariate.

Preliminary Regression to Screen for Multicollinearity and Regression Assumptions

The maximum variance inflation value was 3.42, well below the 7.0 criteria for

concern about multicollinearity. Standardized residuals ranged from -1.62 to 2.44, less

than the ±3.0 criterion. Figure 2 displays a histogram of the standardized residuals, which

has acceptable normal distribution appearance. Figure 3 is a scatterplot of standardized

predicted values against standardized residuals displaying acceptable homoscedasticity.
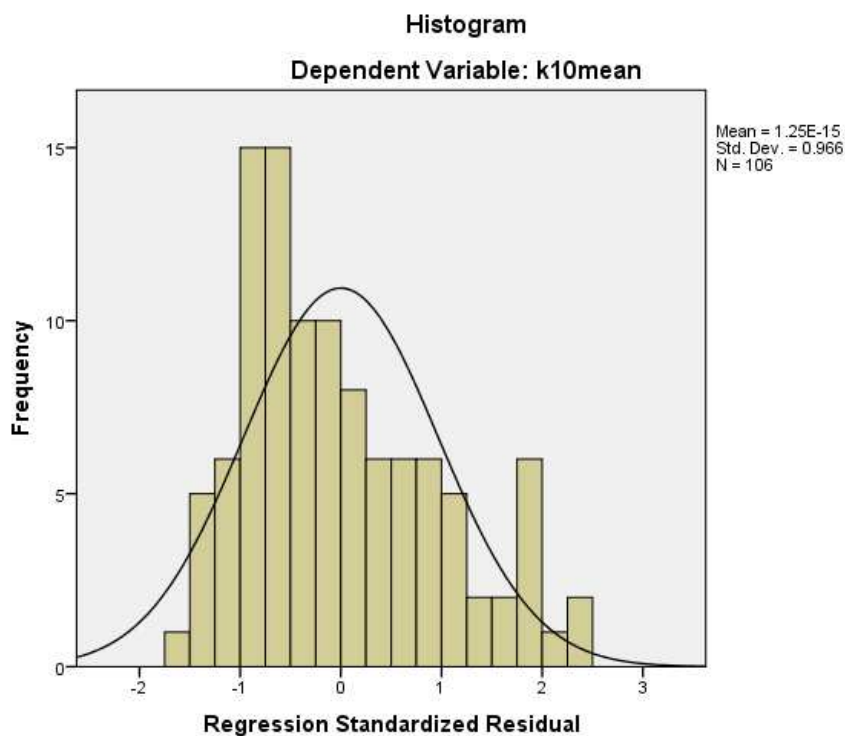
Regression assumptions are met.

Figure 2. Histogram of regression standardize residuals.
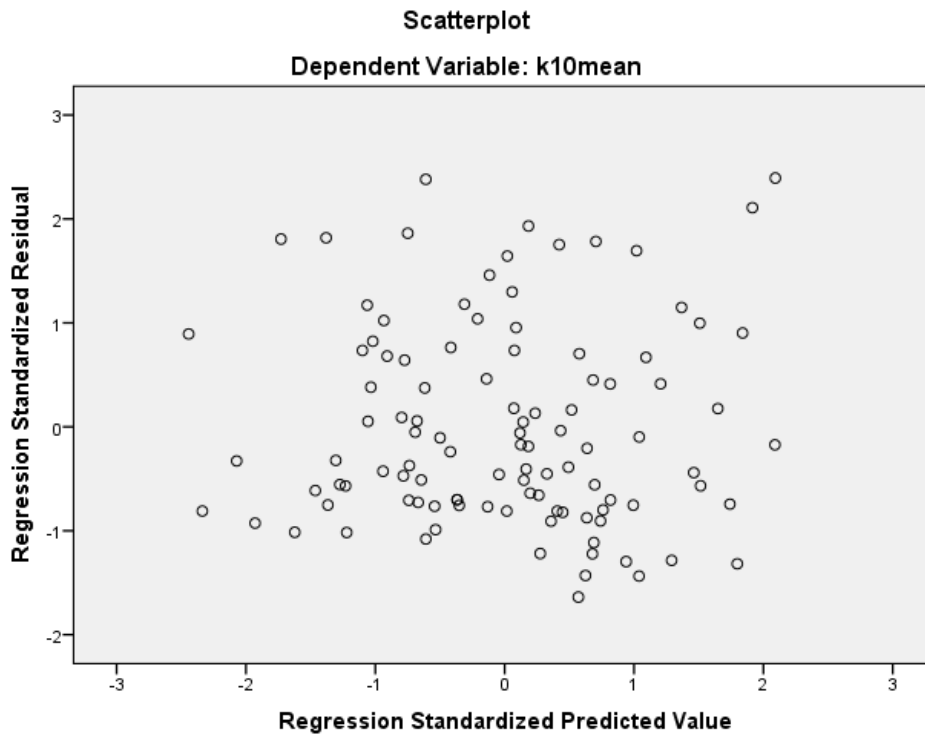
Figure 3. Scatterplot of standardized predicted and standardized residuals.

