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STRESS AND COPING: FACTORS THAT INFLUENCE THE HEALTH STATUS OF
BLACK MEN

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ABSTRACT

Studies have shown that there is a direct relationship between socioeconomic status (SES) and health status, but the health status of Black men does not improve at the same rate as their White counterparts with increases in SES. There is minimal literature on factors that influence the health status of Black men from improving with SES. The purpose of this study is to explore both stress and coping as possible factors that influence this population's health status. The theories of fundamental social causes, stress and coping, and self-efficacy were used to inform the relationship between SES, stress, coping, and health status for Black males. The research questions include: 1) Is higher SES associated with a better health status for Black males?, 2) What is the relationship between SES and perceived stress for Black males?, 3) What is the relationship between SES and coping for Black males?, and 4) Do perceived stress and coping mediate the relationship between SES and health status for Black males?. The study included a convenience sample of 251 Black males between the ages of 25 and 45, recruited from two locations, a health clinic and a graduate level Black fraternity in a large metropolitan city. The data from four instruments were analyzed using SPSSv18 to answer the study questions using bivariate correlations and multivariate regression analyses. Data analysis interpretation indicated that there was a positive relationship between both SES and health status and SES and coping. There also was a negative relationship between SES and perceived stress. Several regression analyses were conducted to determine that coping was a mediator between SES and mental health status of Black men. Stress was only a mediator between SES and mental health status of Black men when coping was also included as a mediator. Stress and coping were not identified as significant predictors of physical health status of Black men. These findings suggest salient factors that may influence the health status of Black men, and have

implications for social work practitioners and researchers working to improve the health status of this population.

Keywords: Black men, socioeconomic status, stress, coping, health status

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Chapter One

Introduction

Introduction to the Problem

Despite improvements in health conditions in the United States, there is evidence of increasing health disparities. Health disparities are significant differences between populations in disease incidence, prevalence, morbidity, mortality, or survival rates (United States Department of Health & Human Services, 2005). Health conditions for Black men in the United States are alarming, as their health status group is similar to the health of people in poor international countries (Gadson, 2006). Despite efforts to eliminate health disparities between ethnic populations, Black men continue to exhibit signs of poor health. Research efforts aimed at improving the health of Black men often focus on behavioral factors rather than social and environmental factors (Xanthos, Treadwell & Holden, 2010). To understand the circumstances behind the poor health status of Black men, compared to other ethnic groups, requires an understanding of additional factors that may influence their health status.

In the United States, Black men have the highest age-adjusted mortality rate, shortest life expectancies, and the worst overall health of the racial groups (Ravenell, Johnson, & Whitaker, 2006). Black men have higher rates of stroke, diabetes, HIV, cancer, and cardiovascular disease, the leading cause of death for Black men ages 35 to 54, when compared to White men (Centers for Disease Control, 2006). The life expectancy for Black men is shorter when compared to their White counterparts. The average life expectancy of Black men in the United States is 69 years of age, which is 7 years less than Black women, 6 years less than White men, and 11 years less than White women (Minino, Heron & Smith, 2006).

The Black male population is one of the most overlooked populations in health care and, one of the populations that experience the poorest health outcomes and the largest barriers to accessing health care (Satcher, 2003). Black men experience earlier onset of diseases such as hypertension and diabetes, and they tend to have higher rates of overall health complications (Wade, 2008). The Centers for Disease Control (2008) reported that 42% of Black men in the United States have high blood pressure, a much higher figure than the 31.2% of White men and 24.8% of Mexican American men suffering from the same condition. Similarly, the American Heart Association (2009) indicated that 44.4% of the Black men aged 20 and older who participated in the National Health and Nutrition Examination Survey had high blood pressure and were prescribed medication for the management of their condition. Only 34.1% of White men and 23.1% of Mexican American men surveyed had high blood pressure and were on medication for the condition. Black men also have high rates of HIV/AIDS and cancers such as prostate and lung cancer. The elevated rates of morbidity, disabilities, and mortality among Black men have made the need to address the health disparities in this population imperative.

In addition to their physical health problems, the mental health of Black men is also of concern. Male depression is seldom recognized or discussed within their community or among health care professionals (Bonhomme, 2007). This trend is especially important concerning Black males as the Centers for Disease Control (2006) reported suicide as the 4th leading cause of death for Black men between the ages of 25 and 34. The discrimination in education and employment for Black men is a major source of stress that adversely affects their mental health (Pieterse & Carter, 2007; Williams, 2003). Watkins and researchers (2006) found that Black men are disproportionately exposed to psychosocial stressors that are associated with the onset of depression. Such stressors include economic deprivation, unemployment, and violence.

Black men may be exposed to these stressors frequently, which can adversely affect their overall mental health.

There are broad ranges of social and environmental factors that affect the physical and mental health status of Black men. These factors have been found in studies to cause disadvantages for the mental and physical health of Black men. Although there have been improvements in health conditions in the US, the morbidity and mortality rates for Black men in the US are not decreasing. There is a vital need to better understand the health status of Black men compared to other male populations so that better-informed efforts can be implemented to improve Black men's physical and mental health status.

Background of the Problem

Race is an indicator of the differences in social factors, resources, and exposure to societal risk factors for diseases and illnesses (Williams & Jackson, 2005). Social environmental factors contribute to racial disparities in health. Some factors that contribute to the increase in health disparities among minorities are racism, SES, occupation, lack of access to healthcare, barriers to healthcare, and cultural values (Copeland, 2005). Race has been a major contributor to the differences in social factors that may cause differences in the health disparities for Black men when compared to White men.

Racial discrimination is a significant experience in the typical life of a Black male (Xanthos, Treadwell, & Holden, 2010). Racism experienced by Black men has the potential to affect their mental and physical health status. Brown and colleagues (2000) report racism as having a direct relationship to depressive symptoms and depression in Black men, concluding that racial discrimination leads to mental health problems for Black men. It is also critical to know the coping strategies of Black men and for them to

develop an ability to cope to reduce the effects of stress from living in an oppressive environment (Ayer, 2010).

