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Social Capital, Health
and Mental Health
In African American Women

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

by

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Abstract

SOCIAL CAPITAL, HEALTH AND MENTAL HEALTH IN AFRICAN AMERICAN WOMEN

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

Virginia Commonwealth University, 2005

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Cultural and social influences on mental and physical health are increasingly recognized by social science researchers. Researchers have found that specific, Afro-cultural factors are related to the functioning of African Americans. The current research considered whether interdependence is especially salient for African American women since women and African Americans tend to define themselves within the context of social relationships. The study outlines processes affecting the mental and physical health of African American women including communalism, collective efficacy, and social capital. The also study examined the relationship between socioeconomic status and both mental and physical health among African American women in a low-income

residential area. The effect of social capital and collective efficacy on mental and physical health above income was analyzed using hierarchical regression. One-hundred-thirty African-American women in a low-income area of Richmond, Virginia completed surveys between October 2002 and October 2004 measuring social capital, collective efficacy and general health and mental health. Level of education served as a proxy for socioeconomic status. The study's central hypothesis was that social capital and collective efficacy, an indicator of social capital, would moderate rather than mediate the association between socioeconomic status and the outcome variables in this population due to the importance of relationships in the African American culture and in the lives of women. Both moderation and mediation models were tested. Significant relationships were found between income and both physical health and mental health. There were no significant relationships found between social capital and physical health, mental health, or socioeconomic status and mediation was not established. The results also did not establish social capital as a moderator between socio-economic status and the outcome variables. This lack of relationship may be related to several factors including the homogeneity of the sample in terms of socioeconomic status and challenges associated with the use of a new measure for social capital. Meaningful comparisons of social capital between socioeconomic levels could not be made.

Chapter One

Introduction

Recent research suggests that the impact of socioeconomic status on health and mental health may be mediated by social processes such as social capital (Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997). The current research examined whether this relationship is notably apparent among populations or cultures that value a sense of community or connectedness, trust, reciprocity, and commitment to others.

Social capital is defined as the network of connections among individuals in a given community or, " the collective value of all social networks [who people know] and the inclinations that arise from these networks to do things for each other (such as) norms of reciprocity ... The central premise of social capital is that social networks have value" (Putnam, n.d., p. 1). Social capital in the African American community may take the form of trust and reciprocity between neighbors, or the sharing of mutual values among community members. Social capital may also take the form of trust, reciprocity, sharing of information, and cooperation between community members and agencies or organizations within the community. Finally, social capital may be reflected by civic participation such as volunteerism or voter participation. The role that the African American church played in the civil right's movement, for example, depended upon social capital. The church, due to long-lasting trusting and supportive relationships within the church and with members of the community, was able to act for and with the collective (Putnam, n.d.). The relationship of the church or spirituality to the functioning of the self is also central to Afrocentrism (Boykin, Jagers, Ellison, & Albury, 1991). Recent

research suggests that psychosocial processes such as social capital may impact health and mental health functioning directly.

Collective efficacy, a component or characteristic of social capital, refers to a group member's perceptions of the group's ability to successfully perform a task or of a group's competency. The neighborhood context of collective efficacy includes mutual trust and willingness to help (Sampson, 1997). Collective efficacy has a high positive relationship to social capital and has been used as an indicator of social capital. The present research examined whether collective efficacy, as a measure of social capital is related to health and mental health among populations that value communalism.

Further, an individual's socioeconomic status is among the contextual factors that have been found to contribute to physical and psychological health outcomes (James, Schulz, & Van Olphen, 2001; Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997). The relationship between socioeconomic status and health has long been established. Individuals living in high-income communities report better general health than those in low-income communities. This is in part due to the availability of insurance, providers, and health care options in high-income communities (U. S. Department of Health and Human Services, 2001). Individuals living in low-income areas are also likely to experience the effects of other social and environmental stressors including higher crime rates and neighborhood disorganization. This may directly or indirectly impact physical health and psychological functioning. For example, high crime is associated with greater mortality and greater stress (Sampson, 1997). Neighborhoods lower in socioeconomic status also experience increased social disorganization and less access to resources, both

of which may affect physical health and mental health negatively (Cutrona, Russell, Hessling, Brown, & Murray, 2000).

African American Women

African American women have specific social, health, and emotional issues and needs that may differ from women in other ethnic groups within American society. Stressors specific to African American women may include exposure to racism, sexism, economic subordination, and the prevalence of negative, stereotypic images in mainstream society. Dealing with these culture-specific stressors may result in the development of specific defenses as well as the development of depression, anxiety and other psychiatric disorders. The development of health issues and psychological distress among African American women takes place within the context of their culture. One important contextual feature may be relevant to the adaptation of these women is social capital.

The research examined social and cultural processes specific to African American women. The study focused on the relationships between socioeconomic status, social capital, and physical and mental health among African American women. The central hypothesis proposed is that social capital would moderate the relationship between socioeconomic status and both general health and general mental health. That is, the effect of socioeconomic status on outcome variables exists in the absence of social capital and collective efficacy, but would be altered significantly by the level of social capital and collective efficacy present. Research has indicated that socioeconomic status has a high, positive correlation with health outcomes. Hypotheses further predicted that higher

levels of social capital and collective efficacy will have a positive impact on health outcomes, even in the presence of low socioeconomic status. Educational attainment served as a proxy for socioeconomic status. Social capital as a mediator was tested as well in order to explore a competing model.

This current manuscript begins with a review of the literature relevant to these issues and described method used to examine the relationships between SES, social capital, and health and mental health outcomes. Definitions of key concepts are provided at the end of the chapter to highlight variables under study.

Why African American Women?

Researchers are increasingly acknowledging the importance of cultural context in the study of health and mental health. Africentric psychology is that which seeks to examine the impact of the African culture on the psychological functioning of African descendents. This school of thought recognizes the impact of African cultural characteristics on the functioning of African Americans. The psychosocial functioning of "African Americans involves the evolution of African patterns of thought, feeling and behavior and their utilization as adaptive mechanisms in a context of racism and oppression...[representing a] multidimensional response to dehumanization and psychic conflict" (Jones, 2003, p. 1).

One salient feature of the African American community is that of communalism. Communalism is the tendency to value the larger community as much as or more than the individual (Nobles, 1991). The individual is viewed as a part of the whole rather than as a solitary entity. Although African American women have internalized the Western

culture's ideal of the "rugged individual", they continue to value community integration and other Afrocentric expressions. Being a valuable part of the whole is as important as individual strivings. African American women, having internalized Africentric values and cultural characteristics, tend to define themselves in the context of relationships. The health and psychological functioning of African American women has been found to be related to social integration and the presence of social networks (Gibbs and Fuery, 1994; Greene, 1994a). Recognition of the importance of communalism and social integration may have particular implications for the conceptualization and treatment of mental health issues among African American women. One feature related to a community's integration is social capital.

African American women have been described as experiencing the "triple-whammy" of racism, sexism and often classism or poverty-based oppression (Greene, 1994b). At the same time, African American women are often seen as, "strong, resilient, and adaptive in their ability to cope with adversity, support their families, and develop avenues of self-esteem and self-actualization" (Gibbs & Fuery, 1994, p. 559); however, the specific stressors, issues and needs of African American women are often neglected in psychological research. "There is, a need for continued investigations into the life experiences of African American women in the hopes of developing models of psychological functioning that are relevant, current, and accurate" (Collins & Lightsey, 2001, p. 272). Improved models will enable providers to appropriately address the specific needs and issues of African American women, improving mental health.

Although African American women represent a diverse group with diverse experiences, many deal with certain issues that may impact their adaptive functioning. For example, race "operates as a powerful social variable that can intensify other social variables, such as class and education" (Greene, 1994a). Racism is associated with unalterable, un-concealable physical characteristics, resulting in a chronic social stressor requiring ongoing management. In relation to women, racism may take the form of stereotypes deemed negative by the dominant culture including African American women being promiscuous, independent to the detriment of their male counterparts, and morally lacking (Greene, 1994a). African American women who internalize this negative self-image may suffer low self-esteem, depression, lack an authentic self, and experience self-hatred, all of which create psychological distress (Greene, 1994a).

African American women are in an economic and social position that is subordinate to European American men and women and sometimes African American males. African American women are often major or sole breadwinners of the family while competing with European American males and increasingly European American females and African American males for economic resources. Racist or sexist attitudes in the workplace may further challenge African American women's ability to achieve economic equality. This position in the socioeconomic (SES) structure may lead to distress and negatively impact psychological functioning (Gibbs & Fuery, 1994; Greene, 1994a).

Profile of African American Women

The following profile of African American women provides an overview of demographic, social and economic factors. This information is can be used to understanding the position of African American women within the United States population and social structure.

The number of African American women in the United States in 2000 was 17,684,000, making up 12.5% of the population of women in the United States (5% of the total population of the United States). This is a slight increase over the same population in 1990 at which time the number of African American women was 15,479,000 comprising 12.1% of the female population (U. S. Department of Health and Human Services, 2002).

African American women are more likely than African American men in the United States to be widowed, separated, or divorced, and less likely to be never married or currently married. Forty-two percent of African American women reported being "never married" in 2002. Thirty-one percent were married, 5.4% were separated, 9.4% were widowed, and 12.2% reported being divorced. Further, in 2002, there were 8.8 million Black families. Forty-eight percent were married-couple families while 43% were maintained by women with no spouse present (McKinnon, 2003). Marital status has been linked to mental health in African- American women as well. Women who are married are healthier than women who are not (Gibbs and Fuery, 1994).). Overall, African American married women report better health outcomes than unmarried women, but they still report poorer health than their white counterparts (Helgeson, 2005).

Eighteen percent of African American women age 25 and over have attained at least a Bachelor's degree. Twenty-one percent, however, have less than a high school degree. Thirty-three percent were high school graduates and 28.2% reported having some college or an associate's degree (McKinnon, 2003). Educational attainment has also been linked to mental health in African American women (Gibbs and Fuery, 1994).

African-Americans age 18 and above in general have higher rates of poverty than the general population (23% compared to 12%). While 13% of all women live in poverty, 25% of African American women are poor. Families maintained by African American women with no spouse present have a 35% poverty rate (McKinnon, 2003). Income is directly and positively related to general health and mental health in the United States (Hawe & Shiell, 2000).

Health Profile. African American women have health issues that may differ from other populations for various reasons. Cultural attitudes and values, for example, may impact diet and exercise. African Americans differ from the general population in levels of access and use of healthcare due to socioeconomic issues as well as cultural perceptions of illness and healthcare institutions. For example, African American women are more likely to prefer informal helping relationships rather than formal therapist-patient relationships (U. S. Department of Health and Human Services, 2001). African-American women are also less likely to report distress in terms of formal psychological diagnoses such as “depression” than their European American counterparts (U . S. Department of Health and Human Services, 2001).

In general, women in the U. S. report that they are in good health. Fewer African-American women reported being in good health than those in the general population. In 2002, 67% of women in the U. S. reported having “excellent or very good” health on the National Health Interview Survey. Among African American women, 52.4% reported having excellent or very good” health, 30.1% reported having “good” health, and 17.6 % reported experiencing “fair/poor” health (U. S. Department of Health and Human Services, 2002)

Indicators of Mental Health. Few indicators of mental health have been studied in relation to African American women. Suicide death rates serve as one indicator of mental health as related to depression and postpartum depression. Suicide death rates for all females 15 and older was 4.3 per 100,000 in 1998 and 1.8 per 100,000 for African American females during this same time period. African American females have slightly lower suicide death rates (U. S. Department of Health and Human Services, 2002).

In, sum, the health and demographic literature indicate that within the American social structure, African American women can be viewed within a specific status position in the U. S. population in relation to a range of stressors and social factors. This can be useful in understanding the role of contextual factors that influence the health and mental health of African American women.

Terminology

In order to support an understanding of the current research and conceptual literature that focuses on social factors such as social capital and related outcomes, a review of key terms and definitions follows.

Social capital refers to social networks, the reciprocity that result from networks and relationships, and mutuality in goal seeking (Putnam, 2000). When measured at the individual level, social capital reflects factors such as the quality of relationships, trust, and reciprocity. When measured at the community level, social capital refers to community organization and the quality of the relationship of residents to community organizations (Putnam, 2000).

Collective efficacy refers to a group member's perceptions of the group's ability to successfully perform a task, a group's competency (Sampson, 1997). The neighborhood context of collective efficacy includes mutual trust and willingness to help (Sampson, 1997). Collective efficacy has a high positive relationship to social capital and may be measured as an indicator of social capital.

Cohesion is an index of closeness or relational ties within a set of social relationships. Cohesion may be measured at the family or community level (Cutrona, et al., 2000)

Communalism refers to the tendency to value group or community in addition to or more than the individual (Nobles, 1991).

Physical Health refers to individual physical functioning. General health refers to overall physical functioning rather than specific illnesses or diseases. Although, physical and mental health interact and affect one another, for the purposes of this study, they will be treated separately. The current study measures general health using the physical health summary score of the Short Form Health Survey (SF-8) (Ware, Sherbourne & Nelson, 1992).

Mental Health refers to general psychological functioning. It may be related to anxiety, depression, life satisfaction, job satisfaction, and satisfaction with relationships. The current study measures this variable using the mental health summary score of the Short Form Health Survey (SF-8) (Ware, Sherbourne & Nelson, 1992).

Chapter Two

Review of Literature

Theory underlying the study will be examined in this section. This will include information related to the African American culture, social capital and collective efficacy. The review of theory will be followed by relevant research concerning the relationship between social capital, socioeconomic status, health, and psychological distress within the African American community.

Social Capital

Social capital refers to the connections among individuals or "the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions... Social capital is not just the sum of the institutions which underpin a society- it is the glue that holds them together" (World Bank, 1999). While physical capital refers to the properties of physical objects such as cars or homes and human capital refers to the characteristics and capacities of individuals, social capital refers to the interactions that help build a community and enables individuals to commit to one another. Indicators of social capital include the presence of social networks, trustworthiness, and reciprocity. When measured at the individual level, social capital reflects one's level of trust and commitment and sense being part of a community (James, Schulz, & Van Olphen, 2001).

While social capital may be considered a type of commodity or good, it may have negative consequences including constraint of opportunity for individuals outside the community, demands upon community members that may at times be excessive,

restriction of individual freedom, and the reinforcement of maladaptive behavior when it occurs as a norm in a given community. Extreme illustrations of negative consequences include the Mafia, gangs, cults, or other "families" in which consideration of the group, even to the detriment to the individual or society in general, is put before the needs of the individual (Hawe & Shiell, 2000).

Three major theorists, Pierre Bourdieu, James Coleman, and Robert Putman, are credited with developing the concept of social capital. Bourdieu first wrote about social capital in the 1960's and 1970's. He was concerned with the relationships between cultural groups and social classes and conceptualized capital in many forms including social, economic, scholastic, and cultural, to be a form of power. Cultural capital, the judgment of the dominant cultural group, was conceptualized as being universal and powerful, influencing relationships between groups. Social capital served as a link between cultural and economic capital. Bourdieu focused on cultural and economic capital and did not empirically define social capital or delineate the possible uses of it as resource. The concept was not fully developed. Very broadly, Bourdieu referred to social capital in terms of actual or potential resources as a function of possession of mutual acquaintances and recognition that leads to group members having the support of collectively-owned capital (Schuller, Baron, and Field, 2000).