Regression Results

A multiple linear regression was conducted to test the following hypotheses and to answer the research question about the combined and relative effects of the four SCI-2 subscales and the three SNI indices in predicting K10 composite scores.

Research Question: What is the combined and relative effect of a set of social network predictors and a set of sense of community predictors in accounting for variance in a measure of Community X residents' psychological distress?

Null Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological distress is zero (multiple-$R = 0$).

Alternative Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological stress is not zero (multiple-$R > 0$, $p < .05$).

Null Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are equal (i.e., semipartial r's are equal).

Alternative Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are not equal (i.e., semipartial r's are not equal).

The regression results are detailed in Table 3. The set of predictors combined to account for 8.0% of the variance in K10 scores, but the overall model was not statistically significant, $F(7, 98) = 1.22$, $R = .283$, $p = .302$. The null hypothesis about the combined effect was accepted.

As well, none of the predictors were statistically significant. The number of embedded networks approached significance at $p = .080$, and the SCI-2 subscale of Influence approached significance at $p = .109$. Because none of the predictors were statistically significant, comparison of their unique individual effects is meaningless, so the null hypothesis was accepted.

The correlation matrix shown in Table 4 indicates that only the number of embedded networks had one-tailed statistical significance with K10 scores, $r(104) = .186$, $p = .028$, $r^2 = .035$, a small-to-medium effect size bivariately accounting for 3.5% of variance in K10 scores. As the number of embedded networks increased, K10 scores tended to increase, indicating higher levels of psychological distress.

Table 3.

*Results of K10 Scores Regressed on SCI-2 Subscales and SNI Indices (*N = 106*)*

Predictor	B	95% CI	t	p	sr^2
Constant	2.35	[1.64, 3.06]	6.58	< .001	
SCI-2 subscales					
Reinforcement of needs	-0.22	[-0.62, 0.17]	-1.14	.258	.012
Membership	-0.04	[-0.51, 0.43]	-0.17	.868	< .001
Influence	0.43	[-0.10, 0.96]	1.62	.109	.025
Shared emotional connection	-0.29	-0.79, 0.22]	-1.14	.257	.012
SNI index					
No. of high contact roles	< 0.01	[-0.06, 0.07]	0.04	.969	< .001
No. of people in social network	-0.01	[-0.04, 0.02]	-0.62	.537	.004
No. of embedded networks	0.14	[-0.02, 0.29]	1.77	.080	.029

Table 4.

*Intercorrelations Among Key Study Variables (*N = 106*)*

Variable	1	2	3	4	5	6	7	8
1. K10		-.067	-.022	.062	-.030	.077	.097	.186
2. Reinforcement of needs	.249		.670	.686	.663	.153	.245	.280
3. Membership	.411	<.001		.647	.688	.199	.351	.361
4. Influence	.264	<.001	<.001		.803	.161	.301	.350
5. Shared emotional connection	.380	<.001	<.001	<.001		.251	.328	.361
6. No. of high contact roles	.216	.059	.020	.049	.005		.499	.544
7. No. of people in social network	.161	.006	<.001	.001	<.001	<.001		.772
8. No. of embedded networks	.028	.002	<.001	<.001	<.001	<.001	<.001	

Note. Upper diagonal contains Pearson correlations; lower diagonal contains one-tailed *p* values.