Black men deal with racism, which in turn, affects their quality of life, education and access to employment. In the United States, Black youth attend the most segregated and poorest public schools with disproportionate levels of special education rates, expulsions, and suspension rates than other ethnic groups (Xanthos & et al, 2010). These conditions in the education of Black males has resulted in achievement gaps between them and other ethnic groups (Roderick, 2003), which has led to problems with Black males attaining higher education or employment.

The unemployment rate for Blacks in the United States has been double the rate of Whites for several decades (Couch & Fairlie, 2010). The U.S. Bureau of Labor Statistics (2011) reports the unemployment rate for Black men at 15.5% and the rate for White men at 7.9%. The differences in employment between Black and White men have been linked to education, but Black men with a college degree also have a difficult time finding employment (Couch & Fairlie, 2010) compared to other ethnic groups. Black men with a post-secondary education also experience high rates of unemployment. Black men with college degrees are more likely than White men with college degrees to be unemployed, have lower levels of income, and to have poor relatives for whom they must provide support (Williams, 2003). Couch and Fairlie (2010) have found that the difference in employment for Blacks and Whites is due to minorities being *the last hired and the first fired* through the business cycle. Blacks were found to be the first people laid-off during an economic crisis regardless of their educational and occupational levels. In addition, Black men experience high rates of incarceration, which reduce employment opportunities for those with a criminal background as well as Black men with no criminal history (Holzer, Raphael, & Stoll, 2006). The high incarceration rate among Black men negatively affects employment opportunities for them.

The racial differences in education and employment for Black men contribute to differences in SES. Blacks are significantly more likely than other ethnic groups to have lower SES (Gadson, 2006) and experience significant differences in education (Pieterse & Carter, 2007). There are less Black men with college degrees than White men. The US Census Bureau (2000) indicated that 17.2% of Black men have a bachelor's degree or higher compared to 36% of White men. There are also differences in income for Blacks compared to other ethnicities. Bishaw and Semega (2008) reported the median household income for Blacks to be \$34,001 compared to \$55,096 for Whites, \$40,766 for Hispanics, and \$66,935 for Asians. Blacks typically see differences in wealth compared to their White peers, even when education levels are comparable. Studies have also found that at every level of education, Black men have earned lower incomes than White men within the same occupation. The unequal status in education and income for Black men acts as a significant source of stress for them, (Pieterse & Carter, 2007; Williams, 2003) and in many cases is a cause for depressive symptoms and depression in Black men (Watkins & et al, 2006).

Concurrent with low income, Black men also tend to have more low-level occupational status and high levels of stress at work (Williams, 2003). The stressful encounters at work are some of the life stressors that may lead the men to engage in poor health behaviors such as drinking alcohol, smoking, or having a poor diet. The combination of stress, poor diet, and poor health behaviors can lead to effects on the body's stress response mechanism, adversely affecting the health of the men (Williams, 2003).

Black people of low and middle class SES tend to live in poor neighborhoods with high rates of crime (Williams & Jackson, 2005). The areas of high crime can contribute negative effects to the mental and physical health of the people in the neighborhood. A study by Altschuler and researchers (2004) found that Blacks in low-

income neighborhoods were exposed to more crime, which increased their stress level. The residents of the neighborhoods had increased stress levels arising from fears of crimes such as robbery, assault, and murder.

SES has an influence on the healthcare of a population. Black men with low SES are less likely to have health insurance or to see a primary care physician for healthcare (Bonhomme, 2007; Ravenell & et al., 2006). Racial differences in SES for Black men influence their low levels of health insurance coverage and access to medical care (Williams & Jackson, 2005). Denavas-Walt and colleagues (2008) found that only 49% of Blacks had employment-based insurance compared to 66% of Whites. A lack of resources that allows access to medical care prevents Black men from seeking health care for preventative care or even current illnesses. In addition to the lack of healthcare services, Black men with low incomes may not know the importance of seeking medical care from free or low-cost clinics since men with low SES levels have limited knowledge of health information (Williams, 2003). The men may not have places in their community or work environment that disperse health information effectively.

Racial differences in SES not only affect Black men's access to health care but also the quality of services they receive when seeking health care services. Studies have shown that Blacks typically do not seek services for mental healthcare due to cultural biases concerning treatment approaches and providers (Snowden, 2003; Copeland, 2005). Additionally, there are a limited number of Black mental health specialists to provide services to someone who prefers a Black health care provider (Holden & Xanthos, 2009). The scarce number of Black therapists results in Black men being more likely to see a therapist of a different ethnic group. The therapists' lack of cultural competency often results in a poorer quality of mental health services for Black men (Holden & Xanthos, 2009) and leads to a resistance to seek service all together.

When Black men seek physical healthcare services, they may not receive the same courses of treatment for illnesses as White men. Mayberry and researchers (2000) found that Black men did not receive the appropriate diagnosis of and treatment for cardiovascular disease and other conditions compared to the care received by White men. These racial disparities in diagnosis and treatment continue to persist when factors such as SES and health insurance coverage have been accounted for (Williams & Neighbors, 2001). Black men who seek healthcare services also do not receive the quality treatment time with the physician for diagnosis and education. Healthcare providers have been found to spend less time with men than women in general, and men are typically provided with less health information and advice (Williams, 2003). These barriers in the healthcare services for Black men may contribute to their growing disparities for diseases.

The economic resources of Black men are often examined in literature when discussing the health of Black men. Income is one of the major socioeconomic factors to influence health for all people (Poetz, Eyles, Elliott, Wilson, & Keller-Olaman, 2007), with low SES directly correlated with poor health status (Xanthos & et al, 2010). As a person's SES increases, their health is expected to improve due to an increased access to healthcare resources. SES has been found to have effects along the income spectrum, but most health disparities are associated with the group labeled as middle class (Adler & Snibbe, 2003). Research indicates that the Black middle class's risk for disease are similar to the risks of low-income groups, as evident by a lack of reduction in health risk for middle-class Black men (Williams, 2003). Existing research has shown a direct relationship between SES and the health status of people (Phelan & Link, 2005) and that stress has indirect and direct affects on health (Zellner, Loaiza, Gonzalez, Pita, Morales, & et al., 2006).