James Coleman studied economics and sociology and attempted to link the two disciplines. His major area of study was establishing linkages between educational achievement and social inequality. In 1980 and 1982, Coleman conducted a series of longitudinal studies of sophomores in US high schools, comparing outcomes in state

schools to those of Catholic schools. He found that higher expectations of schoolteachers were beneficial to students in terms of attainment, particularly for those from economically impoverished backgrounds. Coleman explained these findings with a newly developed concept of social capital. He defined social capital as, "the set of resource that inhere in family relationships and in social organization and that are useful for the cognitive or social development" (Coleman, in Schuller, Baron, and Field, 2000). He further defined the necessary elements of social capital: Social capital is, "a 'particular kind of resource available to an actor' comprising a 'variety of entities' containing two elements: 'They all consist of some aspect of social structures, and they facilitate certain actions of actors- whether persons or corporate actors- within the structure'" (Coleman, in Schuller, Baron, and Field, 2000). Coleman did not perceive social capital to be intentionally developed. It exists rather as a by-product of other activities.

Coleman linked social capital and access to resources by positing that the process by which social relations lead to capital is through establishment of trustworthiness, obligations, and expectations. He further suggested that several factors may affect building or using social capital. For example, cultural differences between group members or between groups may lead to differences in tendencies to lend or ask for help. In addition, the degree of affluence of actors may reduce the amount of help needed from others, reducing the need or use of social capital. Finally, Coleman suggested that social capital was rooted within the quality of family relationships and began at childbirth. He was therefore concerned that the decline of the family may lead to the decline of social capital and societal functioning (Coleman, in Schuller, Baron, and Field, 2000).

Much of Coleman's work related to education and, thus, much of the emphasis of his research was on kinship and neighborhood structures and interaction among children. Criticisms of his work are that he did not look at other structures, adult populations, and did not delineate between membership of social structures and resources acquired through the membership. Further, he focused on dense relational ties and did not examine weak ties or any problems with social capital (Coleman, in Schuller, Baron, and Field, 2000). Coleman's conceptualization differed from that of Bourdieu in that Coleman examined relationships in non-elite groups. Bourdieu focused upon the ways in which power was maintained among elite groups. Further, Coleman established empirical bases for social capital and relevant social implications for its study. His work led to the U. S. educational system recognizing social relationships when considering school outcomes. He shifted the focus from considerations outside of the school to those characteristics of the school. These included establishing obligations, expectations and trustworthiness, and establishing channels for information exchange, and setting norms. Finally, Coleman was the first to suggest that social capital may be as important as economic power in establishing positive outcomes (Coleman, in Schuller, Baron, and Field, 2000).

Putnam began studying social capital with a focus on policy processes in regional government and later studied the everyday activities in American communities. He defined social capital as the, "features of social life- networks, norms and trust- that enable participants to act together more effectively to pursue shared objectives" (Putnam, in Coleman, in Schuller, Baron, and Field, 2000). Four key measures of social capital posited by Putnam include vibrancy of associational life, electoral turnout, newspaper

readership and preference voting. The focus of this conceptualization of social capital is civic participation as an indicator of social ties. The most well known of Putnam's examples of social capital is that of "bowling alone". In the past, bowling clubs have served as recreational outlets and a means by which people built relationships, sustaining the social fabric of the community. Putnam found that associational activities such as bowling or drinking coffee with neighbors were in decline in America in the 1990's indicating a decline in social capital.

Putnam further developed the concept of different types of social capital.

Bonding social capital refers to, "horizontal knit ties between individuals or groups sharing similar demographic characteristics" (Baum & Ziersch, 2003). The effects of this type of social capital may not exist society-wide, but would be limited to group members. Membership to a college fraternity, for example, exemplifies this type of relational bonding. Bridging social capital refers to, "ties that cut across different communities [and] individuals" (Baum & Ziersch, 2003). Linking social capital refers to, "vertical connections that span differences in power" (Baum & Ziersch, 2003). This type of social capital has implications for participation in the political process and gaining and benefiting from political power.

Putnam was concerned with the implications of social capital on social inequality in America. He felt that social inequalities could not exist when high levels of social capital exist. For example, the material benefits of having social capital include increased access to resources. Many studies examine social capital in terms of gains or lack of gains related to living in a particular neighborhood or economic environment. Those

living in communities with less social capital are likely to have less access to healthcare and less access to political power and influence. These factors are in turn related to higher mortality rates and higher crime rates. Building bridging social capital is important in building connections between different groups and to foster social inclusion (James, 2001; Schuller, Baron & Field, 2000).

Putnam has recently added to his initial conceptualization of social capital. Individuals may have high levels of trust, yet be asocial or socially inactive. Further, individuals may be untrusting and still make valuable contributions to society. He maintains, however, that trust and reciprocity are the basis of social capital and civilized life.

The current study will examine perceptions of trust and reciprocity with neighbors and community institutions as they relate to health and emotional functioning. Trust and reciprocity measured at the individual level yields a valid, basic measure of social capital.

Levels of Social Capital Bourdieu and Coleman developed individual, micro-level approaches to social capital while Putnam was more concerned with societal, macro-level social capital. Further, two varieties of network relationships, embeddedness and autonomy, exist within each level. Embeddedness at the macro-level refers to synergy or the state-society connections or the similarity of state actions with the needs and interests of its residents. Autonomy at the macro-level refers to integrity or the freedom of institutions to act independently of vested interests (Hawe & Shiell, 2000). Embedded social capital at the micro-level refers to integration, the extent to which individual members are integrated into their networks. Autonomy at the micro-level

refers to linkage, the existence of extra-community ties or the freedom individuals have to interact outside of the immediate group.

Table 1. *Levels and Types of Social Capital*

	Micro-level	Macro-level
Embeddedness	Integration	Synergy
	Intra-community ties	State-society connections
Autonomy	Linkage	Integrity
	Extra-community ties	Institutional capacity and credibility

(Hawe & Shiell, 2000, p. 873)

The proposed study will examine micro- or individual- level social capital.

Measuring Social Capital. Researchers have attempted to measure social capital in various ways. Social capital may be measured at a broader community level. This macro-level approach attempts to identify organized community structures and processes such as voter turnout, engagement in civic activities, and participation in the community. Social capital measured at this level serves as an indicator of community involvement, interaction, and cooperation towards shared goals (James et. al., 2001; Warren, Thompson, & Saegert, 2001). The structure and functions of social networks including size, density, services, and information dissemination have also been tapped as a measure

of social capital. Interactional characteristics of networks including factors such as frequency of interaction, trust level, and degree of reciprocity may also serve as a measure of social capital (Hawe & Shiell, 2000).

At the micro-level, social capital may be tapped by measuring perceptions and attitudes of community members. These may include measures of collective efficacy or "sense of community" (Body-Gendrot, 2003). The focus of this approach is to identify the social network or relationships among people at the individual-level. An indirect measure of social capital measured at the individual level is tapping the existence of individual prosocial behaviors, values and attitudes (Sampson, Raudenbush & Earls, 1997; James, Schultz, & Van Olphen, 2001). Another method used to tap social capital is to measure the quality of institutional or social environments. These may include families, friendship groups, community agencies, prisons, and schools (Hawe & Shiell, 2000).

An important distinction between community-level social capital and individual social support mechanisms (such as family and friends) exists. For example, a widow with few associates or family would be socially isolated in terms of individual social support; however, she may still benefit from residing in a neighborhood with high levels of social capital "in which neighbors organized and mingled at block parties, transported elderly residents to voting booths on election days, made sure the sidewalks were cleaned when it snowed, and so on" (Kawachi, et. al., 1997, p.1496). While social support is relevant to individuals, social capital is related to communities (Campbell, 2000).

The measure of social capital differs from measures of social support. The Rand Health Organization's *Medical Outcomes Study Social Support Survey*, for example, contains items such as "How often is the following kinds of support available to you if you need it?... Someone to give you good advice about a crisis...Someone who understands your problems, someone who shows you love and affection... someone who hugs you....[and] someone to confide in or talk about yourself or your problems" (Sherbourne & Stewart, 1991). While both social support and social capital are related to health and mental health, they act in differing ways and at differing levels. Social support is measured at the individual level and is related to relationships with others, usually friends and family including: "a) emotional support, love, and empathy, b) instrumental or tangible support, c) information, guidance, or feedback, d) appraisal support, which helps the person evaluate herself, and e) companionship in leisure and recreational activities" (King County, 2004). Social capital refers to relationships with the broader social environment and has political and larger social implications.

Putnam is responsible for further empirically defining social capital. Unlike Coleman, Putnam views social capital to be intentional and active. The composite of social capital developed by Putnam that is often used in research follows:

"1) Measures of community organizational life

- a) percentage served on committee of some local organization in last year,
- b) percentage served as officer of some club or organization in the past year,
- c) civic and social organizations per 1000 population,
- d) mean number of club meetings attended in the last year,

- e) mean number of group memberships
- 2) Measures of engagement in public affairs:
 - a) turnout in presidential elections,
 - b) percentage attended public meeting on town or school affairs in last year,
 - 3) Measures of community voluntarism:
 - a) number of non-profit organizations per 1000 population
 - b) mean number of times worked on community project last year,
 - c) mean number of times did volunteer work last year,
 - 4) Measures of informal sociability
 - a) agree that 'I spend a lot of time visiting friends',
 - b) mean number of times entertained at home last year,
 - 5) Measures of social trust:
 - a) agree that 'Most people can be trusted',
 - b) agree that 'most people are honest'" (Schuller, Baron, & Field, 2000).

Collective Efficacy as a Measure of Social Capital. Social capital may refer to a relational aspect of belonging to an organization or community and to a material aspect that refers to having resources based upon being part of a social network. The relational aspect may include one's "sense of community" and perceptions of collective efficacy. Collective efficacy refers to the group's perceptions of its ability to: "1) work together in a well-coordinated, organized manner to successfully achieve an objective, 2) work together to create desirable short-term and long-term changes in the community, and 3) access and utilize resources in the community to help achieve an objective (Florida

Prevention Research Center, 1999). In short, collective efficacy refers to a group's competency, or individual perceptions of the group's ability to successfully perform a task (Parker, 1994).

Albert Bandura developed the concept of collective efficacy, expanding on that of self-efficacy. Self-efficacy, measured at the individual level, is one's belief that one can perform well. At the group level, collective efficacy beliefs are motivational due to causal attributions made to the group rather than to the situation or context leading to an attitude of resilience. Efficacy judgments may mediate the relationship between ability, incentives, and opportunity to perform and actual behavioral performance. In other words, individuals with a lack of incentive or opportunity may still choose active, effective, and successful behavior if they are high in collective efficacy (Pethe, 2002).

Neighborhoods differ in collective efficacy depending upon levels of cohesion, solidarity among neighbors, and mutual trust among neighbors. Collective efficacy also depends upon the willingness of neighbors to intervene for the common good. This construct is conceptually linked to social capital in they both rely on a "sense of community" or emphasis on communalism and trust. This type of social capital contributes to the stabilization of the individual and community alike. The benefits of social capital may include social control and parental and kinship networks among the people "you live with, work with, worship with, and marry" (Coleman, in Servon, 2003, p. 15) as well as support. These factors contribute to the stability of the community. Collective efficacy and social capital have a strong, positive correlation. Collective efficacy may serve as an indicator of social capital.

Collective efficacy does not exist in a vacuum, but rather, within the context of resident relationships with one another, resident relationships with community organizations, political power structures, and community organizational structures. Collective efficacy can be measured by the level of informal social controls in a community. Sampson, Raudenbush, and Earls (1997) studied informal social controls as the capacity of a group to regulate members according to collectively-held principles. This type of control does not refer to externally induced control such as police intervention. The goal of informal social control is for residents to live in safe, healthy environments due to collective efforts. Informal social control includes parental or neighbor monitoring of children in private and public spaces such as parks. This also includes a willingness to intervene when neighbors or individuals from outside the community act in ways that will harm the public good. This would include activities such as breaking up teenage loiterers or stopping the distribution of drugs on the streets. Informal social control may also take the form of working with community organizations or agencies around developing programs or ensuring ongoing public services. Community members may also exhibit social control by intervening when public services are threatened or cut.

Further, collective efficacy is often depleted in low-income neighborhoods due to resource deprivation, "alienation, exploitation, and dependency" (Sampson, Raudenbush, and Earls, p. 919). Lower-income, minority, and single-parent residents are often cut off from resources that support collective social control. Racial and economic exclusion of these groups results in perceived powerlessness, making it less likely for group members

to act. These findings point to contextual implications for collective efficacy (Sampson, 1997).

African American Cultural Considerations

Proponents of Africentric psychological theory suggest that the African American culture contains several characteristics essential to understanding the experience of African American women. These include consideration of communalism and the quality and importance of relationships in the African American community, stressors faced by the African American women, and specific mental health and health issues.

Communalism. The origin of communalism in the African American community has its roots in African culture. The cultural legacy from Africa and “Afrocultural expressions continue to help and shape the... African American experience” (Boykin, Jager, Ellison, & Albury, 1997). In Africa, kinship connections served to protect and enhance the cohesiveness of tribes. Kinship was conceptualized as existing horizontally in every direction and vertically. Family members believed themselves to be related to ancestors, each other, the unborn, plants and animals. There was an emphasis placed upon a sense of continuity and harmony with all existence. In the African community, everyone was related biologically to others in the tribe and knowledge of one's genealogy was important in establishing one's sense of self, one's tribe and one's sense of one's self in the world. “The individual did not and could not exist alone” (Mbiti, in Nobles, 1991, p. 55) and an individual was viewed to be an integral part of the collective unity of the group. “The community, made, created, or produced the individual; thus the existence of the community was not imagined to be dependent in individual ingression” (Nobles,

1991, p. 54). Further, the culture placed little emphasis on the individual. "Only in terms of other people does the individual become conscious of his own being" (Mbiti, in Nobles, 1991, p. 55).

Key components of communalism are the importance of a social existence, social obligations, and the group as the basis of identity rather than the individual. Boykin suggests that communalism refers to a fundamental awareness of the interdependence of people. It follows that one's orientation is towards social relationships rather than objects (Boykin, Jager, Ellison, & Albury, 1997). Boykin found that communalism is related to the importance of the extended family in the African American culture, goal attainment strategies, and superior performance among African American students in cooperative learning settings (Boykin, Jager, Ellison, & Albury, 1997).

African American women have an "imperative" (Greene, 1994a, p. 12) to maintain aspects of African culture that are adaptive and healthy in addition to incorporating influences of western culture. That is, integration of African cultural values and traditions have been crucial in protecting African Americans from the effects of oppression throughout history while adoption of western cultural ideals have been important in terms of adaptation to aspects of American life. The integration of aspects of the African culture are psychologically protective in that they affirm the African American woman (Greene, 1994b). Communalism, the value and recognition of the community and collective social relationships, has served a protective role for African Americans since arriving from Africa and continues to have an important defining role for African Americans. Members of the community are encouraged to look beyond the

individual and personal needs for that of the group. The community values interdependence and collective responsibility rather than rugged individualism (Nobles, 1991).

Currently, the African American community defines "family" as an extended kinship network rather than the "nuclear family". This network includes biologically related individuals and non-blood relations. Relationships are often based upon affection and shared experience rather than biological connections. Within this extended network, African American children are often "mothered" by many women, including the biological mother. Consequently, African American women are often nurturing and mothering to children not related to the self. The vast kinship network provides women with opportunities to nurture many youth, a variety of emotional outlets in the form of supportive relationships, and occasional respite from childcare. The extended "family" often serves to protect its members from societal stressors. The absence of or shrinkage of this type of social network may result in emotional distress (Greene, 1994a).

The context of relationships is very important to the psychological functioning of African American women. Self-in-relation theory (Surrey, 1991) suggests that for women, the self is developed through relationships. "[African American] women tend to define themselves in terms of significant relationships, rather than defining themselves through separation, beginning with the mother-daughter dyad, extending to the family, then to the minority community, and finally the majority community" (Gibbs & Fuery, 1994, p. 560). Social networking and social support is especially important to African American women who define themselves within the context of relationships. While the

Cartesian worldview is that of "I think, therefore I am", the worldview of the African American woman is that of "I am because we are" (Abdullah, 1998). The development of empathy and connection is crucial to positive mental health functioning (Surrey, 1991).