Cluster Analysis

Cluster analysis results can be biased if the variables were not measured on the same metric. To eliminate this bias, each of the four SCI-2 subscales and the three SNI indices were converted to z-scores. After transformation a two-step cluster procedure was used that identified two salient clusters with fair cohesion and separation.

As evident in Table 5, the group of 67 (63.2%) participants in Cluster 1 had all positive centroids (multivariate standardized means), indicating higher scores on sense of

community and larger social networks compared to those in Cluster 2 who had all

negative centroids (low scores on sense of community and smaller social networks).

An ANOVA was conducted to determine differences in K10 scores by cluster.

Cluster 2 (M = 2.41, SD = .90) had higher psychological distress scores than Cluster 2 (M

= 2.27, SD = .91). The differences in K10 scores were in the expected direction, but were

not statistically significant, $F(1, 104)$ = 0.57), p = .452. Less than 1% of the variance in

K10 scores was accounted for by cluster membership.

Table 5.

Comparison of Cluster Centroids on SCI-2 Subscales and SNI Indices (N = 106)

	Cluster 1 n = 67 (63.2%)		Cluster 2 n = 39 (36.8%)	
Variable	M	SD	M	SD
Reinforcement of needs	0.46	0.79	-0.82	0.65
Membership	0.42	0.81	-0.76	0.65
Influence	0.40	0.84	-0.81	0.55
Shared emotional connection	0.50	0.74	-0.90	0.62
No. of high contact roles	0.29	1.03	-0.53	0.73
No. of people in social network	0.35	1.03	-0.61	0.60
No. of embedded networks	0.40	0.94	-0.67	0.73

Summary

In summary, the research question and hypotheses for this study were the

following:

Research Question: What is the combined and relative effect of a set of social

network predictors and a set of sense of community predictors in accounting for variance

in a measure of Community X residents' psychological distress?

Null Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological distress is zero (multiple-$R = 0$).

Alternative Hypothesis 1: The combined effect of the social network and sense of community predictors in accounting for variance in psychological stress is not zero (multiple-$R > 0$, $p < .05$).

Null Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are equal (i.e., semipartial r's are equal).

Alternative Hypothesis 2: The relative, unique effects of each predictor in accounting for variance in psychological distress are not equal (i.e., semipartial r's are not equal).

The results for the research question indicated that the hypothesis concerning the combined effect of the social network and sense of community predicators in accounting for variance in measuring psychological distress concluded no statistical significance and therefore the null hypothesis was accepted. Similarly, as a result of none of the predictors being statistically significant, their relative, unique effects are irrelevant to this study and therefore the second null hypothesis cannot be rejected. In the final chapter of the study, the results and findings are further discussed. The conclusion, recommendation and suggestions for future research are also presented.

Chapter 5: Discussion, Conclusion, and Recommendations

As I stated in Chapter 1, the Community X area in Dallas, Texas faces unique

challenges and is known as a disadvantaged community. Previous researchers have found

that Community X has significant unemployment, poverty, and crime rates (AreaVibes,

2016), all of which have shown to be closely associated with mental illness (Corrigan et

al., 2015; Sellstrom & Bremberg, 2006; Tendulkar et al., 2012). And as I noted in

Chapter 1, there are limited mental health resources in Community X and many

emotional and behavioral issues experienced within the community ("We're Thinking

Big," 2017). Researchers have found that a sense of community and supportive networks

act as buffers and protectors against crime, mental dysfunction, poverty, and abuse

(Greenfield & Marks, 2010; Pretty et al., 2007). The purpose of this study was thus to

examine the combinations of social network domains and sense of community areas that

positively or negatively affect the level of psychological distress in the disadvantage

community of South Dallas.

Interpretation of Findings

In the literature review, I discussed the benefits of belonging to a strong and

supportive social network, as well as the disadvantages of belonging to a debilitating

social network group. I also found that a strong social network within a debilitated

community can facilitate psychological distress rather than alleviate it. Interestingly, the

results of this study indicated that as the number of embedded networks increased, so did

K10 scores. It is possible that those with higher levels of psychological distress

intentionally increase the number of embedded networks as a way to cope with distress.