There has been research to make emphasis that stress for Black men may be positively correlated with SES (Williams, 2003). However, there is limited research on the relationship between SES, stress, coping, and the health status of Black men. There is a need to explore factors that may affect the health status of Black men, since there are increased differences in diseases among Blacks compared to Whites and a lack of improvement in the health status of Black men as income increases (Williams, 2003). Knowledge of the factors that affect the health status of Black men may extend the knowledge base and lead to the development of techniques that can help reduce such health disparities, consequently improving the health status of Black men.

Statement of the Problem

Middle-class Black men constitute a group that is understudied in research (Williams, 2003). The lack of studies on middle-class Black men has resulted in limited information on factors affecting them. Williams (2003) indicated that as income and SES increase for Black men, health status does not improve to the same degree for middle class Black men as found among middle class White men. There is minimal research in this area to determine the potential reasons that the health status of Black men does not improve with increases in income to middle-class levels (Williams, 2003).

Purpose of Study

The purpose of this study is to explore both stress and coping as possible factors that may prevent the health status of Black men from improving with differences in SES. This study will explore stress and coping as factors that intervene on the health status of Black men with differences in SES.

Research Questions

The research questions for this study are as follows:

1. Is higher SES associated with a better health status for Black men?
2. What is the relationship between SES and perceived stress for Black men?
3. What is the relationship between SES and coping for Black men?
4. Do perceived stress and coping mediate the relationship between SES and health status for Black men?

Rationale, Relevance, and Significance of the Study

Black men are found to be disproportionately affected by diseases, have negative health outcomes, and have major barriers to accessing health care (Cheatham, Barksdale, & Rodgers, 2008; Plowden & Miller, 2000; Satcher, 2003). SES has been a factor in research linked to diseases and health. Phelan and Link (2005) have determined that as the SES of an individual increases, his health status improves; however, the health status of Black men is not improving as SES increases (Williams, 2003). This study is conducted to determine if stress and coping are factors that have an influence on the socioeconomic and health status of Black men.

The research topic is important because the health status of Black men is poor and ultimately affects other racial groups and communities economically (Williams & Jackson, 2005). It is imperative to improve the health status of Black men because poor health limits the productive capacity and output of adults and has adverse effects on the economic revenues of the local and national government (Bound & et al., 2003). The improvement of the health status of Black men could lead to less revenue needed for disability and social services for Black men with poor health. Research on improving the health status of Black men is important to political, social, and medical professionals (Williams & Jackson, 2005). Improvements of the health status of Black men may result

in a decreased need for the funding of health disability services for Black men while simultaneously increasing knowledge on the subject, allowing social service and medical professionals to provide better services to help Black men improve their health status.

This study was informed by previous research conducted on the health status of Black men. Williams (2003) and Hill (2009) concluded from their research studies that more research is needed to determine factors that are preventing the health status of Black men from not improving with SES. Hill (2009) proposed stress as a factor that hinders the health status of Black men from improving as SES increases. This research study provides information on stress and coping as factors that influence the health status of Black men. The results from the study will inform further research on these and other factors that emerge from the research study.

This study provides social workers with an enhanced understanding of the relationship between SES, stress, coping, and the health status of Black men, an important population with limited research on factors affecting their health status. Most studies on coping examine SES and how coping resources vary with certain social classes and races; however, they do not explore the coping abilities or mechanisms (Coles, 2009). This study will provide information on the coping abilities of Black men. Social work researchers and practitioners can utilize the results of this study to create and test the effectiveness of culturally competent evidence-based interventions on coping for Black men that would be an asset to social work practice and research. Social workers in practice could use such coping interventions to prevent or reduce high stress levels (Littrell, 2008), thus possibly improving the health status of Black men.

In addition to the research study enhancing social work practice, the results will yield information that may lead to ideas for future social work research studies. This study was exploratory and provides knowledge on the relationship between SES, stress, coping, and the health status of Black men. The results can be used to inform the

development of an experimental design study to determine if stress and coping mechanisms may be factors contributing to Black men's health status not improving with increases in SES.

Definition of Terms

Coping. Coping refers to behavior that protects people from being psychologically harmed by a problematic social experience (Pearlin & Schooler, 1978).

Direct relationship. A direct relationship between variables exists when two variables consistently change in the same direction (Singleton & Strait, 2005).

Health status. Health status is determined by a self-reported physical and mental health status of an individual (Ware & Sherbourne, 1992).

Mediating. A mediating variable is a variable that explains the relationship between the predictor and outcome variables and is simultaneously predicted by one or more predictor variables (Singleton & Strait, 2005).

Outcome variable. An outcome variable is the variable whose values can be predicted by values of the predictor variable (Weinbach & Grinnell, 2007).

Predictor variable. Predictor variables are explanatory variables that have values or categories that may be used to predict values or categories of dependent or outcome variables (Singleton & Strait, 2005).

Socioeconomic status (SES). SES is determined by the educational attainment, occupational status, and income level of a person (Phelan & Link, 2005).

Stress. Stress is a relationship between the person and their environment that is appraised by the individual as a harm, threat of harm, or challenge to their resources or endangerment to their well-being (Lazarus & Folkman, 1984).

Chapter Two

Conceptual Framework and Literature Review

The purpose of this study was to explore stress and coping as factors that have effects on the health status of Black men. The theories of fundamental social cause, stress and coping, and self-efficacy were used to compose the conceptual framework for this study. Additionally, the empirical literature review is discussed regarding SES and health status, stress and health status, and coping strategies. The themes of the literature review allow for an examination of the variables that comprise the conceptual framework for this study.

Conceptual Framework Theories

Theory of Fundamental Social Cause. SES is measured as a combination of educational attainment, occupational status, and income level; and it has a very strong association to morbidity and mortality (Phelan & Link, 2005). It has been used to determine the likelihood a person will have the resources to prevent illness, access healthcare, and engage in positive health-related behaviors (Phelan, Link, Diez-Roux, Kawachi & Levin, 2004). The association between SES and disease can be traced as far back as the beginning of the 19th century, observed in Mulhouse, France in the early 19th century as well as in the United States in Rhode Island in 1865 and Chicago in the 1930s (Phelan & Link, 2005). As time progressed and there were new developments in sanitation conditions and technology, it was assumed the socioeconomic influences on disease would diminish. By the 1960s, the majority of factors that were identified as the linkages between SES and disease had been addressed and the association between

SES and disease was expected to weaken (Link & Phelan, 1996). Since the association between SES and disease did not weaken, an explanation for the social causation was debated. Link and Phelan (1995) proposed that social conditions are fundamental social causes of diseases and that the association between sociodemographic factors and disease are predictable and unavoidable.