There have also been studies regarding the resiliency and strength of African American women. This defense is developed in order to deal with adversity and harsh environmental factors including racism and other race-specific threats to the self. This defense is similar to "armoring" and may enhance health and mental health in spite of poor community conditions (Greene, 1994a)

African American Women from the Womanist Perspective. The womanist movement exemplifies the tenets of communalism and the importance of relationships for the African American woman adapting to the demands of the western world. African American women, left out of the American feminist movement due to its grounding in Eurocentric ideals of supremacy based upon race and class and the exclusion of the African American male, formed the womanist movement. The womanist movement seeks to eradicate domination based upon race, sex, and class (Collins, 1991). Rather than use the Eurocentric classification of people as "white", "black", "yellow", and "red" based upon the level of melanin in their skin, humans are perceived as "people of color" (Collins, 1991; Yancy, 2000), eradicating the notion of race and focusing on the harmony of existence between all people. bell hooks further describes the goal of African American woman as "a commitment to reorganize the U. S. society so that the self-development of people could take precedence over imperialism, economic expansion, and material desires" (hooks, 1981, p. 134) eradicating or minimizing the Eurocentric

emphasis on domination through economic resources. African American women, in short seek an Africentric process that empowers women to experience a community that recognizes the "oneness of all human life" (Collins, 1991, p. 39). This collectivism and emphasis on community has been important in facing the challenges to power and oppression within the black community (Ntiri, 2001).

Health and Mental Health in African American Women

The psychological functioning of African American women may be impacted by several culture-specific factors. Mental health functioning refers to overall life satisfaction and is an indicator of general psychological functioning. It may be related to anxiety, depression, life satisfaction, job satisfaction, and satisfaction with relationships. African American women may have specific threats to psychological functioning. Experiences of racism or sexism may influence, "the genesis of depression by posing transient threats to self-esteem, making the group's failure to receive normative returns more salient, and contributing to a sense of helplessness" (Clark, Anderson, Clark, & Williams, 1999). While discriminatory experiences may lead to depression, some researchers suggest that depression leads to increased, perhaps faulty, perceptions of discrimination. In this sense, social factors and mental health issues may work in a circular fashion in which each has an impact upon the other.

African American women can also experience chronic stress related to poverty and sexism. Poor African American women are more likely to experience threatening or uncontrollable life events and to suffer from chronic depression related to feelings of powerlessness than the general population. In addition, African American women face

the stress of increased competition between African American men and women in the labor market, the possibility of sexual harassment in the workplace, and challenges to professional and economic advances linked to the "glass ceiling" (Gibbs & Fuery, 1994).

Racism-specific coping responses may impact health and psychological functioning. After experiences of racism, African Americans engage several types of coping responses including anger, paranoia, anxiety, helplessness, hopelessness, frustration, resentment, and fear. These types of psychological distress may lead to anger suppression, hostility, aggression, verbal expression of anger or the use of alcohol or other substances to blunt negative feelings. Passive and active coping responses to discrimination have been found to be related to psychological distress, poorer mental health, and chronic health conditions among African Americans. Chronic perceptions or experiences of racism over time in individuals with passive coping styles may lead to frequent increases in higher blood pressure, decreased immune functioning, changes in neuroendocrine functioning, and impaired cardiovascular functioning (Clark, et. al., 1999). African American women who responded to unfair treatment with passive coping responses were found to have greater levels of hypertension than those with active coping responses (Clark, et. al., 1999).

There are several affective, cognitive, and behavioral manifestations of dealing with the varying types of oppression that African American women face. These include the use of "armoring", a coping skill used to decrease vulnerability to racism, sexism and classism (Greene, 1994a). Armoring consists of a wariness and interpersonal reserve, particularly evident in environments where there is a potential for oppression or

exploitation. It serves to decrease psychological or emotional vulnerability to harmful stimuli. In addition, cultural paranoia ranges from sensitivity to distrust of European-Americans and American institutions and serves to protect the woman from exploitation by these entities. Another coping strategy is that of racial socialization, defined as a group of cognitive strategies in which the woman learns to label racism accurately, has positive others who model appropriate responses to adverse environmental factors, and understands oppressive experiences that may include confusion, anger, and feelings of rejection. African American mothers strive to understand the legacy of negative images and expectations their children will encounter and to prepare themselves and their children to face this reality (Greene, 1994a). Finally, African American women, in general, approach the world with a problem-solving perspective due to their life-long experience of environmental stressors (Penn, et al., 1986).

In summary, African American women have specific health and quality of life issues that may be unique to their gender, ethnicity, social status and cultural context. The socialization of the African American woman within the context of close, cohesive relationships suggests that social capital and social cohesion may have an impact on the mental health of this group in particular.

Relevant Research

There is a paucity of research linking socioeconomic status, social capital, health, and psychological functioning. There are fewer still studies examining these linkages in the African American community and specifically for African American women. The following section contains a review of relevant existing literature.

Social Capital and Health. Social capital, as a measure of cohesion or relatedness among group members, has been found to impact community health. Researchers have found, for example, that communities high in social capital have lower heart attack rates than surrounding communities despite similar levels of fat intake, exercise, and smoking (Lasker, Eolf & Wolf, cited in Hawe & Shiell, 2000). Social capital in this study referred to close social relationships, participation in family and religious traditions, and intra-ethnic marriages. In addition, communities high in social capital have been found to have lower than expected death rates (Hawe & Shiell, 2000). These studies did not measure socioeconomic status in relation to health. This is important to note since socioeconomic status may confound the relationship between social capital and health.

In another study, Skrabski, Kopp and Kawachi (2003) found that trust, reciprocity, and help from civic associations, all indicators of social capital, were negatively associated with middle-age mortality in Hungary. Levels of mistrust showed the greatest association with mortality. In this study, reciprocity and mistrust were measured using three items from a survey administered by the researchers in the homes of the participants. The items were, "If I do nice things for someone, I can anticipate that they will respect me and treat me just as well as I treat them." (Answer 0-3, Totally disagree-Totally agree), "People are generally dishonest and selfish and they want to take advantage of others." (Answer 0-3, Totally disagree - Totally agree), and "In a difficult situation, whose help can you count on?" (Answer was open-ended, then rated as 0=none, 1=little, 2=moderate, 3=great deal). The participants were also asked the third question specifically in relation to civic organizations and religious organizations: "In a difficult

situation, whose help can you count on?" (0=none, 1=little, 2=moderate, 3=a great deal).

The last question taps Putnam's macro-level definition of social capital. The researchers used a weighted average for the above variables for 20 counties in their analysis, examining social capital at the broad community level.

In another study, researchers used federal-level health data correlated by state and social capital was measured using the Putnam Comprehensive Social Capital Index (Putnam, 2000), a public use dataset including data aggregated at the state level. The indicators of social capital in the database include community organizational life variables, involvement in public affairs, informal sociability, social trust, and informal sociability. Social capital was found to be the greatest predictor, above poverty and income inequality, for infectious diseases including Chlamydia, gonorrhea, syphilis, and AIDS case rates (Holtgrave & Crosby, 2003).

In a study conducted in 342 Chicago neighborhoods, social capital was found to be associated with lower neighborhood death rates. Higher levels of social capital were associated with lower death rates for "total mortality" including death from heart disease. This link was not found when considering mortality from cancer. In this study, social capital was measured using indicators of reciprocity, trust, and civic participation from the Project on Human Development in Chicago Neighborhoods (PHDCN) data. Data included responses to the Collective Efficacy Survey (Sampson, Raudenbush, and Earl, 1997) administered to 8782 Chicago residents in 343 neighborhoods and census tract data (Lochner, Kawachi, Beman, & Buka, 2003).

Browning and Cagney (2002) examined the role of neighborhood structural characteristics such as collective efficacy in promoting physical health among neighborhood residents. They used data from the 1994 Project on Human Development in Chicago Neighborhoods Community Survey and the 1991-2000 Metropolitan Chicago Information Center-Metro Survey. Neighborhood socioeconomic disadvantage was not related to physical health when individual demographics and health history were controlled. Individuals residing in neighborhoods with higher levels of collective efficacy, however, reported better health.

Further, at the individual level, indicators of social capital including trust, social cohesion, social integration, and social support may reflect protective factors for physical and mental health. These aspects of social capital have been found to offset detrimental factors such as obesity, cigarette smoking, elevated blood pressure and physical inactivity (James et. al, 1991). They have also been found to serve as protective factors in contraction of the common cold (Campbell, 2000) indicating that social capital may serve to buffer the effects of unhealthy lifestyles and indicators of poor health.

Social Capital and Psychological Functioning. A few studies suggest a possible link between indicators of social capital and psychological wellness. One study in a rural community (O'Brien, et. al, 1994) revealed that a sense of community attachment, the extent to which the resident is socially integrated into the community, was negatively correlated with depression. Sense of attachment was found to account for 20% of the variance in addition to the effect of socioeconomic status on depression when health and age, individual-level correlates of mental health, were controlled.

An additional study revealed that community level social cohesion and social stability is associated with depression, anxiety, oppositional defiant disorder, and conduct disorder in adolescents in Los Angeles County (Aneshensel & Sucoff, 1998). In this study, individual data from 877 adolescents were aggregated at the neighborhood level. The mental health factors were measured individually using symptom checklists and individual interviews. Social cohesion was measured by determining the levels at which neighbors knew one another, helped each other out, and worked together to maintain standards of behavior. The researchers found that crime, violence, drug use, and graffiti in low socioeconomic status neighborhoods had a greater association with mental health issues. The researchers did not, however, study the relationship between crime and violence and indicators of social capital.

Socioeconomic Status, Social Capital, Health and Psychological Functioning.

The relationships between SES, social capital, physical health, and mental health have also been researched. First, socio-economic status has been found to directly affect mental health and physical health. Lower socio-economic groups tend to suffer worst overall health. For example, socioeconomic inequality has been found to be associated with higher adult and infant mortality, smaller declines in mortality over time, and low investment in human capital (James et. al. 2000). In a rural study (O'Brien, et. al, 1994), the residents of economically depressed communities had higher levels of depression than those in economically advantaged communities. In another study, researchers found that census-based indicators of community poverty were related to low self-worth among adolescents (Paschall & Hubbard, 1998).

The effect of economic status on psychological functioning and health status may be influenced by factors in the psychosocial environment. Social capital may serve as one such factor. "The public arena [serves] as a source of supportive and health-promoting social networks rather than a source of stress, conflict, and ill-health [in democratic or egalitarian societies]. On the other hand, [socioeconomic] inequality increases social instability, crime rates and violence, and undermines the likelihood of densely overlapping horizontal social networks, imposing a burden which reduces health and well-being" (Campbell, 2000, p. 188). Social cohesion and networking promote or are related to greater health and psychological health.

Further, Campbell (2000) states that the main causes of death have changed from infectious diseases to degenerative diseases within the last century due to advances in medical understanding and practices. This indicates a shift to "psychosocial" pathways to disease. "Social capital- measured in terms of levels of trust of fellow citizens and the extent of membership in voluntary groupings- [may be] a causative variable... Income inequality exerts its negative influence on health through the social capital variable" (Campbell, 2000, p. 189).

The linkage of social capital with health is relatively new. A few studies, however, support this linkage. Kawachi and associates (1997) found a strong correlation between group membership and social trust and both income inequality and mortality. In other words, income inequality affects health, but may exert its influence through psychosocial and cognitive mechanisms, such as less social cohesion. In this study, mortality was defined by public health data while group membership and trust were

measured by the General Social Survey (GSS) (Davis & Smith, 1994). The researchers measured trust level with GSS items such as, "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?".

Social capital has been found to impact both health and mental health in various communities worldwide. Researchers have further hypothesized that social capital serves as a mediator between socioeconomic status and quality of life outcomes. The following sections will outline research in the area of social capital as it relates to African Americans.

Social Capital in the African American Community. While there is a paucity of research linking social capital and health outcomes for African American women, several studies examine the relationship of indicators of social capital, including social support, cohesion, collective efficacy, and communalism with outcomes in the African American community.

In one study (Cutrona, et al., 2000), researchers found that neighborhood cohesion was significantly related to mental health among African American women who had a positive outlook and who reported being in healthy relationships. In this study, the researchers worked with a sample of 709 women and clustered data by neighborhood. Neighborhood cohesion was defined as "the sense that neighbors know one another, help each other out, work together to maintain standards of behavior" (p. 4), social support, and participation in religious activities. The association was not found in women who reported low neighborhood cohesion suggesting that having a positive outlook and being in healthy relationships serve as a buffer and may interact with social cohesion to bring

about positive mental health outcomes. Community disorganization, related to a lack of rules, resources, and routines, was found to be a greater predictor of mental health issues. A lack of community organization may outweigh the presence of social capital.

In another study, Dominguez and Watkins (2003) found that among African American and Latin-American women, social capital can impact levels of support, improve chances of self-survival, and enhance chances for upward mobility. Reciprocity and social support through friendships and social institutions worked to ensure day-to-day survival and mobility through advice, contacts, and encouragement to get ahead. Social support networks that enforced time-consuming and limiting expectations on women were found to inhibit social mobility. Constraints included limited size and lack of heterogeneity of the network.

Harris & Molock (2000) found that communalism, family cohesion, and family support were associated with each other among college students at a historically black college. Higher levels of communalism were associated with higher levels of suicidal ideation and levels of depression while family support was associated with lower levels of suicidal ideation and depression among the students. This study suggests that family factors may be more influential in positive mental health than social capital. The study did not measure the level or amount of communalism actually found at the college which may have had a different influence on mental health functioning than a self-reported value of communalism. In other words, the researchers measured how much students valued communalism rather than the actual amount of communalism present at the college.

Further studies have examined the relationship between indicators of social capital and outcomes in African American adolescent populations. In one study, collective efficacy was found to moderate the effect of parental monitoring on prosocial competency and problem behavior in youth. Youth living in neighborhoods high in collective efficacy were also found to be more likely to have prosocial friends. Prosocial peer influences were also found to lead to positive youth outcomes. Neighborhood social capital was found to be more important than ecological disadvantage (such as low socioeconomic status and lack of resources) for some problem behavior due to its impact on parenting practices (Rankin & Quane, 2002). In addition, Jagers (1996) found that African American youth who endorsed Afrocentric values including communalism, positive affect, and spirituality were less likely to engage in delinquent behaviors. This was especially true for those who did not endorse Anglo cultural orientations of school rejection and involvement in gang-related activities. The researcher did not analyze the impact of value of communalism alone on outcome behaviors.

In summary, several research studies support the importance of relationships and social connections in the African American community. The psychological wellness of African Americans has been linked to several variables related to communalism and social capital. The next section will outline research in the area of psychological well-being among African American women.

Psychological Functioning Among African American Women. Research on the well-being of African American women has yielded varying results, possibly due to use of different measures, the characteristics of individual samples, and measurement during

different time periods. Redmond (1988) found that African American women had higher levels of psychological functioning (as measured by the 18-Item General Well-Being Schedule) than African American men, white women, and white men. In all groups, higher levels of well-being were related to education, income, and being married at the time of data collection. In contrast, Reskin and Coverman (1985) found that African American women reported more psychological distress than white women on a ten-item physical and psychological distress scale. Marital status, paid employment, and high income were related to psychological well-being for both groups of women.

Several studies have examined the link between social integration or social networking and psychological well-being in African American women. The presence of informal social networks have been related to greater coping and well-being among African American women. In addition, family support, having a network of kin, and social integration has been found to be positively related to subjective feelings of psychological well-being. African American women with high levels of social integration reported fewer symptoms of psychological distress than those with low levels of social integration (Gibbs & Fuery, 1994).