Like the proverbial saying, "Birds of a feather flock together," it could be the case that those with psychological dysfunctions tend to associate with other individuals experiencing similar dysfunctions. Furthermore, given that the group consists of an increasing number of individuals experiencing psychological distress, there is likely a lack of useful coping skills being shared, more opportunity for conflict among group members, as well as increased stress transmission and misguided attempts to help other group members.

Relating to the ecological framework guiding this study, healthy functioning is contingent on a plurality of factors interacting between individuals and their overall environment, as well the role that larger environmental factors (macrosystems) serve in facilitating psychological dysfunction. The ecological stance holds that the social environment influences behavior by matters relating to social norms, social control, advantages and limitations regarding environmental opportunities, as well as stress producing circumstances and stress alleviating actions. With that being said, it is likely that as the embedded networks increased in the Community X area, maladaptive social functioning and dysfunctional social norms were spread amongst group members, which inadvertently affected psychological functioning. In the literature review, I found that a failure to think and practice ecologically encourages the tendency to engage in victim-blaming and has a hindering effect on liberation and well-being (see Nelson & Prilleltensky, 2010). With that being said, although the overall K10 scores showed no statistical significance regarding psychological distress, it is worth remembering that psychological distress was found to increase as the number of embedded networks

increased. This could indicate the need for future research examining the fundamentals of embedded networks in distressed communities.

Limitations of the Study

There are a few limitations to this study. For instance, the representativeness of this study's sample could be questioned with regard to the recruitment of the participants. I recruited participants from a local community center/clinic in the Community X area. Although anywhere from 200 to 300 clients pass through the community center in one day, recruitment was nonetheless limited to that one location. Another limitation to the study concerns possible hidden or intervening variables. It is possible that age, personality traits, accuracy in reading and comprehension ability, disabilities, or serious mental health conditions acted as extraneous variables in the study. Variables not deliberately studied have the possibility of threatening the internal validity of the study. With that being said, the generalizability of results and findings from this study should be limited to similar neighborhoods and cannot be generalized to other populations, ethnicities, ages, and genders.

Recommendations

Although extensive empirical research has indicated that social networks have a significant impact on psychological functioning, there are still questions and challenges not addressed by the results of this study. For instance, Pretty et al. (2007) reported that sense of community within the field of psychology has not been adequately examined and that the disciple is in great need of a theoretical framework to build upon. This study provides a foundation regarding the examination of sense of community within the

Community X area. A particular strength of this study is how the data can be linked to other data sources or future research conducted in this area. However, there is still much more work to be done in order to get a better understanding of the relationship between social networks and a sense of community in the Community X area, as well as a better understanding of sense of community within similar communities and dissimilar ones.

In addition, future research could further address how specific social relationships are linked to health outcomes by examining how individuals within a network interact with one another. That is, are they utilizing healthy social interactions or unhealthy behaviors that are being spread amongst the group members? Moreover, using alternative interviewing methods to inquire about a group's specific interaction techniques allows individuals to tell their stories and experiences from their perspectives. A narrative approach, for instance, would provide rich data to further build upon the theoretical framework relating to social networks and sense of community, thereby greatly contributing to the literature. My examination of the social network domains and sense of community areas in the Community X community indicated that the social environment and the connections within the networks are complex matters requiring further research. Ultimately, I recommend that future researchers consider the lack of current theoretical understanding regarding the role that social networks and sense of community play in health and use as many theoretical models as possible in understanding the phenomenon.

Implications

This research has significant implications for social change, especially in the Community X area. Not only does it further validate a meaningful connection between

social networks and psychological outcomes, it also sheds light on the connection between the variables within the Community X area. Examining the connection between social networks and sense of community in this area allows the possibilities for policy makers and community stockholders to use the findings to inform public health polices and interventions. Their efforts can translate this data into policies and strategies that can drive public health policy in making beneficial changes in the Community X area.