The theory of fundamental social cause examines the relationship between indicators of SES, health, and mortality (Link & Phelan, 1995). The resources at a person's disposal are assessed to determine his or her ability to reduce the risk of disease. According to the theory, resources such as knowledge, money, power, prestige, and social connections are factors that strongly influence a person's ability to avoid risk, thus minimizing their chances for contracting disease (Link & Phelan, 1995). The theory of fundamental social cause can be used to link many disease outcomes through the use of risk factors associated with SES. The resources a person possesses can also be used to prevent or minimize risk factors for diseases as they change (Link & Phelan, 1995).

A condition that must occur for fundamental social causes to emerge is change over time in the diseases affecting humans. If no new diseases develop, there would be no new risks, knowledge about risks that have emerged, or treatment developments. In this case, the theory of fundamental social cause would not apply (Link & Phelan, 1995). When examined as a system, changes in diseases, risks, knowledge of risk factors, and treatments will bring new fundamental social causes to light. The people with resources such as money, knowledge, and social connections are able to avoid the risk, diseases, and the consequences of disease (Link & Phelan, 1996). The cause of the disease does not matter; the people with greater resources and access to those resources will be less affected by the disease. Examples of changes in disease and resources to avoid the risks of disease are the improvements in conditions to limit cholera, diphtheria, measles,

small pox, and tuberculosis along with the infection or mortality of HIV/AIDS. The United States and Europe improved sanitation, water systems, and living conditions to limit the spread of diseases such as tuberculosis and diphtheria. Lower socioeconomic status populations were always at a higher risk of exposure due to living in worse conditions, but as the water system, sanitation, and housing conditions improved, their chances of diseases decreased, but did not disappear. This has been explained as a result of a lack of financial resources (Phelan & Link, 2005). Later, HIV/AIDS emerged, and the people with higher levels of resources were and still are able to reduce their risk of exposure by having access to resources such as condoms and the knowledge of prevention. In the event of contraction, those with more resources have easier access to the latest treatment regimens to manage the disease more effectively than those with fewer resources.

The theory of fundamental social causes has four features according to Link and Phelan (2004). First, fundamental social causes influence multiple disease outcomes. Second, they affect the disease outcomes through multiple risk factors. Third, the relationship between fundamental social causes and mortality happens over time via the replacement of intervening mechanisms. Lastly, the indispensable feature of fundamental social causes is that it involves access to resources such as money and healthcare services that can be used to avoid risks or to minimize the consequences of disease once it occurs (Link & Phelan, 1995).

Phelan and colleagues (2004) conducted a test of fundamental social causes by identifying a situation in which the presence of resources would not positively affect mortality rates. They found that the relationship between SES and mortality was stronger when the disease was preventable as opposed to unpreventable. Phelan and colleagues (2004) also found that socioeconomic inequalities with mortality began to diminish when a person reached their early 80s. The results lead Phelan and

colleagues (2004) to conclude that socioeconomic variations in exposure to risk factors are the greatest among those who are middle-aged and in early old age. It was also concluded that the diminished relationship between education and mortality with advanced age may not be due to age effects. When there is no known method to prevent or treat life-threatening diseases, old age may be an instance when socioeconomic resources are of no use in prolonging life.

Theory of Stress and Coping. Individuals encounter stress on a daily basis, and there are different manners in which individuals counteract the stress. The theory of stress and coping is often used to explain the stress and coping process of individuals. Lazarus and Folkman's (1984) cognitive theory of stress and coping indicates that the person and his or her environment are in a dynamic, complementary, bidirectional relationship that is achieved through a series of actions. The theory has two processes: cognitive appraisal and coping. Cognitive appraisal is the manner in which a person evaluates a particular encounter with the environment and its relationship to their well-being (Folkman, Lazarus, Gruen, & DeLongis, 1986). Coping refers to the person's cognitive and behavioral actions that are a response to external demands that are evaluated as troublesome or exceeding the person's resources (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Lazarus and Folkman (1984) define stress as a relationship between the person and the environment that is appraised by the individual to be harmful, contain the threat of harm, challenge their resources, or endanger their well-being.

There are two cognitive appraisal processes in the theory of stress and coping. The first process is called primary cognitive appraisal, in which a person determines if he or she has anything at stake or in danger in the stressful encounter. The secondary cognitive appraisal occurs when a person examines if there is anything that can be done

to prevent or defeat the harm or improve the chances for his or her benefit in the stressful encounter (Folkman, Lazarus, Gruen, & DeLongis, 1986). These two processes occur using a range of personality characteristics and the values, goals, beliefs, and commitments of the individual. An individual assesses the encounter based on his characteristics and how he perceives the encounter will affect his well-being.

The definition of coping has three key features. First, it is process-oriented, indicating that it focuses on the person's thoughts and actions in a specific stressful encounter and how they change as the encounter unfolds (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Second, Lazarus and Folkman (1984) view coping as contextual, meaning it is influenced by the individual's appraisal of the actual needs in the encounter and the resources he or she has to manage the encounter. Lastly, there are no assumptions made about what determines a good or bad coping method (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986).

In addition to the features of the definition of coping in the theory of stress and coping, coping also has two functions within the theory. Coping in the theory serves as the regulation of emotions (emotion-focused coping) and managing the problem that is causing the stress (problem-focused coping). In problem-focused coping, the conditions of the relationship are changed. This affects the appraisal, which is done by the individual through the use of problem solving techniques (Lazarus, 1990). Emotion-focused coping enhances a person's feeling of control over the stressful encounter (Folkman, 1984). The individual may achieve this sense of control by distancing himself or herself or denying that the stressful encounter has happened. Lazarus and Folkman (1984) consider distancing, self-controlling, seeking social support, escape-avoidance, accepting responsibility, and positive appraisal as examples of emotion-focused coping. A study by Folkman and researchers (1986) conducted to examine the relationship between cognitive appraisal and coping processes found that confrontive coping,

accepting responsibility, planful problem solving, and positive reappraisal were the dominant forms of coping.