In one study, researchers analyzed data from the National Survey of Black Americans, to link subjective well-being with social relationships and network factors. The researchers analyzed responses from 2,107 participants from 1979 and 1980 administrations. Social relations and networks included subjective family closeness, support from family, number of friends, presence of fictive kin, church attendance, and frequency of contact with neighbors. Subjective well-being was measured using two

questions: "Taking all things together, how would you say things are these days--would you say you're very happy, pretty happy, or not too happy these days?" and "In general, how satisfied are you with your life as a whole these days? Would you say that you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?" Social support was measured using questions about friends, families, religious institutions, and neighbors such as "How often do you see, write, or talk on the telephone with your friends? Would you say nearly everyday, at least once a week, a few times a month, a few times a year, hardly ever, or never?" and "How often do people in your family--including children, grandparents, aunts, uncles, in-laws, and so on--help you out? Would you say very often, fairly often, not too often, or never?" The researchers found that subjective family closeness, having extensive nonkin friends, and having extensive contact with neighbors were positively associated with subjective well-being. Contrarily, having support from church members was not associated with subjective well-being, while frequency of church attendance was, suggesting that the social aspect of church may not be as important in well-being as the spiritual or religious aspect (Taylor, Chatters, Hardison & Riley, 2001).

In a second study, African American women with HIV were better able to deal with stress leading to better health outcomes, if they had social support and experienced social cohesion or inclusiveness at the family level. Family cohesion was found to buffer change in psychological distress despite an elevated T-cell count (an indicator of the progression of HIV). The quality of social relationships as measured by social support satisfaction was likely to play a protective role in the development of depression and

other distress in African American women. Satisfaction was found to moderate the impact of lower T-cell count on psychological functioning. The researchers suggested that interventions targeting enhancement of social support networks and relationships are important in treating the psychological health of African American women with HIV (Antoni, Ironson, Robbins, Samuels, Szapocznik, & Tejada, 2003).

The research in the area of psychological functioning among African American women illustrates the importance of social connections to healthy functioning. Social processes related to social capital have been proven to positively impact well-being.

Summary

In sum, studies attempting to link social capital to health and psychological well-being outcomes demonstrate mixed results. This may be due to differing definitions of social capital and controlling for other factors such as crime and violence in low-income neighborhoods. "It is not clear which kinds of networks- strong or weak ties, homogeneous or heterogeneous contacts- are most effective in the creation of social capital and protecting health" (Cattell, 2001). More research in this area is needed. There are even fewer studies attempting to link social capital with health and psychological functioning well-being outcomes within the African American community.

The current study seeks to analyze the relationship between perceived social capital and the general psychological mental health and health of African American women. The development of a model of health and mental health for African American women with social capital as a mediating or moderating influence may have implications for conceptualization and therapeutic intervention. Conceptualizations could incorporate

relational influences into the disease model of health and mental health, enriching the understanding of the formation and factors sustaining illness. Further, such findings would indicate that interventions that incorporate group and community support models that recognize the importance of social capital and collective efficacy be implemented for African American women in addition to or substituting more traditional individual treatment models. Finally, establishing a model for general health and mental health may serve as a foundation for future research into the social and cultural processes that affect specific rather than general illnesses. If socioeconomic status is mediated by the "layers of social networks in which [individuals] are embedded, building community capacity for social change logically must become a major focus of public health interventions" (James et. al, 2001, p. 180). Community-based organizations may recognize "the critical role of mediating [processes]... in building social capital and fostering connections between residents and organizations, both inside and outside of the community" (James et. al., 2001, p. 182). If these relationships exist, increasing community empowerment and social capacity by strengthening social networks may improve health outcomes.

The current study seeks to examine linkages between social capital and health and psychological functioning within a specific population. Establishing social capital as a mediator or moderator between socioeconomic status and the expected outcomes may set the foundation for further research in developing a physical and psychological health model for African American women.

Chapter Three

Hypotheses

The present research seeks to establish the relationship between social capital and physical health and mental health among African American women. Existing research suggests that level of socioeconomic status exerts a strong influence on health and psychological mental health. Socioeconomic status impacts the quality and frequency of health care and level of insurance. Further, resources to support physical health and psychological and general mental health such as health care agencies and mental health providers often do not exist or are not easily accessible in low-income areas with the same frequency as they exist in higher income areas. Low socioeconomic status may also be related to poor diet and greater health risks.

Individual social capital has also been found to influence physical and mental health. The number of and quality of community relationships has a positive impact on health. Some researchers (Hawe & Shiell, 2000; Kawachi et. al., 1997) have suggested that social capital may mediate the impact of socioeconomic status on health. That is, income may affect health through its impact on social capital. A low-socioeconomic neighborhood would be expected to have low levels of social capital, leading to poor health and psychological outcomes. The direct relationship between income and health is expected to be low when social capital is controlled. Social capital may, however, serve as a moderator rather than mediator. That is, it influences the existing relationship between income and health and psychological outcomes. This is

especially likely to be true in communities that place a high value on community cohesiveness or collectiveness.

In the study, income was analyzed in relation to psychological mental health and health. Social capital was measured individually using surveys that tap several types of social capital: 1) reciprocity, and 2) similarity of values and beliefs, 3) levels of trust and mutuality, and 4) collective efficacy. These types of social capital are based upon Coleman's definition. Social capital is expected to moderate rather than mediate the impact of income on mental health and health outcomes. The researcher tested the following hypotheses:

Hypothesis I

Social capital will moderate the relationship between SES and both psychological health and general health.

Hypothesis II

In order to test a competing model, social capital will be examined as a mediator between SES and both psychological mental health and general health.

Figure 1. Relationship Between Social Capital and SES to Mental Health Functioning, with Social Capital as moderator.

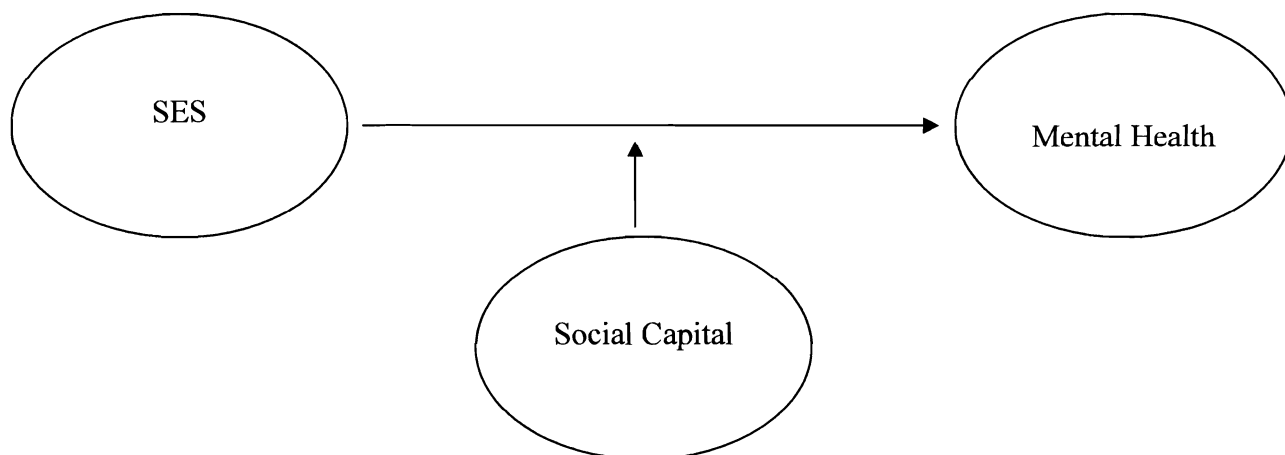


Figure 2. Relationship Between Social Capital and SES to Health, with Social Capital as moderator.

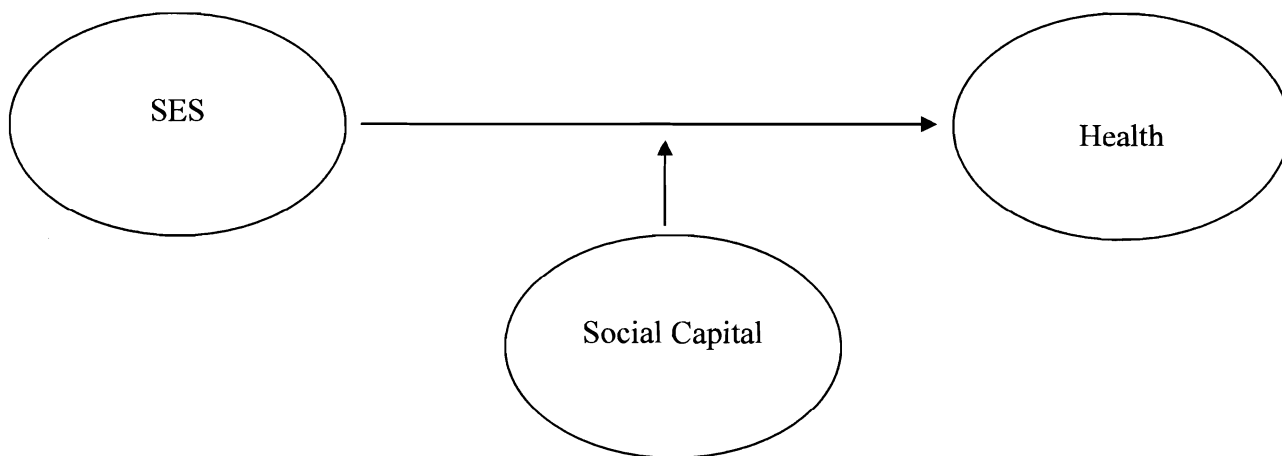


Figure 3. Relationship Between Social Capital and SES to Mental health, with Social Capital as mediator.

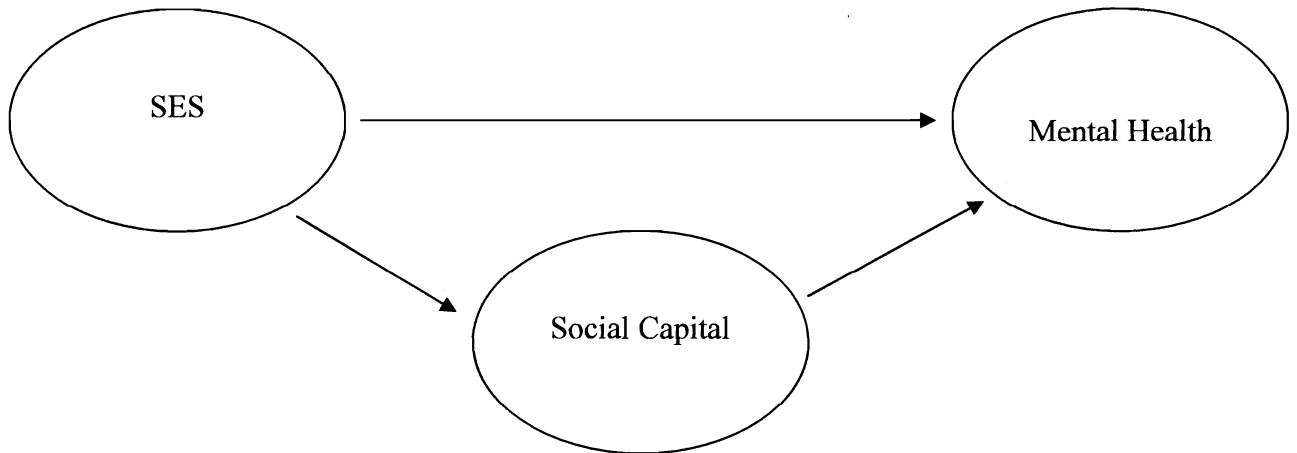
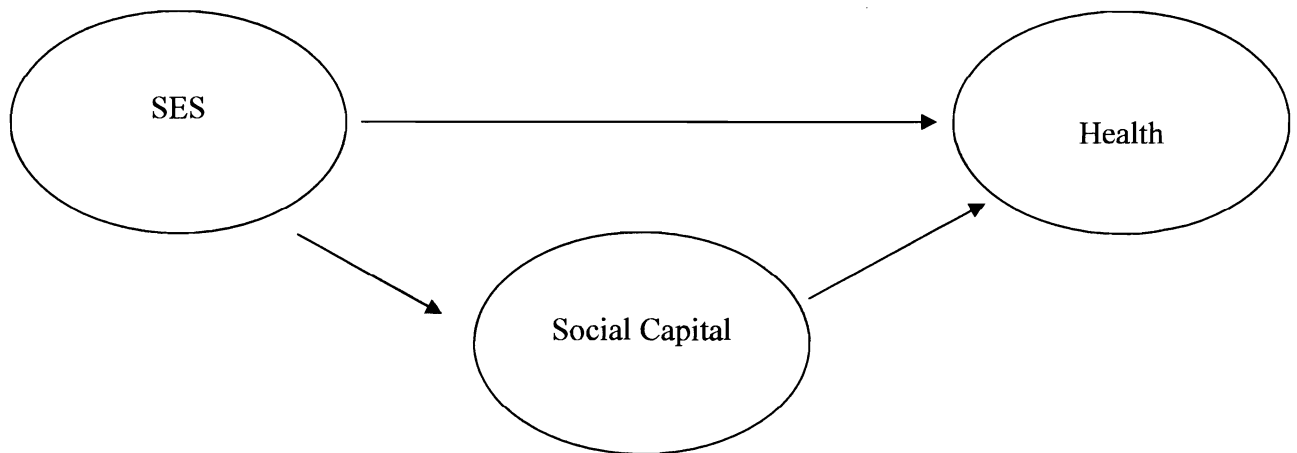


Figure 4. Relationship Between Social Capital and SES to Health, with Social Capital as mediator.



Chapter Four

Method

Participants.

Data collection took place in a low-income residential area of Richmond, Virginia. The target area has 27,743 residents, comprising 14% of Richmond's total population and houses 6,242 families. Sixteen percent of households in the area are comprised of married couples. Thirty-two percent of the households in the area are headed by females with no male present. Twelve percent of households in the area are headed by a female and have children 18 and younger living in the home (U. S. Census Bureau, 2000) (See Table 3).

The median household income for the data collection area is \$20,874 and the Per Capita income is \$12,033. This compares to a median household income for the City of Richmond of \$31,121 and a Per Capita income of \$20,337. In the area under study, 9,295 individuals live below the poverty line compared to the City of Richmond's 40,185 individuals living below the poverty level. Further, 2,520 families in the area live below the poverty level while 8,239 families in Richmond live below the poverty level (See Table 3). One thousand one hundred eighty-one (1181) residents receive public assistance (U. S. Census Bureau, 2000).

In terms of education, the data indicate 2,457 residents with a diploma or GED, 160 with a bachelor's degree, and 374 with a graduate or professional degree in 2000. In the area, 59.3% of females have at least a high school diploma and 12.36 have a bachelor's degree or higher. Demographic data further indicate that 4,212 employed

males, 477 unemployed males, 4,913 employed females and 890 unemployed females resided in the community at the time of the 2000 Census (U. S. Census Bureau, 2000) (See Table 2).

Table 2. *Characteristics of East End Residents, Richmond, Virginia.*

	East End			Richmond
	N	Percentage of East End Population	Comparable Percentage of Total Richmond Population	N
Residents	27,743	--	16%	197,790
Individuals Below Poverty Line	9,259	33.37%	4.32%	40,130
Families Below Poverty Line	2,520	9.08%	3.27%	8,239
GED or Diploma	2,457	8.86%	8.0	30,314
Bachelor's Degree	160	.58%	2.5	23,951
Professional Degree	374	1.35%	2.7	13,910
Employed Males	4,212	15.18%	19.5%	44,624
Unemployed males	477	1.72%	13.2%	3,622
Employed Females	4,913	17.71%	10.7%	46,121
Unemployed Females	890	3.21%	20.6%	4,321

Participants in the study included only women who self-identified on research materials as African American. Participants were 18 or older. Males were excluded from the study since the focus of this study is the health and mental health outcomes for African American females. Individuals of other ethnicities were excluded since the focus of this study was the particular needs of African American women.