In addition, results from this study can help facilitate actions aimed at incorporating empirically supported treatments involving social networks and social capital for mental health support and psychological treatment in this area. Findings from this study may help to illuminate the social contexts in which the residents function and may assist with designing and providing professional mental health services. For instance, professional consideration of the processes that are inherent in living in the Community X community may allow for customized programs that can include or exclude certain factors related to social networks and community factors in the area. Interventions could include upgrading helping skills among caregivers and community leaders, the creating needed support groups, and developing one-to-one mentoring and coaching programs. Ultimately, it is beneficial to build an audience to hear the matters concerning the residents, and this study is one step in the direction of challenging complacency in the area and giving the residents a voice.

Conclusion

In conclusion, I examined the combinations of social network domains and sense of community areas that positively or negatively affect the level of psychological distress

with the debilitated community of South Dallas. My goal was to better understand

relationships that may exist between social networks, sense of community, and

psychological distress among residents of South Dallas. Gaining greater insight into the

associations between these factors will facilitate further research on the impact that

emotions, cognitions, and behaviors have on health outcomes, as well as how to intervene

with treatment mechanisms and community programs aimed at strengthening existing

networks and creating new productive ones. This study emphasizes the challenges

confronting the Community X area and the importance of thinking of the residents from a

socio-ecological perspective. I found that as embedded networks increased in the area,

psychological distress also increased. These findings demonstrate the importance of

crafting treatments aimed at utilizing social networks to strengthen and enhance overall

wellbeing. However, in order to do this, it is necessary to conduct additional research in

the area to understand more about the social network dynamics and to ensure residents

that their concerns have not been ignored.

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Appendix A: Kessler Psychological Distress Scale (K10)

The following questions ask about how you have been feeling in the last four weeks. For each question, rate them based on what best describes the amount of time you felt that way. There are two introductory questions to get your started.

1 = None of the time
2 = A little of the time
3 = Some of the time
4 = Most of the time
5 = All of the time

Introductory Questions

1. Over the past 30 days, about how often did you have a lot of energy? _____

2. Over the past 30 days, about how often did you feel happy and relaxed? _____

K10 Questionnaire

Over the past 30 days, about how often did you feel…

1. Tired out for no good reason? _____

2. Nervous?_____

3. So nervous that nothing could calm you down?_____

4. Hopeless?_____

5. Restless or fidgety?_____

6. So restless you could not sit still?_____

7. Depressed?_____

8. Everything was an effort?_____

9. So sad that nothing could cheer you up? _____

10. Worthless? _____

Appendix B: Demographic Questionnaire

Completion of the demographic questionnaire is significant for determining the influence of variety of factors on the results of this study. All of these records will remain confidential. Any reports that may be published will not include any identifying information of the participants in this study. Please check the appropriate line.

Gender:

_____ Male

_____ Female

Age: _____

Ethnicity

_____ African American   _____ Asian, Asian American

_____ Caucasian/White   _____ Hispanic/Latino

_____ Native American   _____ Other

Educational background

_____ Less than a High school Diploma or GED

_____ High school Diploma or GED

_____ Some College

_____ College Graduate
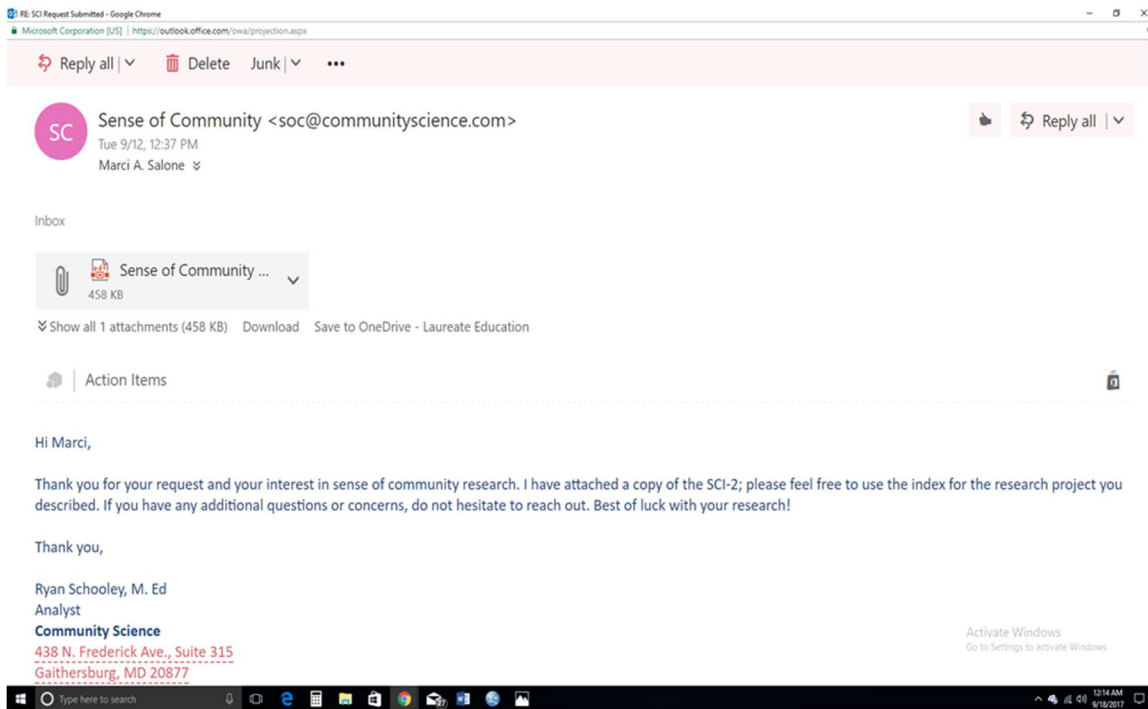
Income Bracket

_____ Less than $1000 monthly

_____ Between $1000 and $2000 monthly

_____ Between $2000 and $3000 monthly

_____ More than $3000 monthly

Appendix C: Email Correspondence Between Ryan Schooley, M. Ed and Marci Salone

Regarding use of SCI-2

Appendix D: Sense of Community Index (SCI-2)

The following questions about community refer to: [South Dallas].

How important is it to you to feel a sense of community with other community members?

1	2	3	4	5	6
Prefer Not to be Part of This Community	Not Important at All	Not Very Important	Somewhat Important	Important	Very Important

How well do each of the following statements represent how you *feel*

about this community?

		Not at All	Somewhat	Mostly	Completely
1.	I get important needs of mine met because I am part of this community.	○	○	○	○
2.	Community members and I value the same things.	○	○	○	○
3.	This community has been successful in getting the needs of its members met.	○	○	○	○
4.	Being a member of this community makes me feel good.	○	○	○	○
5.	When I have a problem, I can talk about it with members of this community.	○	○	○	○
6.	People in this community have similar needs, priorities, and goals.	○	○	○	○
7.	I can trust people in this community.	○	○	○	○

		Not at All	Somewhat	Mostly	Completely
8.	I can recognize most of the members of this community.	O	O	O	O
9.	Most community members know me.	O	O	O	O
10.	This community has symbols and expressions of membership such as clothes, signs, art, architecture, logos, landmarks, and flags that people can recognize.	O	O	O	O
11.	I put a lot of time and effort into being part of this community.	O	O	O	O
12.	Being a member of this community is a part of my identity.	O	O	O	O
13.	Fitting into this community is important to me.	O	O	O	O
14.	This community can influence other communities.	O	O	O	O
15.	I care about what other community members think of me.	O	O	O	O
16.	I have influence over what this community is like.	O	O	O	O
17.	If there is a problem in this community, members can get it solved.	O	O	O	O
18.	This community has good leaders.	O	O	O	O
19.	It is very important to me to be a part of this community.	O	O	O	O
20.	I am with other community members a lot and enjoy being with them.	O	O	O	O
21.	I expect to be a part of this community for a long time.	O	O	O	O
22.	Members of this community have shared important events together, such as holidays, celebrations, or disasters.	O	O	O	O
23.	I feel hopeful about the future of this community.	O	O	O	O
24.	Members of this community care about each other.	O	O	O	O

Total Sense of Community Index = Q1 to Q24

Subscales
Reinforcement of Needs = Q1 + Q2 + Q3 + Q4 + Q5 + Q6
Membership = Q7 + Q8 + Q9 + Q10 + Q11 + Q12
Influence = Q13 + Q14 + Q15 + Q16 + Q17 + Q18
Shared Emotional Connection = Q19 + Q20 + Q21 + Q22 + Q23 + Q24

Appendix E: Social Network Index (SNI)

Instructions: This questionnaire is concerned with how many people you see or talk to on a regular basis including family, friends, workmates, neighbors, etc. Please read and answer each question carefully. Answer follow-up questions where appropriate.