Research has shown that stress and coping has an impact on the health of individuals (Lazarus and Folkman, 1984). According to Lazarus and Folkman (1984), there are three ways in which coping may adversely affect health status: 1) coping influences the frequency, intensity, duration, and patterning of neurochemical responses; 2) coping can affect health negatively when it involves excessive use of injurious substances such as alcohol, drugs, tobacco, or when it involves the person engaging in activities considered high risk; and 3) certain forms of coping can impair health by deterring adaptive health/illness related behavior. A study conducted by Folkman and colleagues (1986) to determine the extent to which people are stable in their primary and secondary appraisal and coping processes in diverse stressful encounters found that the more the people felt they had at stake and the more they tried to cope, the poorer their health became.

Self-Efficacy Theory for Coping. People who encounter stress tend to cope in a manner that may be appropriate for the situation, using the abilities and skills they perceive themselves to possess. Bandura's (1977) theory of self-efficacy defines perceived self-efficacy as a person's beliefs about his or her ability to have an influence in dealing with prospective situations. Self-efficacy consists of the person's cognitive, social, and behavioral skills. The self-perceptions of efficacy are the basis for people's decisions about what challenges to attempt, how much effort to exert, and how long to work in overcoming challenges (Bandura, 1986). The stronger the person believes in his or her capabilities, the greater and more persistent they are in their efforts (Bandura, 1989). People who judge themselves ineffective in managing potential threats approach

situations carefully, and the experience of disruptive arousal decreases their sense of efficacy in being able to deal with prospective situations (Bandura 1983).

There are four sources of information-based perceptions of personal efficacy: performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal. Performance accomplishments are based on personal mastery experiences, with previous success raising an individual's future expectations (Bandura, 1977). Repeated success decreases the thoughts of failure in situations. Vicarious experience relies on social comparisons. Seeing people perform challenging activities without negative consequences allows others to feel they can improve if they are persistent in their efforts (Bandura, 1977). The individual is likely to believe that if others can successfully perform an action that he or she can as well. In verbal persuasion, people are led to believe they can cope successfully with challenges. Efficacy expectations developed from this manner tend to be weak because the reassurance is not based on the individual's accomplishments (Bandura, 1977). Emotional arousal is brought forth by challenges or taxing situations. Fear is one of the emotions that often emerge from a challenge, leading to inefficacy in coping with the challenge and eventual avoidance of the situation (Bandura, 1983). Emotional arousals such as fear and anxiety are minimized with behavioral control (Bandura, 1977). Once a person learns to feel control over challenging situations, the chances of feeling fear are diminished.

The belief in one's abilities affects how much stress an individual will experience as a result of challenging situations. Stress reactions are controlled by the perception of coping self-efficacy (Bandura, Cioffi, Taylor, & Brouillard, 1988). People who have doubts about their abilities reduce their efforts whereas people who have strong beliefs in their abilities will exert more effort to master the challenge (Bandura, 1989). The perception of a threat that exceeds a person's coping abilities allows the threat to cause more stress. Those who have an inability to cope with threats tend to view them as

frightful, which in turn causes the individual more distress and may lead to unsettling thoughts that decrease their coping abilities (Bandura & et al, 1988).

Conceptual Framework for the Study

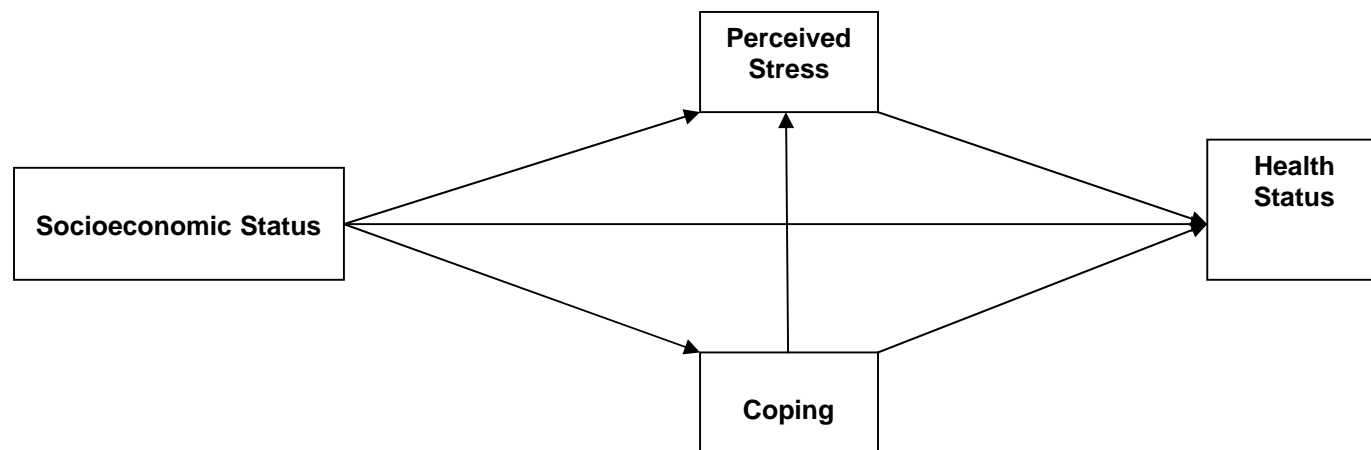
The theories of fundamental social causes, stress and coping, and self-efficacy inform the conceptual framework for this study, which attempts to explain the relationship between the SES, stress, coping, and health status of Black men. The theory of fundamental social cause is used to describe the relationship between SES and health status. There is a lack of understanding and culture-specific models of interventions for examining the relationship of stress and coping in Black men. This deficit is due to a lack of research on the effective coping methods of Black men (Outlaw, 1993). The interventions used with Black people for stress and coping emerged from a Eurocentric perception, lacking ethnic specific characteristics (Caldwell & White, 2005). Therefore, the conceptual framework attempts to delineate the relationship of stress and coping for Black men by using the theory of stress and coping to explain the relationship between stress, coping, and health status. The self-efficacy theory is used to explain how Black men develop their ability to cope.