Data from a minimum of 110 women was needed for this stage of research based upon power analysis using power of .80 and effect size of .30 at alpha of .05. All available data were used. Complete data from 130 women was collected.

Data from two main sources, The East End Partnership for Families (EPPF) Evaluation Client Tracking System study and the Aspen Project, were used for this project. Both studies were conducted at Virginia Commonwealth University. The EPPF is a collaboration of agencies working to improve services and the quality of life for families in the eastern region of Richmond, VA. The agencies making up the partnership provide a variety of services including healthcare, parenting education and support, distribution of social services benefits, and mental health care. In the EPPF study, consumers at three agencies that serve families in a low-income area in Richmond, VA were identified to validate the use of a computerized client assessment system and to gather resource information for the EPPF.

The Aspen project sought to develop a measure social capital in urban neighborhoods. Trained community data collectors mapped community and social resource networks and conducted interviews with community residents to better

understand what services are used in the neighborhood, and the physical characteristics of the community.

Measures.

Socioeconomic Status. Educational attainment was used as a proxy for socioeconomic status. Educational attainment and socioeconomic status have a strong, positive correlation in the United States (Abrams & Stormer, 2002). Educational status was broken down into the following categories: 1) less than high school diploma, 2) high school diploma or GED, 3) some college, 4) college degree, and 5) graduate degree. Educational statuses are often broken down in these categories due to the step in income related to the educational categories. The categories were coded ordinally in order for the variable to be treated as a continuous variable (Abrams & Stormer, 2002). Information regarding education was taken from the intake section of the EEPF study and the demographic section of the Richmond Community Resource Interview (See below).

Social Capital

Richmond Community Resource Interview Schedule (RCRIS). The interview is administered in a semi-structured interview format via hand-held computer and paper and pencil. The measure taps specific domains of social capital including: 1) health care, 2) crime or safety, 3) exercise, sports or recreation, 4) need for help with community problems, 5) child care, 6) community activities, 7) employment or job training, 8) child or teenager's education, 9) religious or spiritual growth, 10) care for the elderly, 11) housing, 12) help with food, clothing, or utilities, 13) handling bad stress, nerves, or emotional issues, 14) problems with drugs or alcohol, 15) legal issues, and 16)

transportation. The interview also probes for information about the social network regarding: 1) frequency of use, 2) satisfaction, 3) reciprocity, and 4) similarity of values and beliefs, and 5) levels of trust and mutuality.

The RCRIS measures three components of social capital based upon Coleman's definition of social capital: 1) obligation and expectations involving reciprocity, 2) information channels based in relationships, and 3) shared norms and values with effective sanctions (Allison, 2001). This measurement strategy involves measurement of relationship to community resources including family members, neighbors, churches, businesses, and government agencies and institutions. Previous measures often examine individual-level interactions and networks including exchanges between individuals. The current measure also measures exchanges between individuals and institutions. Individual responses may be aggregated across specific geographic areas allowing researchers to analyze community levels of social capital. This strategy was based upon use of the Arizona Social Support Interview Schedule (ASSIS) (Barrera, 1986). The ASSIS assesses: (1) intimate interaction, (2) material aid, (3) physical assistance, (4) guidance, (5) social participation, (6) positive feedback. The respondent is required to read a general description of the support and asked to give initials of all persons who would fit the description as providing that function and to whom the respondent had talked to in the last 30 days. Ratings of support satisfaction are obtained. The ASSIS yields a measure of total network size. Scores for individual support functions obtained (National Institutes of Health, 2005).

The RCRIS was developed at Virginia Commonwealth University (Allison, 2003). The measure differs from previous measures of social capital in that it: 1) Examines specific domains of social capital listed above, 2) utilized interpersonal interviews and digital methods of data collection, 3) examined "real" versus "apparent" social capital in that community residents were asked to name specific resources they have used, and 4) identified processes through which social capital support adaptive functioning for individual and communities.

Respondent are first asked about resources across each of the categories. There is no limit to the number of resources that can be given for each category. The respondent is then questioned about the resources in terms of the reciprocity, similarity of values and beliefs, and the level of trust and mutuality using a Likert scale. Scores for reciprocity, similarity, and trust are averaged from scale items for each respondent. The scores for the individual subindicators are also averaged to produce the total RCRIS score, which is used as the general measure of social capital. The RCRIS is usually administered individually, but may be administered to groups.

The RCRIS was administered in a pilot study by trained community residents in a low-income urban area in the southeastern United States. Participants were recruited from neighborhood civic associations and blanket flyer distribution. Sixty-one participants completed surveys in the pilot stage of the survey study. The sample consisted of 21 males and 40 females ranging in age from 28 to 90 years old with a mean of 47.9 years. The RCRIS was validated using the Collective Efficacy Survey, an established measure of the neighborhood level of social capital.

The proposed study will analyze the perceptions of social capital as measured by 1) reciprocity, 2) similarity of values and beliefs, and 3) levels of trust and mutuality, based upon Coleman's definition of social capital. The ratings for each indicator will be examined by domain.

Collective Efficacy Survey. The Collective Efficacy Survey measures collective efficacy in two domains: 1) Social Control/Willingness to intervene and 2) Social Cohesion and Trust. The Collective Efficacy Survey was developed in a study of neighborhood violence in 1995. It was administered to 8782 residents in 343 neighborhoods in Chicago, Illinois where participants were interviewed in their homes. Approximately one-third of the sample was African American, one-third was Caucasian, and one-third Latino American. The African Americans in the sample varied in terms of socio-economic status. There were neither low-income Caucasians nor high-income Latino Americans in the sample. Gender, ethnicity, and years in a neighborhood did not effect responses (Sampson, et. al., 1997).

Social cohesion and informal social control were highly correlated across neighborhoods ($r = 0.80, p < 0.001$) which suggesting that the two constructs, Social Control and Social Cohesion, were measuring aspects of the same latent construct, collective efficacy. Further, the reliability with which neighborhoods can be distinguished on collective efficacy was found to range between 0.80 for neighborhoods with a sample size of 20 raters to 0.91 for neighborhoods with a sample size of 50 raters (Sampson, et. al., 1997).

To validate the measure, the Collective Efficacy Survey was administered with scales measuring neighborhood services, friendship and kinship ties, and organizational participation. Collective efficacy was significantly and positively related to friendship and kinship ties ($r = 0.49, p < .01$), organizational participation ($r = 0.45, p < .01$), and neighborhood services ($r = 0.21, p < .01$).

The items of the collective efficacy survey are coded from 0 to 5 with five corresponding to "very likely" and "strongly agree". Items 4 and 5 of the Social Cohesion items are reverse coded. The ratings may then be summed resulting in a collective efficacy index with scores 0 (least) to 50 (most). Separate Social Control and Social Cohesion may also be computed by summing ratings on the respective scales. The current study utilized the single collective efficacy index which measure social control and social cohesion. The total score is used since it has been studied in relation to social capital. While the subindicators may be significantly associated with social capital as well, this type of research has not been done. Coleman has suggested that the subindicators, reciprocity, similarity, and trust, are associated with social capital.

Physical and Mental Health

Short Form Health Survey (SF-8). The S-F8 is an 8-item health questionnaire developed for use with large populations that measures eight domains of health: physical functioning, role limitations due to physical health (role-physical), bodily pain, general health perceptions, vitality, social functioning, role limitations due to emotional problems (role-emotional), and mental health. Further, the measure yields summary scores for two major domains, Physical Health and Mental Health. It has been found to be valid and

reliable in identifying health issues along the eight domains. It does not provide detailed or specific information about health or mental health issues, but may be used as a general measure of health and mental health functioning.

The SF-8 was developed in order to provide a quick, comprehensive measure of health and mental health functioning. In the Medical Outcome Study, the Short Form-36 (SF-36) (Ware & Sherbourne, 1992), a 36 - item health measure, was found to reliably identify health along the eight domains listed. Eight items that reliably identify health in the domains comprise the SF-8. Each item is linked to a pool of SF-36 items for each domain. The developers analyzed each item using analysis of variance methods (ANOVA) using the SF-36 scales corresponding with each domain as criteria. The best performing items were chosen for the SF-36. Regression methods were used to estimate the coefficient for each SF-8 item to estimate the Physical and Mental Health summary scores.

Reliability and validity for the SF-8 was established in a national study of the general U. S. population. The survey was administered to 12,957 adults via phone interview, internet and mail. The SF-8 has been found to have good test-retest reliability. Test-retest reliability for the Physical Health and Mental Health summary scores were .73 and .74, respectively after 1 week (N=540). Validity was established by comparing individual SF-8 item scores and summary scores with SF-36 scales and summary scores. The SF-8 and SF-36 scales were found to be highly correlated. Convergent validity between scales ranged from .71 to .95. The Physical Health summary scales for the two measures were correlated .92 while the Mental Health summary scales were correlated

.93. Further, responses to the SF-8 from known patient groups were compared to self-reports from the same group of: 1) physical conditions, 2) mental conditions, 3) the impact of acute symptoms during the past 24 hours, and 4) changes in symptoms over time. The developers compared means of the SF-8 scale scores and summary scores with the means of patient symptoms. They found no significant difference between means for each indicator, further establishing the validity of the measure (Ware, Kosinski, Dewey, & Gendak, 2001).

The SF-8 may be scored in two ways: obtaining scaled scores or summary scores. The scaled scores are derived by assigning an SF-36 scale score from a US population study to each SF-8 response domain. Summary scores are then obtained by multiplying each item score by physical health domain regression weight and mental health domain regression weight, then and summing each weighted score by domain. To obtain a mean of 50 and a standard deviation of 10, an intercept constant corresponding to each summary score is added to the sum of weighted scores for each domain. The QualityMetric company provides weights and intercept constants in the measurement manual (Ware, Kosinski, Dewey, & Gendak, 2001). The present study utilized the Physical Health and Mental Health summary scores as indicators of Physical Health and Psychological Functioning.

Procedure

The participants were informed about the study at intake at participating agencies in the EEPF and in the Aspen Study and asked to allow their intake data to be used

independent of their names or other identifying information. The EEPF agencies use a collaborative web-based data system (the East End Client Tracking System, a multi-agency database that includes demographic information; individual client needs assessment, and demographic information) in which intake information is entered with the consent of the clients. Participants must complete at least an intake including demographic information in order to be included. EEPF consumers also completed the *Richmond Community Resource Interview Schedule* and the *SF-8* at intake as part of the East End Partnership with Families evaluation research. There was no penalty for refusal of consent. In the EEPF study, the researcher and agency staff administered the computerized assessment, *The Richmond Community Resource Interview Schedule* and the *Short-Form Health Survey*, and the *Collective Efficacy Survey* to agency clientele. Clients received twenty dollars for participation. Responses to the computerized assessment were correlated to those on the health measures to establish the validity of the computerized assessment. Data collection took place from August, 2003 to October, 2004.

Data from the Aspen project including answers to the *Richmond Community Resource Interview Schedule*, *Short Form Health Survey*, the *Collective Efficacy Survey*, and demographic information was used. In the Aspen Project, community residents were trained to collect data in order to access information from residents about resources and needs across a range of areas such as housing, social and recreational activities, social services, and community action. The Community data collectors recruited participants from civic association meetings, snowballing from interviews and blanket flyer

distribution. The measures, *The Richmond Community Resource Interview Schedule*, the *Collective Efficacy Survey*, and the *Short-Form Health Survey*, were administered using handheld computers. Data collection took place from October, 2002 to May, 2004. Clients received twenty dollars for participation. Many of the data collectors in the Aspen sample administered the assessments using handheld computers. Others used pencil and paper. The records of how many used handheld computers versus how many used pencil and paper were not kept. Further, some of the participants in the Aspen study took were administered the assessments in groups while many others were administered the assessments individually. These records were not kept, either, and would have been interesting to explore.

Chapter Five

Results

Data were analyzed using SPSS and checked for out-of-range responses and data-entry errors. Data were collected from 133 African American women. Ninety respondents provided data as part of the Aspen study and 43 provided data during the EEPF study. Cases in which participants did not complete all surveys were not used. These cases were omitted from analyses due to incomplete data on educational attainment which was used as the index for socioeconomic status. Complete data for the variables under investigation was collected from 118 participants. The entire available sample of completed surveys was used in subsequent analyses.

Preliminary Analysis

Preliminary descriptive data analyses were conducted examining sample characteristics, and the psychometrics of predictors, and outcome variables (see Tables 3-5). The purpose of these analyses was to obtain a description of the sample population and to understand distributions of the variables measured. The average age of the participants was 45.55. The average level of education in the sample was found to be high school education ($\bar{x}=2.07$) with little variation ($SD=.89$). The mean score for social capital as measured by the RCRIS for the sample was found to be 10.88 (ranging from 3.59 to 28) while the mean of collective efficacy was 21.63 (on a scale of 10-40). Possible responses on all the items of the RCRIS (satisfaction, dependency, similarity of values, and levels of support) were based on a scale of 1 to 4, with 4 being the highest. The average level of satisfaction each RCRIS variable was analyzed (a likert scale of 1-4

was used for each scale with 1 being the lowest and 4 the highest): resources utilized was found to be 3.32; subjects' perception of being able to depend upon resources was found to be 3.05; support of the resources identified was 3.00; similarity of values subjects reported having with resources was found to be 2.93. Alphas for the RCRIS, the Collective Efficacy Survey, and the SF-8 were obtained in order to determine how consistently individual items measured the target construct and are presented in Table 4.

Table 3. *Education Frequencies*

Category	Education Level	Frequency
1	Less than college	33
2	High school or GED	64
3	Some College	25
4	College degree	4
5	Graduate or Professional degree	3

Additional analyses were conducted to explore the relationships between variables of the RCRIS and neighborhood characteristics providing additive information about the sample. Ninety subjects gave responses indicating the number of years they had lived in the neighborhood. The mean number of years subjects lived in the neighborhood was 19.44.

Table 4. *Descriptive Statistics for Age, Predictors, and Outcome Measures.*

	alpha	M	SD
Age	-	45.55	15.50
Education	-	2.07	.89
Dependability	-	3.05	.88
Support	-	3.00	1.02
Similarity	-	2.93	.93
RCRIS	.83	10.88	14.65
Collective Efficacy	.98	21.63	5.10
SF-8 Mental Health	.91	76.20	13.36
Sf-8 Physical Health	.91	46.82	10.16
Years in Neighborhood	-	19.44	17.19
Satisfaction	-	3.32	.73

Second, correlational analyses were conducted between number of years in the neighborhood and individual indicators of the RCRIS (support, dependability, satisfaction with resources, and similarity of beliefs). Age was associated with the number of years a resident lived in the neighborhood ($r=.51, p=.00$) and reported satisfaction with resources ($r=.29, p=.00$). Education was also associated with satisfaction with resources ($r=.19, p=.03$).

The individual indicators measured by the RCRIS were found to be significantly associated with each other. Since the RCRIS is a new measure, it has been unclear how much the individual indicators of social capital related to each other, the overall measure, and the outcome variables. Similarity of Beliefs was found to be significantly associated with satisfaction with resources ($r=.18, p=.00$), Support ($r=.59, p=.00$), and Dependability ($r=.69, p=.00$). Satisfaction with resources was also found to be significantly associated with support ($r=.10, p=.00$) and Dependability ($r=.23, p=.00$). Finally, Support and

Dependability were found to be significantly associated ($r=.58, p=00$). This information is not part of the social capital study, but is part of exploration of the RCRIS measure.