1. Which of the following best describes your marital status?
____ (1) currently married & living together, or living with someone in marital-like relationship
____ (2) never married & never lived with someone in a marital-like relationship
____ (3) separated
____ (4) divorced or formerly lived with someone in a marital-like relationship
____ (5) widowed

2. How many children do you have? (If you don't have any children, check '0' and skip to question 3.)
____ 0 ____ 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 or more

    2a. How many of your children do you see or talk to on the phone at least once every 2 weeks?
____ 0 ____ 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 or more

3. Are either of your parents living? (If neither is living, check '0' and skip to question 4.)
____ (0) neither ____ (1) mother only ____ (2) father only ____ (3) both

    3a. Do you see or talk on the phone to either of your parents at least once every 2 weeks?
____ (0) neither ____ (1) mother only ____ (2) father only ____ (3) both

4. Are either of your in-laws (or partner's parents) living? (If you have none, check the appropriate space and skip to question 5.)
____ (0) neither ____ (1) mother only ____ (2) father only ____ (3) both ____ (4) not applicable

    4a. Do you see or talk on the phone to either of your partner's parents at least once every 2 weeks?
____ (0) neither ____ (1) mother only ____ (2) father only ____ (3) both

5. How many other relatives (other than your spouse, parents & children) do you feel close to? (If '0', check that space and skip to question 6.)
____ 0 ____ 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 or more

    5a. How many of these relatives do you see or talk to on the phone at least once every 2 weeks?
____ 0 ____ 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 or more

6. How many close friends do you have? (meaning people that you feel at ease with, can talk to about private matters, and can call on for help)

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

6a. How many of these friends do you see or talk to at least once every 2 weeks?

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

7. Do you belong to a church, temple, or other religious group? (If not, check 'no' and skip to question 8.)

_____ no   _____ yes

7a. How many members of your church or religious group do you talk to at least once every 2 weeks? (This includes at group meetings and services.)

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

8. Do you attend any classes (school, university, technical training, or adult education) on a regular basis? (If not, check 'no' and skip to question 9.)

_____ no   _____ yes

8a. How many fellow students or teachers do you talk to at least once every 2 weeks? (This includes at class meetings.)

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

9. Are you currently employed either full or part-time? (If not, check 'no' and skip to question 10.)

____ (0) no   _____ (1) yes, self-employed   _____ (2) yes, employed by others

9a. How many people do you supervise?

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

9b. How many people at work (other than those you supervise) do you talk to at least once every 2 weeks?

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

10. How many of your neighbors do you visit or talk to at least once every 2 weeks?

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

11. Are you currently involved in regular volunteer work? (If not, check 'no' and skip to question 12.)

_____ no   _____ yes

11a. How many people involved in this volunteer work do you talk to about volunteering-related issues at least once every 2 weeks?

___0 ___1 ___2 ___3 ___4 ___5 ___6 ___7 or more

12. Do you belong to any groups in which you talk to one or more members of the group about group-related issues at least once every 2 weeks? Examples include social clubs, recreational groups, trade unions, commercial groups, professional organizations, groups concerned with children like the PTA or Boy Scouts, groups concerned with community service, etc. (If you don't belong to any such groups, check 'no' and skip the section below.)

_____ no   _____ yes

Consider those groups in which you talk to a fellow group member at least once every 2 weeks. Please provide the following information for each such group: the name or type of group and the total number of members in that group that you talk to at least once every 2 weeks.

Total number of group members
        Group that you talk to at least once every 2 weeks

1.

2.

3.

4.

5.

6.