In the conceptual framework (Figure 1), the education, occupation, and income level of Black males will compose the SES. It is hypothesized that SES will have a direct impact on the health status of Black men as indicated in the theory of fundamental social cause. SES in the model also has a direct influence on stress levels for Black men. The coping ability of Black men is portrayed as a mediating effect on their stress levels and health status, as indicated in the theory of stress and coping. The relationship between coping and stress is bidirectional, but this study focuses solely on the unidirectional relationship between stress and coping as is frequently done in research using the

theory (Coles, 2009). Stress is hypothesized to have a mediating effect on SES and health status and to have a direct impact on the health status of Black men.

The conceptual framework for this study examines and explains the relationship between SES, stress, coping and health status of Black men by integrating the theoretical expectations of the theories of fundamental social causes, stress and coping, and coping self-efficacy. The analysis and interpretation of the data will be used to determine if the concepts of the theories provide information on the relationship between the variables as it relates to the population of this study.

Figure 1: Conceptualization of the Relationship between Socioeconomic Status, Stress, Coping, and Health Status of Black Men



Empirical Literature

Socioeconomic Status and Health Status

SES is one of the strongest determinants of the variations in health status or disease (Williams, 2003; Williams, 1998). It is a reflection of the social position of an individual and is generally measured by income, education, and occupational status. Education is the most basic SES, which determines the occupational choices and income of an individual (Adler & Newman, 2002; Williams, 2003). Individuals with low educational achievement generally have less income than individuals who have obtained education higher than the high school level.

Each aspect of SES indicates the different resources of a person (Adler & Snibbe, 2003). For instance, higher levels of education are linked with higher levels of knowledge, access to social networks, income, and occupational status. Mirowsky and Ross (1998) concluded that higher educational attainment is associated with better health. People with higher education have more knowledge to make better choices in lifestyle to improve health. Higher educational attainment also leads to access to better housing, food, and health care services (Mirowsky & Ross, 1998). Lower SES is associated with poverty and higher mortality rates due to a limited access of resources (Adler & Newman, 2002). People with low SES do not have access to the resources that people with higher education and income possess, increasing their risk for disease.

People with higher income generally report that they are in good health (Marmot, 2002) and work and live in safer environments. These persons are able to afford better housing, schooling, recreational activities, and access to high quality food (Adler & Newman, 2002). They tend to live in neighborhoods where there are playgrounds and access to exercise facilities. Low SES neighborhoods tend to lack stores with more nutritious foods when compared with higher income neighborhoods because the

residents lack the economic capacity to purchase those foods (Gadson, 2006). People in lower SES communities have to travel farther to access recreational facilities and higher quality food (Robert, 1999; Altschuler, Somkin, & Adler, 2004). Residents of low SES communities may not have the transportation to access better quality food, leaving them to seek whatever is available within their neighborhood. Altschuler and colleagues (2004) found that residents in disadvantaged neighborhoods exhibited higher risks of coronary disease than residents of neighborhoods with higher resources. The increased risk for coronary disease may result from the lack of quality food and recreational facilities in the disadvantaged neighborhoods.

In addition to people with low SES living in neighborhoods with poor quality food and a general lack of recreational facilities, the neighborhoods tend to be located in areas that are hazardous to their residents' health. Low socioeconomic Black neighborhoods tend to have excessive advertisements of alcohol and cigarettes (Gadson, 2006) and have problems with littering and detrimental odors (Williams & Collins, 2001). These neighborhoods are also located near highways, industrial areas, and toxic waste sites due to the lower cost of real estate in such areas (Adler & Newman, 2002; Adler & Snibbe, 2003). The environment could potentially allow the residents to be at an increased risk for illnesses such as cancer, asthma, and other lung diseases due to the hazardous chemicals in the air from the industrial or toxic waste sites and improper discarded waste. The low socioeconomic neighborhoods are also hazardous to their inhabitants' health based on the high crime risk exposure. People living in low-income neighborhoods may have a fear of crime, which can increase their stress levels (Ravenell, Johnson, & Whitaker, 2006; Robert, 1999). In a study by Altschuler and researchers (2004), they found that Blacks in low-income neighborhoods were exposed to more crime, which increased their stress level.

The traditional beliefs about male social roles contribute to the effects employment status has on the health of men. Research has indicated that men experience social pressure to be the breadwinner and protector in the family, which causes high levels of stress to be employed (Courtenay, 2000a). The belief in these male roles also depicts the concept of men maintaining a job to exceed those expectations, which could also cause stress. In addition, unemployment also has an effect on the health status of men. Unemployment for men was found to have greater negative effects on men's health status than women due to men engaging more in alcohol consumption and smoking (Mathers & Schofield, 1998).

As well as employment status, the quality of employment also has an effect on the health status of men (Williams, 2003). People with higher income jobs are more likely to work in safe environments and have access to health benefits. The low-income jobs have a higher incidence of layoffs and job strains, which can have an affect on the health status of the employees (Adler & Newman, 2002). Landsbergis and researchers (2003) found there is a relationship between job strain and blood pressure among men that varies by SES, and blue-collar jobs have more job strain. After controlling for SES, job strain has also been found to be associated with greater narrowing of the arteries in males ages 24-39 (Littrell, 2008). Working a blue-collar job tends to increase the stress level of men. There is an indication that low income and the type of jobs held by the individuals of those incomes may contribute to their health status.

Stress and Health Status

Stress has direct and indirect affects on the health of a person (Zellner, Loaiza, Gonzalez, Pita, Morales, & et al., 2006). Research has shown that there is a link between stress and the results of the stress reactions to various health conditions (Dohrenwend, 2000). Stress reactions of the body involve physiological and emotional

arousal along with neural and hormonal adaptations that work to return the body to homeostasis (Kelly, Hertzman, & Daniels, 1997). Continuous and ongoing stress affects the physical and mental health of a person. When a person is exposed to repeated or prolonged elevation of the body's stress hormones, response systems in the body can produce a physiological state known as allostasis, which can cause changes in the body's immune system and brain when this physiological state occurs over a long period of time (Lantz, House, Mero, & Williams, 2005). These changes may lead to potential health problems for the stressed individuals.