Please see Table 5.

Table 5. *Correlations Between Subject Variables and RCRIS Variables.*

	Age	Years in Neighborhood	Satisfaction	Support	Dependability	Similarity of Beliefs
Age	1	.51**	.29**	.06	.08	.16
Years in Neighborhood		1	.15	.03	-.06	-.08
Satisfaction			1	.10**	.23**	.18**
Support				1	.58**	.59**
Dependability					1	.69**
Similarity of Beliefs						1

* $p \leq 0.05$ level

** $p \leq 0.01$ level

Finally, frequency of mental health and physical health resources were explored in order to get a sense of what types resources residents identified. Out of the total 1808 responses identifying resources across the 17 different response categories, 10 (.55%) included mental health agencies or institutions and 83 (4.6%) included health agencies or institutions. Responses that included churches, pastors, or "God" totaled 60 (3.3%). These

numbers may under-represent institutions identified since researchers were not able to categorize responses such as “Mr. Jones” which did not indicate the type of resource. Responses ranged from “self”, neighbors, family members, newspapers, social services, schools, housing offices, civic associations, nurseries, parks, and various other institutions and people. Similarly, specific types of resources could not be linked to outcome variables due to the lack of specific categorization in the data set.

Correlational Analysis

The first step in establishing mediation is to carry out correlational analyses in order to establish or rule out the existence of relationships between variables (Baron & Kenney, 1986). Bivariate correlations were conducted to examine the relationships between predictors and outcome variables (See Table 64). Significant correlations were found between education and the mental health ($r = .18, p = .03$) and physical health ($r = .15, p = .05$) outcome variables. Physical and mental health were found to be significantly correlated at the .01 level ($r = .46$) (See Table 7).

There were no significant relationships found between the measures of social capital, the RCRIS and the Collective Efficacy Survey, and the outcome variables. Social capital measured by the RCRIS was not significantly correlated with mental health ($r = -.01, p = .44$) or physical health ($r = -.03, p = .72$). Collective efficacy scores were not found to be significantly correlated to mental health ($r = -.14, p = .08$) or physical health ($r = -.08, p = .45$) (See Table 7). Further, there was not a significant relationship found between educational attainment (the proxy for income) and the measures of social capital. The correlation between educational attainment and RCRIS scores was found to be $-.02$

($p=.42$). The correlations between educational attainment and collective efficacy was found to be $-.05$ ($p=.31$) (See Table 6).

Table 6. *Correlations Between Predictors and Outcome Variables*

	Depend- ability	Support	Similar- ity of Beliefs	CE	RCRIS	Educa- tion	SF-8 MH	SF-8 Physical Health
Age	.06	.07	.16	-.02	.11	.11	.10	.25**
Depend- ability	-	.58**	.69**	.19*	-.003	-.08	-.08	-.11
Support		-	.59**	.09	.02	-.04	-.05	-.25**
Similarity of Beliefs			-	.10	.07	-.12	.17	.07
Collective Efficacy (CE)				-	.13	-.05	-.14	-.08
RCRIS					-	-.02	-.01	-.03
Education						-	.18*	.15*
SF-8 Mental Health							-	.46**
SF-8 Physical Health								-

* $p<.05$ level, ** $p<.01$ level

Analysis of Hypothesis I: Tests for Moderator Effects

Baron and Kenny (1986) outline the steps to test for moderators in research. First, the relationship between educational attainment and the outcome variables, mental health

and health must be established through regression. The variables used within regression were as follows:

The independent variable, educational attainment was categorical but organized in an ordinal fashion to be used as a continuous variable, while the predicted moderator, social capital was continuous. The outcome variables are health and psychological functioning.

Analyses were organized as follows:

1. Mental Health Functioning

- a. The relationship between educational attainment (as a proxy for socioeconomic status) and psychological mental health functioning were analyzed through regression. The researcher predicted that educational attainment would account for a significant amount of the variance in mental health.
- b. A significant effect on mental health was expected using regression analysis to examine the interaction between educational attainment and social capital when the main effects of both were controlled.

2. Health

- a. The relationship between educational attainment (as a proxy for socioeconomic status) and health was analyzed through regression. The researcher predicted that educational attainment would account for a significant amount of the variance in health.

b. A significant effect on health was expected using regression analysis to examine the interaction between educational attainment and social capital when the main effects of both were controlled.

Additional tests were run using the subindicators of the RCRIS as measures of social capital to explore the usefulness of the subindicators as independent measures of social capital. The researcher proposed that educational attainment would account for a significant amount of the variance in the outcome variables. Second, the proposed interaction between the proposed moderator, social capital, and educational attainment must predict health and mental health when the main effects of both are controlled. In this case, the independent variable, educational attainment is a progressive interval, while the predicted moderator, social capital is continuous.

To control for effects of multicollinearity and to make data more interpretable, the predictor variables were centered by subtracting the group mean from each individual score. The centered variables are used in the first step of the regression. The centered variables are then multiplied together to create an interaction term which is entered in the second step of regression analysis (Aiken & West, 1991).

To test social capital and collective efficacy as moderators of the effects of income on mental health functioning, the relationship between educational attainment (as a proxy for socioeconomic status) and mental health was analyzed using regression. Educational attainment was expected to account for a significant amount of the variance in mental health. Next, the effect of the interaction between educational attainment and

social capital on mental health was examined using regression analysis when the main effects of both were controlled.

There was not a statistically significant relationship found between educational attainment and mental health established through regression. That is, educational attainment did not account for a significant amount of variation in mental health (though it approached significance at the bivariate level). There was no significant effect of the interaction between educational attainment and social capital on the outcome variables when main effects were controlled. There were no moderation effects found using the total RCRIS or any of the individual subscales. There was also no significant contribution of collective efficacy and education in predicting mental health (See Tables 7-11).

Table 7. Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Score on Mental Health

Regression	Variable	ΔR^2	B	SE B	Beta	Sig. of Beta
Step 1		.03				
	Education		2.61	1.35	.18	.06
	RCRIS		.30	.30	.04	.64
Step 2		.00				
	Education		2.57	1.38	.18	.07
	RCRIS		.04	.29	.04	.65
	Education x RCRIS		.01	.12	.02	.88

Final Model: $F(2, 112)=1.27, p=.29$

Table 8. *Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Dependability Score on Mental Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig of Beta
Step 1		.03				
	Education		2.52	1.35	.17	.07
	Dependability		-.83	2.57	-.03	.75
Step 2		.00				
	Education		2.51	1.35	.17	.37
	Dependability		-.80	2.59	-.029	.78
	Education x Dependability		.394	2.956	.01	.89

Final Model: $F(2,112)=1.24$, $p=.30$

Table 9. *Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Support Score on Mental Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig of Beta
Step 1		.31				
	Education		2.54	1.34	.17	.06
	Support		-.55	2.32	-.02	.82
Step 2		.00				
	Education		2.51	1.35	.17	.07
	Support		-.61	2.34	-.02	.79
	Education x Support		1.11	2.86	.39	.70

Final Model: $F(2, 118) = 1.27, p = .29$

Table 10. *Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Similarity of Belief Score on Mental Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig of Beta
Step 1		.03				
	Education		2.62	1.34	.18	.05
	Similarity of Beliefs		1.3	2.3	.05	.57
Step 2		.00				
	Education		2.64	1.35	1.95	.05
	Similarity of Beliefs		1.33	2.30	.05	.56
	Education x Similarity of Beliefs		.52	2.7	.02	.85

Final Model: $F(2,118)=.1.32, p=.27$

Table 11. *Test for Moderation: Regression Analyses of Significance of Education Level and Collective Efficacy Score on Mental Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig. of Beta
Step 1		.030				
	Education		2.54	1.3	.17	.01
	Collective Efficacy		.01	.14	.01	.40
Step 2		.022				
	Education		2.28	1.35	.16	.01
	Collective Efficacy		.08	.14	.06	.50
	Education x Collective Efficacy		.28	.17	.16	.33

Final Model: $F(2,118)=2.13, p=.10$

To test both social capital and collective efficacy, an indicator of social capital, as moderators of the effects income on physical health functioning, the relationship between educational attainment (as a proxy for socioeconomic status) and health was analyzed using hierarchical regression analyses as outlined by Baron and Kenney (1986).

Subindicators of the RCRIS, serving as measures of social capital, were also analyzed as moderators using the Baron and Kenney method.

There was no statistically significant effect of educational attainment on physical health established through the regression analyses. There was no significant effect of the interaction between educational attainment and social capital (RCRIS and its subscales) on health when main effects were controlled (See Tables 12-16 below).

Table 12. *Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Score on Physical Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig. Of Beta
Step 1		.05				
	Education		1.61	1.03	.14	.12
	RCRIS		.89	.50	-.17	.07
Step 2		.002				
	Education		1.51	1.05	.14	.15
	RCRIS		-.91	.49	-.17	.07
	Education x RCRIS		.31	.59	.05	.60

Final Model: $F(2,118)=2.15$, $p=.10$

Table 13. *Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Dependability Score on Physical Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig of Beta
Step 1		.03				
	Education		1.79	1.04	.16	.09
	Dependability		.64	1.98	.03	.75
Step 2		.00				
	Education		1.77	1.04	.16	.09
	Dependability		.67	1.99	.03	.74
	Education x Dependability		.51	2.28	.02	.84

Final Model: $F(2,112)=1.01$, $p=.39$

Table 14. *Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Support Score on Physical Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig of Beta
Step 1		.03				
	Education		1.76	1.03	.16	.09
	Support		-.09	1.79	-.00	.96
Step 2		.00				
	Education		1.74	1.04	.16	.10
	Support		-.13	1.80	-.01	.94
	Education x Support		.64	2.20	.03	.77

Final Model: $F(2, 118) = .986, p = .40$

Table 15. *Test for Moderation: Regression Analyses of Significance of Education Level and RCRIS Similarity of Beliefs Score on Physical Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig. Of Beta
Step 1		.04				
	Education		1.85	1.03	.17	.08
	Similarity of Beliefs		1.92	1.75	.10	.28
Step 2		.00				
	Education		1.83	1.04	.16	.08
	Similarity of Beliefs		1.88	1.76	.10	.29
	Education x Similarity of Beliefs		-.48	2.04	-.02	.82

Final Model: $F(2,118)=.1.38, p=.25$

Table 16. *Test for Moderation: Regression Analyses of Significance of Education Level and Collective Efficacy Score on Physical Health*

Regression	Variable	ΔR^2	B	SE B	Beta	Sig. Of Beta
Step 1		.034				
	Education		1.89	1.04	.17	.07
	Collective Efficacy		-.12	.11	-.11	.27
Step 2		.01				
	Education		1.76	1.04	.16	.09
	Collective Efficacy		-.08	.11	-.07	.46
	Education x Collective Efficacy		.13	.13	.10	.31

Final Model: $F(2,118) = 1.7, p = .12$

Analysis of Hypothesis II: Tests for Mediator Effects

The second hypothesis predicted that social capital would serve as a mediator between SES and Baron and Kenny (1986) also outline the steps to test for mediators in research. Educational attainment served as the independent variable, while the predicted mediator was the social capital variable. The outcome variables were health and mental health functioning.

The analyses were organized as follows:

1. Mental Health Functioning

- a. The predicted mediator, social capital, was regressed on the educational

attainment. Educational attainment was expected to account for a significant amount of variance in social capital.

b. Regression of mental health functioning on educational attainment.

Educational attainment was expected to account for a significant amount of variance in the amount of mental health functioning.

c. Regression of mental health functioning on educational attainment and social capital. Social capital and educational attainment were expected to account for a significant amount of variance in the measure of mental health.

d. The regression coefficient for the educational attainment variable in step "c" should be expected to be less than that of step "b" suggesting that the relationship with mental health functioning is stronger when social capital is controlled.

2. Physical Health

a. The predicted mediator, social capital, was regressed on educational attainment. Educational attainment was expected to account for a significant amount of variance in social capital.

b. Regression of mental health functioning on educational attainment.

Educational attainment was expected to account for a significant amount of variance in the amount of health.

c. Regression of mental health functioning on educational attainment and social capital. Social capital and educational attainment were expected to account for a significant amount of variance in health.

d. The regression coefficient for the educational attainment variable in step "c" should be less than that of step "b" suggesting that the relationship with health is stronger when social capital is controlled.

Additional analyses using subindicators of the RCRIS as measures of social capital were run to explore their usefulness as independent indicators. The lack of a significant correlation between proposed mediating variables, measures of social capital, and the predictor (income) and the outcome variables (i.e., health and mental health) makes mediation impossible (Baron and Kenney, 1986). Regressions were run to test the measures of social capital as mediators on mental health to explore the relationships between the individual variables.

To test for the mediation effects of social capital on physical health, regression analyses were conducted to explore the relationships between the variables. Again, educational attainment did not significantly predict social capital, the predicted mediator. Further, educational attainment failed to account for a significant amount of variance in physical functioning. It did account for a significant amount of variance in mental health functioning. Neither educational attainment nor social capital as measured by the RCRIS or collective efficacy accounted for a significant amount of variance in either mental health or physical health.

Chapter Six

Discussion

Overview

Economic and social factors have been found to contribute to the depletion of resources, such as insurance and available providers, and create challenges for residents in urban communities. Adaptive social connections among neighbors and community institutions, or social capital, have been identified as important resources that buffer residents from challenges. Identifying links between community social ties and health and mental health outcomes may be useful in improving those outcomes. The current study examined the relationship between social capital, socioeconomic status, and both health and mental health among African American women. The researcher theorized that social capital may be salient to this population due to the importance of relationships and social connections in the African American culture and in the lives of women, considering the importance of relationships among women outlined by Africentric psychology theorists.

The goal of the present study was to determine whether social capital serves as a mediator or moderator for the relationship between income and health and mental health. The relationship between income and both physical and mental health has been well-established in the literature (Kawachi, et al, 1997). Individuals high in income are more likely to have positive health and mental health outcomes than those with low income. Health disparities by income have been attributed to access to resources and insurance,

greater health risks and biases in health care processes. SES and social capital, as measured by similarity of beliefs, reciprocity, and trust between residents, and community agencies, have also been found to be positively correlated (James et. al, 2001). The research proposed that social capital and collective efficacy, a factor associated with social capital, would moderate the relationship between income and health and mental health. Mediator and moderator models were tested.

Interpretation of Results

SES (as measured by educational attainment) was found to be significantly associated with physical and mental health. This is consistent with research findings (stated above) that SES impacts health and mental health functioning due to differences in of insurance, providers, and health care options between low- and high-income communities (U. S. Department of Health and Human Services, 2001). Crime rates and neighborhood disorganization may also contribute to poorer physical and mental health outcomes (Cutrona, Russell, Hessling, Brown, & Murray, 2000). Functioning and health functioning were significantly correlated as well. This is also consistent with previous research, but may be a result of measuring them both using the same instrument as well.

In the analysis of the final statistical models, individual measures of social capital were not found to be significantly associated with SES, although they approached significance. This contrasts with many, though not all, previous studies that have found that social capital has a high, positive association with SES. Other variables such as resiliency and faith, may or may not moderate the impact on social capital and SES or the relationship may not be as strong as suggested by many previous studies. Low levels of

similarity of beliefs, trust, and reciprocity with community resources have been found to be linked with low income, though low-income communities may work to build social capital (James et. al, 2001). There was no significant association found between collective efficacy and SES in this study, however. Again, this may be due to a rather moderate level of collective efficacy in a low-income community. Neighbors may feel that they are able to accomplish things as a community despite low-income.