The changes the human body experiences with stress are known as the General Adaptation Syndrome. Selye (1955) discovered the General Adaptation Syndrome while conducting studies of stress on rats, and noticed changes when the rats were exposed to unpredictable changes. The three changes noted were 1) the cortex of the adrenal glands becoming enlarged and hyperactive, 2) the thymus, spleen, lymph nodes, and other lymphatic structures were reduced in size, and 3) bleeding ulcers appeared in the stomach and upper intestines. Repeated replicas of the experiment lead to the conclusion that the changes occurred due to stress and the body's response to the stimuli (Selye, 1975).

The General Adaptation Syndrome has three stages – alarm reaction, stage of resistance, stage of exhaustion. When the human body is exposed to stress, the initial response is called alarm reaction, which is when the nervous system alerts the body's defense mechanism, causing an increase in the number of red blood cells, hypochloremia, and tissue catabolism (Selye, 1975). Once the alarm reaction is activated in the body, it will either adapt or initiate resistance to the stress. In the stage of resistance, the cortex in the body becomes plentiful in the secretory glands, and there is an increase in the fluid volume of blood, hyperchloremia, and anabolism (Selye, 1956). The resistance stage causes the body to reverse the signs of the alarm reaction

stage. The final stage is the human body experiencing exhaustion. The stage of exhaustion happens if the stressor is severe and applied for sufficient length of time (Selye, 1975).

Selye (1955) noticed that the exhaustion the body experience from stress could not be changed by the person consuming more calories for energy or receiving hormonal stimulation. Sleep and rest can restore resistance and adaptability close to previous levels, but a person seeking sleep or rest will not restore the initial levels of the body's response to the stress when experiencing stress that is progressive or extensive (Selye, 1975). The repeated effects of the stress cause wear and tear on the body due to the body trying to maintain resistance over an extended period of time. Selye (1975) concluded that the wear and tear on the body from stress leaves irreversible damages to the human body, which accumulate over time and contribute to causing signs of aging or illness.

Body responses during stressful events or encounters are most likely to affect physical health (Baum & Grunberg, 1991). There is evidence that stress affects the cardiovascular system, suppresses the immune system, and may possibly contribute to cancer (Zellner & et al, 2006). The suppressed immune system potentially allows a person to be vulnerable to illnesses such as cold and flu. Research has found that men have a higher increase in blood pressure when stressed than women (Baum & Grunberg, 1991). The higher increase in blood pressure in response to stress could propose effects on the man's cardiovascular system if he continuously experiences stress over an extended period of time.

The research on stress and health also indicates that stress can cause negative emotional states such as anxiety and depression (Williams, Neighbors, & Jackson, 2003), conditions often under-diagnosed and undertreated in men (Primack, Addis, Syzdek, and Miller, 2010). Men are often reluctant to seek help for the management of

stress or the resulting causes of stress. Masculine norms, which include the expectation for men to be strong, aggressive, independent, emotionless, and risk-taking have been associated with the reluctance of men to seek mental health services. This avoidance results in effects on both their psychological and physical well-being (Primack & et al, 2010).

People may experience stress from environmental demands or from everyday life stressors. Environmental demands that may cause stress for a person are fear of crime, conditions of their neighborhood, transportation problems, discrimination, and social class (Lantz & et al, 2005). Exposure to chronic stressors such as relationship and family problems, financial stress, and job strain, along with stressful life events such as divorce and death, are linked to psychological distress and disorders like depression (Aneshensel, 1992; Lantz & et al, 2005). Socioeconomic position is negatively associated with the frequency of stressful life events and environmental stressors (Lantz & et al, 2005). Individuals of low SES have more exposures to environmental stressors and a higher potential for chronic stressors.

Children tend to be a source of stress for men. Having children has been found to negatively affect men's health due to the stress of financially providing for their children, to balance work and parenting, or the feeling of guilt to spend time with their children if they do not reside in the same home (Garfield, Clark-Kauffman, & Davis, 2006). Men have stress to work as a manner to provide the monetary means for their children, and stress from determining how to allocate time from work to be with his children.

Ravenell and researchers (2006) conducted a study to explore and identify Black men's perception of health and health influences, finding that the men believed stress affected their physical health. The Black men in the study felt the sources of the stress they encountered arose from a lack of income, racist attitudes, living in poor

neighborhoods, and conflicts in their relationships with spouses or significant others. Other sources of stress for Black men have been found to be a lack of social support, social-familial factors, higher rates of unemployment, lower occupational status, unhealthy neighborhoods, and exposure to racism (Barnes, Schneider, Alexander, & Staggers, 1997; Ravenell & et al., 2006).

When a person perceives elevated stress, they attempt to relieve or find ways to cope. People often try to relieve their stress with unhealthy behaviors that often affect their health (Krueger & Chang, 2008). Some unhealthy behaviors people engage in when stressed are eating high-fat foods, not exercising, drinking alcohol, and smoking (Ng & Jeffery, 2003; Zellner, Saito, & Gonzalez, 2007). Zellner and colleagues (2006) found that stress changes food choice from healthy low-fat foods to less healthy high-fat foods. The increase in high-fat foods is known to affect a person's health by increasing their risk for conditions such as obesity. Men have been found to consume more cholesterol and sodium rich foods such as red meat, pizza, soda, and milk when experiencing elevated, prolonged levels of stress, which may increase the instances of heart disease (Ng & Jeffery, 2003; Zellner & et al., 2007). High stress levels are also associated with smoking initiation, increased smoking, less successful smoking cessation attempts, increased alcohol consumption, increased problem drinking, and positive attitudes toward drinking (Ng & Jeffery, 2003; Krueger & Chang, 2008). Alcohol consumption may lead to poor decision making in the face of impaired judgment as well as a risk for other health problems such as liver disease from long-term alcohol consumption.

Krueger and Chang (2008) found that high levels of former smoking or physical inactivity increased the impact of perceived stress on mortality among people with a low SES, indicating unhealthy behaviors have an effect on the health of individuals of low SES. Individuals with low SES are at a disadvantage when engaging in unhealthy

behaviors and when experiencing perceived high levels of stress because they may not have the money or access to health care facilities to maintain their health or effectively cope with stress (Lantz & et al, 2005). Low SES populations are left to cope with stress in a manner that is perceived effective for them and to battle any health affects with the limited resources that are available to them.