Finally, there was no association found between either social capital or collective efficacy and physical and mental health outcomes. While links have been established between indicators of social capital and health in numerous studies, the current study failed to support this relationship. Further, while the relationship between social capital and mental health has been supported in the literature, the current research fails to do so. This may be due to measurement and data collection issues discussed below.

Tests of Hypotheses

Test of Moderator Effects of Social Capital. The present research failed to establish a model for moderation with respect to social capital. Neither educational attainment nor the interaction between educational attainment and social capital were found to account for a significant amount of variance in mental health nor health.

Test of Mediator Effects of Social Capital. Mediation was impossible due to the lack of association between measures of social capital and SES and between predictors and outcome variables. Social capital was not found to be related to SES nor to physical or mental health. Social capital can not, therefore, mediate the relationship between them.

Educational attainment (serving as a proxy for SES) was not found to account for a significant amount of variance in social capital nor in physical health in the final statistical models. It was found to account for a significant amount of variance in the final model of mental health, however, and approached significance at the bivariate level. Educational attainment may not have served as an accurate proxy for SES in this sample. Many residents are likely to work several jobs or hold prominent positions in the community (such as pastor or community advocate) and make a higher income or access to other resources than their educational level would reflect. Therefore, educational attainment would not reflect socio-economic status. Use of another or more approximate measure of income, such as yearly income, or household income may have yielded different results.

The RCRIS. The individual variables of the RCRIS were highly associated with one another, suggesting that similarities of beliefs, reciprocity, and trust, as measured by the RCRIS are indicators of the same construct, social capital. This is consistent with Coleman's findings and his definition of social capital. Further, Support of resources and Similarity of beliefs was found to be associated physical health, though the other individual variables of the RCRIS that were used, Satisfaction and Dependability, were not. An individual's sense of having a supportive connection with a resource may be related to physical health outcomes. An individual's sense having similar beliefs and values with an institution or resource is negatively associated with physical health outcomes. The reasons for this finding are unclear and the findings may be due to measurement error in the RCRIS.

Types of Resources. During the open-ended portion of the RCRIS, respondents named 1808 resources across 17 categories. A small portion of these could be identified as health or mental health agencies or providers. A smaller portion were identified with religious institution or faith. The responses, overall, were rich and varied quite a bit indicating a rich network of connections in the East End area. This information is not related to the specific focus of the study but is important for future research in exploring the number and types of resources available to the East End. The number and types of resources may buffer the negative impacts of low SES (such as crime and neighborhood disorganization) on health and mental health. This may be important to examine in the future.

Interpretation and Implications. The lack of significant findings in the preliminary relationships between levels of social capital and predictor and outcome variables made mediation impossible. The researcher also failed to establish social capital as a moderator of the relationship between SES and health and mental health outcomes. This may be due to the homogenous nature of the participants. In the present study there was little variation in collective efficacy and in educational attainment. The homogeneity of the population on the predictor, SES, is likely to have impacted results. In other words, the lack of heterogeneity in the sample in terms of socioeconomic status made it impossible to look at statistically significant differences at different levels of SES. This may be due to sampling error. Though residents of several neighborhoods were recruited, all neighborhoods were in a lower SES area of the city. There may have also been fewer individuals from the higher SES participating since the monetary incentive may have been more meaningful to those in the lower SES areas. Broader sampling across many different areas of Richmond may have yielded more meaningful results as a greater range in SES may have been sampled. In addition, aggregation of responses within each neighborhood would allow for comparisons between neighborhoods of varying SES averages may have been possible. Differing levels of collective efficacy and SES might result from analyzing differences among neighborhoods that differ in SES. In other words, sampling a larger number of neighborhoods in Richmond, VA may have yielded larger differences between individuals and between neighborhood groups in measures of both SES and measures of collective efficacy and social capital. Use of one area of Richmond may have limited the

possibility of measuring diverse levels of SES, collective efficacy, and social capital.

Further, using subjects who were seeking services or identified by community data collectors may have skewed results. A more random sample would possibly yield a more diverse sample.

The use of the RCRIS, and the current scoring strategies, as a measure or index of social capital may be premature since it is a relatively new instrument. It may not actually measure social capital or be a good indicator of the types of social capital under investigation in the study: reciprocity, mutuality of beliefs and support. The subindicators of the RCRIS were highly correlated to each other suggesting that they are likely to measure the same construct. Future researchers may use them independently or in conjunction with each other to measure social capital or aspects of social capital. More research on the measure is needed across various populations (in terms of SES, ethnicity, and gender) in order to generalize these results to the broader population. In addition, the measure may not distinguish between perceptions of social capital and objective amount of social capital. The RCRIS measures the latter. It may be that perceptions are more relevant to health and mental health outcomes.

The researcher did not find a significant relationship between social capital and collective efficacy. The participants reported a moderate level of social capital and a rather low amount of collective efficacy.

Future Research

Future research in this area may utilize larger, more heterogeneous samples. Greater variability in SES and in collective efficacy may yield more fruitful results.

Further, by using the RCRIS, individual responses may be aggregated, yielding community level indices of social capital. Various communities may be compared to one another, rather than comparing individual levels of social capital. This may yield more heterogeneity in the sample, since individuals living in the same area may experience similar levels of social capital. Measurement at the community level may yield more significant results. That is, aggregation of results within one community may be compared with aggregated individual results from other communities. Comparison between communities that vary in levels of SES and social capital may yield more useful results. Use of a more approximate indicator of income may yield more significant results as well.

In addition, exploration of the types of measurement administration, individual versus group administration of the RCRIS, may yield interesting results. Groups were noted to share information and participants in groups may have yielded richer responses regarding social capital and collective efficacy. The type of administration was not recorded in this study and was not analyzed. This type of analysis may be interesting in the future. Traditionally, psychological assessments of health and mental health indicators as well as social capital are administered individually to rule out the effect of other's on an individual participant's responses. This may be of concern in assessing social capital at the individual level. More analysis of different administration styles using the RCRIS may yield interesting results.

There is a paucity of research exploring the relationship between SES, social capital, income and health and mental health outcomes among African American females.

There is also need for comprehensive health and mental health models for African American women. Future research in establishing social capital as an important factor in health and mental health outcomes among African American women may serve in the establishment of a useful model. Once these relationships are clarified, additional research targeting specific health and mental health diagnoses such as heart disease, depression, and other disorders that have been proven to be related to social capital, may be incorporated in a model that includes considerations of SES.

References

- Antoni, M., Ironson, G., Robbins, M., Samuels, D., Szapocznik, D., & Tejada, M. (2003). The protective role of the family and social support network in a sample of HIV-positive African American women: Results of a pilot study. *The Journal of Black Psychology, 29*, 17-37.
- Abdullah, A. S. (1998). Mammy-ism: A diagnosis of psychological misorientation for women of African descent. *Journal of Black Psychology, Vol. 24 (2)*, 196-210.
- Abrams, L. S. & Stormer, C. C. (2002). Sociocultural variations in the body image perceptions of urban adolescent females. *Journal of Youth and Adolescence, 31*, 443-451.
- Allison, K. (2001). *Community social capital: Using networks and technology to build community social capital*.
- Allison, K. (2003). *Community social capital: Using networks and technology to build community social capacity. Final progress report*. Virginia Commonwealth University.
- Aneshensel, C. & Sucoff, C. (1998). The neighborhood context in adolescent mental health. *Journal of Health and Social Behavior, vol. 37 (4)*, pp 293-310.
- Baron, R. M. & Kenny, D. A (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Barrera, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology, Vol. 14*, 413-445.
- Baum, F. & Ziersch, A. (2003). Social capital. *Journal of Epidemiology & Community Health, 57*, 320-324.
- Bech, , Gudex, C., Staehr-Johansen, K. (1996). The WHO (ten) well-being index: Validation in diabetes. *Psychotherapy and Psychosomatics, 65*, 183-190.
- Belle, D. & Doucet, J. (2003). Poverty, inequality, and discrimination as sources of depression among U. S. women. *Psychology of Women Quarterly, 27*, 101-113.

- Body-Gendrot, S. Local governance, community organization, and crime. In Brody-Gendrot, S. & Gittell. (Eds.). *Social Capital and Social Citizenship* (25-51). New York: Lexington Books.
- Boykin, A. W., Jagers, R. J., Ellison, C. M., & Albury, A. (1997). Communalism: Conceptualization and measurement of an Afrocultural social orientation. *Journal of Black Studies*, 27, 409-419.
- Browning, C. R. & Cagney, K. A. (2002). Neighborhood structural disadvantage, collective efficacy, and self-rated physical health in an urban setting. *The Journal of Health and Social Behavior*, 43, 383-400.
- Campbell, C. (2000). Social capital and health: Contextualizing health promotion within local community networks. In Baron, S., Field, J. & Schuller, T. *Social capital: Critical perspectives*, (182-196). New York: Oxford University Press, Inc.
- Cattell, (2001). Poor people, poor places, and poor health: the mediation role of social networks and social capital. *Social Science & Medicine*. 1501.
- Clark, R., Anderson, N., Clark, , & Williams, D. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist*, 54, 805-816.
- Collins, K. W. & Lightsey, O. R. (2001). Racial identity, generalized self-efficacy, and self-esteem: A pilot study of a mediation model for african american women. *The Journal of Black Psychology*, 27, 272-287.
- Collins, P. H. (1991). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York: Routledge, Chapman and Hall, Inc.
- Cutrona, C., Russell, D., Hessling, R., Brown, P. , & Murray, V. (2000). Direct and moderating effects of community context on the psychological well-being of African American women. *Journal of Personality and Social Psychology*, vol 79, 1088-1101.
- Davis, James A., and Tom W. Smith. 1994. *The General Social Surveys: Cumulative Codebook, 1972-1994*. National Opinion Research Center.
- Dominquez, S. & Watkins, C. (2003). Creating networks for survival and mobility: Social capital among African-American and Latin-American low-income mothers. *Social Problems*, 50, 111-135.

- Flora, J. (1998). Social capital and communities of place. *Rural Sociology*, 63. 481-483.
- Florida Prevention Research Center at the University of South Florida. (1999). *1998-1999 Progress report*. Florida: Author.
- Gibbs, T. & Fuery, D. (1994). Mental health and well-being of black women: Toward strategies of empowerment. *American Journal of Community Psychology*, 22, 559-593.
- Greene, B. (1994a). African american women. In Comas-Dias, L. & Greene, B. (Eds.). *Women of Color: Integrating Ethnic and Gender Identities in Psychotherapy*. (10-29). NY: The Guilford Press.
- Greene, B. (1994b). Diversity and Difference: The issue of race in feminist therapy. In M. Mirkin (Ed.), *Women in context: Towards a feminist reconstruction of psychotherapy*. (315-333). NY: Guilford Press.
- Grundy, E. & Sloggett, A. (2003). Health inequalities in the older population: The role of personal resources and socio-economic circumstances. *Social Science and Medicine*, vol. 56., 935-948.
- Harris, T. L. & Molock, S. D. (2000). Cultural orientation, family cohesion, and family support in suicide ideation and depression among African American college students. *Suicide and Life-Threatening Behavior*, 30, 341.
- Hawe, P. & Shiell, A. (2000). Social capital and health promotion: A review. *Social Science & Medicine*, 51, 871-885.
- Helgeson, V. (2005). *Psychology of Gender*. 2nd Edition. New Jersey: Pearson Education, Inc.
- Hendreyx, M. Ahern, M. Lovirch, N. & McCurdy, A. (2002). Access to health care and social capital. *Health Services Research*, 37, 87-103.
- Holtgrave, D., & Crosby, R. (2003). Social capital, poverty, and income inequality as predictors of gonorrhoea, shyphilis, chlymydia and AIDS case rates in the United States. *Sexually Transmitted Infections*, 79. 62-65.
- Hooks, B. (1981). *Ain't I a woman: Black women and feminism*. Boston, MA: South End Press.
- Jagers, R. J. (1996). Culture and problem behaviors among inner-city African American youth; Further explorations. *Journal of Adolescence*, 19, 370-371.

- James, S., Schulz, A., & Van Olphen, J. (2001). Social capital, poverty, and community health: An exploration of linkages. In Saegert, S., Thompson, J., & Warren, M. (Eds.). *Social Capital and Poor Communities*. (pp. 165-188). New York: Russel Sage Foundation.
- Jones, J. M. (2002). Toward a cultural psychology of African Americans.. In W. J. Lonner, D. L. Dinnel, S. A. Hayes, & D. N. Sattler (Eds.), *Online Readings in Psychology and Culture* (Unit 3, Chapter 1). Retrieved October 18, 2003 from <http://www.wvu.edu/~culture>.
- Kawachi, I., Kennedy, B., Lochner, K., & Prothrow-Stith, D. (1997). Social capital, income inequality, and mortality. *American Journal of Public Health*, *87*, 1491-1498.
- King County, (2004). Basic needs and social determinants of well-being: Social support. Retrieved April, 2004 from http://www.communitiescount.org/B_social_support.htm.
- Landcare Research. (2001). *Social Capital: Civic Community, Organization, and Education*. Retrieved May 30, 2003 from http://www.landcareresearch.co.nz/research/social/social_capital.as.
- Lochner, K., Kawachi, I., Brennan, & Buka, S. (2003). Social capital and neighborhood mortality rates in Chicago. *Social Science & Medicine*, *56*, 1797-1806.
- McKinnon, J. (2003). The black population in the united states: March 2002. *U. S. Census Bureau, Current Population Reports, Series P20-541*. Washington, D. C.
- Minino, A., Arias, E., Kochanek, K., Murphy, S., & Smith, B. (2002). Deaths: Final data for 2000. *National Vital Statistics Report*, *50*.
- Morrow, (1999). Conceptualizing social capital in relation to the well-being of children and young people: A critical review. *The Sociological Review*, *47*, 744.
- Nobles, W. (1991). African philosophy: Foundations for black psychology. In Jones, R. L. (ed.). *Black Psychology* (3rd ed.) (pp. 47-64). Berkeley, CA: Cobb & Henry.
- Ntiri, D. W. (2001). Reassessing africana womanism: Continuity and change. *The Western Journal of Black Studies*, *25*, 163-167.
- O'Brien, Hassinger & Desrshem, (1994). Community attachment and depression among residents in two rural Midwestern communities. *Rural Sociology*, *v59*, p255.

- Paschall, M. & Hubbard, M. (1998). Effects of neighborhood and family stressors on African American male adolescents' self-worth and propensity for violent behavior. *Journal of Consulting and Clinical Psychology*, *v66*, p825.
- Pethe, S. (2002). Collective efficacy: Development of a measure. *Decision*, *29*, 25-26.
- Putnam, R. (n.d.). *Social Capital: What Is It?* Retrieved October 15, 2003 from www.bowlingalone.com.
- Putnam, R. (2000). *Bowling Alone: The Collapse and Revival of the American Community*. New York: Simon and Schuster.
- Rankin, B. H. & Quane, J. M. (2002). Social contexts and urban adolescent outcomes: The interrelated effects of neighborhoods, families, and peers on African-American youth. *Social Problems*, *49*, 79-101.
- Reskin, B. & COVERMAN, S. (1985). Sex and Race in the Determinants of Psychophysical Distress: A Reappraisal of the Sex-Role Hypothesis. *Social Forces*, *63(4)*. p. 1038-59.
- Sampson, R., Raudenbush, S, & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, *277*, 918-924.
- Schuller, T. Baron, S, & Field, J. (2000). Social capital: A review and critique. In Baron, Field, & Schuller (Eds.). *Social Capital: Critical Perspectives*. (pp. 1-38). NY: Oxford Press.
- Servon, L. (2003). Social capital, identity politics, and social change. In Brody-Gendrot, S. & Gittell. (Eds.). *Social capital and social citizenship* (pp. 13-21). New York: Lexington Books.
- Sherbourne C. D., and Stewart A. L. (1991). The MOS social support survey. *Social Science Medicine*, *32*, 705-714.
- Skrabski, A, Kopp, M., & Kawachi, I. (2003). Social capital in a changing society: Cross-sectional associations with middle-aged female and male mortality rates. *Journal of Epidemiology & Community*, *57*, 114-120.
- Smith, M. K. (2001) 'Social capital'. *The Encyclopedia of Informal Education*. Retrieved May 30, 2003 from http://www.infed.org/biblio/social_capital.htm.

- Surrey, J. L. (1991). The self - in - relation theory. In Jordan, J. , Kaplan, A. G., Miller, J. B., Stiver, I. P. and Surrey, J. L. (Eds.). *Women's growth in connection: Writings from the stone center* (pp. 51-66). NY: The Guilford Press.
- Taylor R., Chatters L., Hardison C., Riley A. (2001). Informal social support networks and subjective well-being. *Journal of Black Psychology*, 27, 439-463.
- U. S. Census Bureau (2002). Retrieved June 23, 2003 from <http://factfinder.gov>.
- U. S. Department of Health and Human Services. (2002). *Women's health USA 2002*.
- U. S. Department of Health and Human Services, 2001, U.S. Public Health (2001). *Mental health: Culture, race, and ethnicity -- a supplement to: A report of the Surgeon General*. MD: Department of Health and Human Services, Substance Abuse and a Mental Health Services Administration, Center for Mental Health Services.
- Veenstra, G. (2002). Social capital and health (plus wealth, income inequality and regional governance). *Social Science & Medicine*, 54, 849-869.
- Ware, J. E. & Sherbourne, C. (1992). The MOS 36-Item short-form health survey (SF-36): Conceptual framework and item selection. *Medicare*, 6, 473-483.
- Ware, J.E. & Sherbourne, C. (2000). *The Short-Form Health Survey (SF-8)*.
- Warren, R. Thompson, J., & Saegert, S. (2001). The role of social capital in combating poverty. In Saegert, S., Thompson, J., & Warren, M. (Eds.). *Social capital and poor communities*. (1-28). New York: Russel Sage Foundation.
- World Bank, (1999) What is social capital?, *PovertyNet*. Retrieved May 30, 2003 from <http://www.worldbank.org/poverty/scapital/whatsc.htm>
- Yancy, G. (2000). Feminism and the subtext of whiteness: Black women's experiences as a site of identity formation and contestation of whiteness. *The Western Journal of Black Studies*, 24, 156.

Appendix A

Measures

Richmond Community Resource Interview Schedule

In the next few minutes I would like to get an idea of the organizations, agencies or people that are useful to you in a number of different ways. I will be reading descriptions of ways that people, organizations, businesses or agencies are useful to us. After I read each description, I will be asking you to give me the name of the agencies, organizations, businesses or persons who fit the description. These might be social service agencies, ministers, churches, community groups, businesses, family members, friends, neighbors, or other people, groups or organizations you might know.

In the question, I'll ask who you go to for information or resources. When I say resources, I mean that broadly-it could be helping you get access to a program or services, it could be money or something that you need.

I only want you to give me the names of the organizations, agencies businesses or people that you have actually used or contacted since you have lived in this neighborhood.

When you have any questions, please ask me and I'll try and make it clearer.

A. When you or someone you know needed information or resources for **health care**, or when your community has needed information or resources for health care, who have you gone to for help?"

PROBE: Is there anyone else you can think of?

B. When you or someone you know needed information or resources for handling **crime or safety** concerns, or when your community has needed information or resources for handling crime or safety concerns, who have you gone to for help?"

PROBE: Is there anyone else you can think of?

C. When you or someone you know needed information or resources for **exercise, sports or other types of recreation**, or when your community has needed information or resources for exercise, sports or other types of recreation, who have you gone to for help?"

PROBE: Anyone else?

D. When you or someone you know needed information or resources to address a **problem in the neighborhood or to make something better for your community**, or when your community has needed information or resources to address a problem in the neighborhood or to make something better for the community, who have you gone to for help?"

PROBE: Anyone else?

E. When you or someone you know needed information or resources for **child care** or when your community has needed information or resources for child care who have you gone to for help?"

PROBE: Anyone else?

F. When you or someone you know needed information or resources on **community activities or who knows what's going on in the community**, or when your community has needed information or resources for community activities or who knows what's going on in the community, who have you gone to for help?"

PROBE: Anyone else?

G. When you or someone you know needed information or resources for **employment or job training** or when your community has needed information or resources for employment or job training, who have you gone to for help?"

PROBE: Anyone else?

H1. When you or someone you know needed information or resources for **a child or teenager's education** or when your community has needed information or resources for a child or teenager's education, who have you gone to for help?"

PROBE: Anyone else?

H2. When you or someone you know needed information or resources for **adult education** or when your community has needed information or resources for adult education, who have you gone to for help?"

PROBE: Anyone else?

I. When you or someone you know needed information or resources for **religious services or spiritual growth**, or when your community has needed information or resources for religious services or spiritual growth, who have you gone to for help?"

PROBE: Anyone else?

J. When you or someone you know needed information or resources for **helping take care of someone elderly**, or when your community has needed information or resources for helping take care of someone elderly, who have you gone to for help?"

PROBE: Anyone else?

K. When you or someone you know needed information or resources for **housing** or when your community has needed information or resources for housing, who have you gone to for help?"

PROBE: Anyone else?

L. When you or someone you know needed information or resources for **food, clothing, utilities, or some other type of financial support**, or when your community has needed information or resources for accessing food, clothing, utilities, or some other type of financial support, who have you gone to for help?"

PROBE: Anyone else?

M. When you or someone you know needed information or resources for **handling bad nerves, stress or some other emotional issues (e.g., mental health care)** or when your community has needed information or resources for handling bad nerves, stress or some other emotional issues (e.g., mental health care), who have you gone to for help?"

PROBE: Anyone else?

N. When you or someone you know needed information or resources for **problems with drugs or alcohol** or when your community has needed information or resources for problems with drugs or alcohol, who have you gone to for help?"

PROBE: Anyone else?

O. When you or someone you know needed information or resources for **legal issues** or when your community has needed information or resources for legal issues, who have you gone to for help?"

PROBE: Anyone else?

P. When you or someone you know needed information or resources for **transportation** or when your community has needed information or resources for transportation, who have you gone to for help?"

PROBE: Anyone else?

Q. **CHARACTERISTICS of Network Resources**

Now I would like to get some information about the organizations, agencies, businesses and people you have just listed. For each, could you tell me:

1. How often have you used this (resource, agency, person, business, organization)?

2. How satisfied were you in getting help from this (resource, agency, person, business, organization)?

3. What type of (resource, agency, person, organization) is this? (e.g., is it a family member, neighbor, business, church, civic association, government representative, government agency, non-profit human service organization, etc.)?
4. How much do you think you or someone else could count on this (resource, agency, person, business, organization) if they were needed?
5. When this (resource, agency, person, business, organization) needed something, how much could they count on you for support?
6. How much do you think this (resource, agency, person, business, organization) has values and beliefs that are similar to the values and beliefs that are most important to you?
7. What is the address of this (resource, agency, person, business, organization)? Where is it located?

R. Demographics

Now I'd like to ask a few questions about you:

1. How long have you lived in this neighborhood?
2. How old are you?
3. Gender?
4. Ethnicity?
5. How many adults over 65 live in your household?
6. How many adults between 25 and 64 live in your household?
7. How many people between age 18 and 24 live in your household?
8. How many youth between age 12 and 17 live in your household?
9. How many children between ages 5 and 11 live in your household?
10. How many children 4 or younger live in your household?

11. How far did you go in school?

Collective Efficacy Survey (R. Sampson, S. Raudenbush, F. Earls)

Social Control/ Willingness to intervene

“For each of the following, please tell me if it is very likely, likely, unlikely, or very unlikely that people in your neighborhood would act in the following manner.”

“If a group of neighborhood children were skipping school and hanging out on a street corner, how likely is it that your neighbors would do something about it? Would you say it is very likely, likely, unlikely, or very unlikely?”

“If some children were spray-painting graffiti on a local building, how likely is it that your neighbors would do something about it? Would you say it is very likely, likely, unlikely, or very unlikely?”

“If there was a fight in front of your house and someone was being beaten or threatened, how likely is it that your neighbors would break it up? Would you say it is very likely, likely, unlikely, or very unlikely?”

“If a child was showing disrespect to an adult, how likely is it that people in your neighborhood would scold that child? Would you say it is very likely, likely, unlikely, or very unlikely?”

Suppose that because of budget cuts the fire station closest to your home was going to be closed down by the city. How likely is it that neighborhood residents would organize to try to do something to keep the fire station open? Would you say it is very likely, likely, unlikely, or very unlikely?”

Social Cohesion/ trust

For each of these statements, please tell me whether you strongly agree, agree, disagree, or strongly disagree.

“People around here are willing to help their neighbors. Would you say you strongly agree, agree, disagree, or strongly disagree?”

“This is a close-knit neighborhood. Would you say you strongly agree, agree, disagree, or strongly disagree?”

“People in this neighborhood can be trusted. Would you say you strongly agree, agree, disagree, or strongly disagree?”

“People in this neighborhood generally don’t get along with each other. Would you say you strongly agree, agree, disagree, or strongly disagree?”

8. During the past 4 weeks, how much did personal or emotional problems keep you from doing your usual work, school or other daily activities?

Excellent

☐

Very good

☐

Good

☐

Fair

☐

Poor

☐

Very poor

☐

Vita

Cheryl Lynn Bennett

PERSONAL INFORMATION

Birthplace: Santa Barbara, CA

Birth Date: September 29, 1967

Citizenship: United States of America

ACADEMIC TRAINING

Virginia Commonwealth University, Richmond, VA. Doctoral Candidate, Clinical Psychology Training Program. Dr. Kevin Allison, dissertation advisor. Fall 2001 - Present. August 2005.

East Carolina University, Greenville, NC. M. A. degree, Clinical Psychology. Dr. Larry Hines, Thesis Advisor. 1990-1993.

University of North Carolina at Chapel Hill, Chapel Hill, NC. B. S. degree, Psychology. 1985-1989.

EXPERIENCE

Internship

Clinical Psychology Intern, Medical University of South Carolina. Rotations include Psycho-oncology, Older Adult Primary Care, Counseling and Psychological Services Center, and Weight Management Center. Duties include individual psychotherapy, psychological assessment, and patient education. Writing a research paper, research presentation, and case presentation are also mandatory components of the internship. August, 2004- July, 2005.

Graduate Training, Virginia Commonwealth University

Clinical Rater, Mood Disorders Institute, Virginia Commonwealth University, Responsibilities include administering structured interviews such as the Hamilton Rating Scale for Depression, the Montgomery-Asberg Depression Rating Scale, the Hamilton Rating Scale of Anxiety, and the Mini-International Neuropsychiatric Inventory for various research studies. Other responsibilities include conducting telephone screening interviews, completing study documentation, and assisting with other projects as needed. April, 2004- July, 2004.

Practicum, Co-Director of the Office of Student Development and Counselor, Virginia Union University. Administrative duties include development of Peer Counselor Program, supervision and training of ten Peer Counselors, enhancement of faculty and staff referral processes, development of crisis intervention procedures, facilitation of workshops for students and staff, enhancement of existing intake procedure, and working with students seeking to withdraw from the university. Counseling duties include individual counseling, facilitation of discussion groups, and psychological assessment. Under the supervision of Dr. Micah McCreary. August, 2003 - Present.

Practicum, Therapist, Virginia Commonwealth University. Conducted individual therapy and crisis intervention. Administered and interpreted intelligence and personality assessments. Under the supervision of Dr. James P. McCullough. January, 2002 - May, 2003.

Graduate Research Assistant, Virginia Commonwealth University. Developed and facilitated training for 15 community data collectors. Collected and analyzed data. Wrote portions of Institutional Review Board. Served as a liaison between data collectors and VCU professors under the supervision of Dr. Kevin Allison. May, 2002 - Present.

Instructor, Virginia Commonwealth University, Richmond, VA. Taught "Personal Adjustment" class to undergraduates, June, 2002 - July, 2002. Provided lectures aimed at explaining material and information and providing a foundation of knowledge about the science of Psychology. Followed the lectures with discussion and in-class activities aimed at giving the student's experience in applying the knowledge to everyday life.

Professional Work

Counselor, Hope College, Holland, MI. Provided individual counseling to college students. Consultation with Counseling Center staff. Coordinated services with the Student Development Division and Health Services. Co-taught a First-Year Seminar course entitled "Social Identity Development" (Fall, 2000). Served as advisor to Black

Coalition. Developed and facilitated support group for African American students (2000-2001). Developed and facilitated workshops. Under the supervision of Dr. Kristen Gray. February, 1999 - May, 2001.

Program Manager, Learning, Enhancement, Achievement Programs (LEAP), Holland, MI. Developed academic programs for 15-20 African-American middle-school children. Trained and supervised volunteers. Assisted Executive Director with organization and structure of program. May, 2000-August, 2001.

Staff Psychologist, Cumberland Hospital, Fayetteville, NC. Conducted psychological assessment (intelligence and personality). Consulted with treatment teams. Conducted individual therapy. Provided service to outpatients at the Behavioral Medicine Center of Cumberland Hospital. Supervised inpatient testing (as of 10/96). Under the supervision of Dr. George Krolick and Dr. Robert Ritzema. October, 1994 - December, 1997.

RESEARCH PROJECTS

Cognitive Processes in Coping and Psychological Adjustment in Breast Cancer Survivors. Write a theoretical review. Under the supervision of Dr. Cindy Carter. August, 2004-May, 2005.

Benefit-Finding in Newly –Diagnosed Breast Cancer Patients. Coordinate and carry out recruitment of patients, administration of surveys, data entry. Under the supervision of Dr. Cindy Carter. August, 2004- January, 2005.

Community Social Capital. Developed and facilitated training for community data collectors. Developed interview scripts and protocols and developed and conducted exit interviews for the data collectors. Conducted interviews/data collection. Wrote portions of the Institutional Review Board protocol and consent form. Analyzed quantitative data (Spring and Summer 2003). Under the supervision of Dr. Kevin Allison. May, 2002 - Present.

Evaluation of East End Partnership for Families. Wrote portions of the Institutional Review Board protocol and consent form. Conducted semi-structured interviews in December, 2002 and the Spring of 2003. Coded semi-structured interview data and quantitative data analysis (Spring of 2003). Under the supervision of Dr. Kevin Allison, May, 2002 – January, 2005.

A Qualitative Needs Assessment for Virginians with Spinal Chord Injury: A Focus on Women and Minorities. Developed facilitator's guide in collaboration with other facilitators. Facilitated focus groups. Reviewed transcripts for accuracy of statements and qualitative meaning. Identify themes of focus groups. Under the supervision of Dr. Njeri Jackson. May, 2003 – January, 2005.

Cultural Enhancement Program/ Cultural Experiences Program. Facilitated cultural curriculum for African-American adolescent females. Aided in training facilitators. Under the supervision of Dr. Faye Belgrave. August, 2001 - May, 2003.

HUMAN SUBJECT RESEARCH TRAINING

Virginia Commonwealth University Level 1 Human Subject Research Training, Fall 2002.

National Institutes of Health Human Participants Protection Education for Research Teams, Fall 2002.

THESIS AND DISSERTATION

The Relationship between Community Social Capital and the Health and Well-Being of African American Women. Dr. Kevin Allison, Dissertation Advisor. Successfully Proposed November, 2003. August, 2005.

Underlying Object-Relations Impairment in Alcoholism. Dr. Larry Hines, Thesis Advisor. Successfully Defended July, 1993.