Coping

Coping refers to behavior that protects people from becoming psychologically harmed by a problematic social experience (Pearlin & Schooler, 1978). Coping mechanisms differ from person to person and from situation to situation. Coping is an individualized defense mechanism that depends on the kind of stressor present and is influenced by the individual's characteristics and persona (Pearlin & Schooler, 1978). Coping mechanisms arise in response to perceived threats aroused in individualized situations, and constitute action taken on one's own behalf (Pearlin & Schooler, 1978; Aneshensel, 1992; Marco, Neale, Schwartz, Shiffman, & Stone, 1999). Defense mechanisms allow relief from the perceived threat and a return to the normal state the individual was experiencing before the perceived threat appeared. The functions of coping are to avoid or eliminate a stressor, alter the meaning of a situation, and to manage states of arousal (Pearlin & Schooler, 1978). The manner in which one copes can have potential effects on the physical and mental health of an individual. Marco and colleagues (1999) concluded that the ability of a person to cope with stressful daily events is a critical mediator of the relationship between stress and mental health outcomes. An effective method for assessing coping effects on health needs to be determined from research on coping.

Lazarus and Folkman (1984) have conducted various studies on stress and coping, which has yielded numerous replicable findings in regards to coping with stress. Lazarus (1993) concluded the following factors about coping to be the most important: 1) Coping is complex, and people use the basic elements of coping in everyday stressful events, 2) Coping depends on an evaluation of whether something can be done to change the situation, 3) If the stressful encounter is held constant, women and men show similar coping patterns, 4) Some techniques of coping are more stable than others among diverse stressful encounters, while others depend on particular stressful contexts, 5) Coping strategies differ from one level of a stressful encounter to the next, 6) Coping acts as a potent mediator of emotional outcomes, and 7) The effectiveness of coping patterns vary with the type of stressful encounter, the type of personality of the individual, and the outcome manner studied.

There are two major functions of coping that include dealing with the problem that is causing distress (problem-focused coping) and emotion regulation (emotion-focused coping) (Folkman, Lazarus, Gruen, & DeLongis, 1986). Problem-focused coping is used in encounters that are seen as changeable, and emotion-focused coping is used in encounters perceived as unchangeable (Folkman, Lazarus, Dunke-Schetter, DeLongis, & Gruen, 1986). When there is an encounter between the person and his or her environment and that situation is changed by the coping actions, the coping method is called problem-focused coping. Emotion-focused coping may include various feelings towards the situation or oneself. Lazarus and Folkman (1984) identified self-blame, wishful thinking, avoidance, counting one's blessings, and blame of others as emotion-focused coping methods. Researchers have indicated that emotion-focused coping is a less effective method of coping and is more likely to be associated with psychological distress than using the problem-focused coping method (Matud, 2004).

Pearlin and Schooler (1978) indicated in their research that there is relationship between coping and education. Education has an impact on the coping skills of an individual. The more education and income a person has, the more resources and knowledge a person has for coping abilities. The less educated and the poor are more exposed to stress and hardships, and they are less likely to have the means to cope with the stressors that result from these hardships (Pearlin & Schooler, 1978). Fernandez and researchers (2004) conducted a study to determine whether healthy subjects with low levels of education and high levels of sustained coping would exhibit higher blood pressure levels found that men with high coping mechanisms and higher education had higher blood pressure rates. The low educational level participants with high coping mechanisms had lower blood pressure levels.

In certainty, the ability of a person to cope depends on the resources that aid the process. Coping resources include factors such as social support, sense of mastery, optimism, and self-esteem (Taylor & Stanton, 2007). The resources a person has to cope affects the coping process by influencing whether the person will take action by using problem-focused coping or merely manage his or her emotions. Coping resources also have effects on the psychological and physical health of a person (Taylor & Stanton, 2007) due to the effect of coping resources on the ability to cope, thus influencing stress levels.

Social support and a sense of mastery are coping resources that are a fundamental part of the stress-reduction process because they act as a stress buffer (Meyer, Schwartz, & Frost, 2008). A sense of mastery allows a person to feel that they are in control or have an influence over the outcome of a situation (Thompson, 1981). There are studies with results indicating a relationship between a sense of control and having better psychological health (Taylor & Stanton, 2007). Studies have also indicated that people of lower SES have a lower sense of control, and Blacks have a lower sense

of mastery than Whites (Meyer & et al., 2008). Social support, another substantial element of coping resources, is the perception that one is loved, cared for, and valued by family, friends, or social networks (Wills, 1991). Social support contributes to physical and psychological health. Research has found that social support reduces psychological distress during stressful events (Taylor & Stanton, 2007).

The coping resources of optimism and self-esteem have an effect on the psychological health of people. Optimism has been shown to lead to greater psychological well-being (Kubzansky, Wright, Cohen, Weiss, Rossner, & et al., 2002). A person has optimism when they believe good things rather than bad things will be the outcome of a situation (Taylor & Stanton, 2007). High self-esteem has been linked in research studies to a better psychological well-being (DuBois & Flay, 2004). High self-esteem can protect a person from poor mental health outcomes because they feel better about themselves and their abilities to cope. In his study, Whitty (2003) found that people who had a higher purpose in life determined by their sense of meaning and self-esteem were more likely to use mature defense mechanisms in their coping abilities. Studies on self-esteem have found that Blacks have higher self-esteem levels than Whites (Meyer & et al., 2008), which is incongruent with the results of their lower health status.

Coping and Black Men

Men are expected to deal with stress with fewer expressed emotions due to gender role stereotypes. Men have been found to use problem-focused coping more than women (Ptacek, Smith, & Zanas, 1992; Matud, 2004). The study conducted by Brown (2004) examining chronic stress and emotional responses found that Black men lack suppression of anger in stressful encounters, and chronic stress was associated

with a negative affect on their health. Black men tended to respond to stressful situations with fewer emotions of sadness or disbelief.

Studies have found that men are less likely to seek social support in coping and more likely to turn to drugs and alcohol as a means of coping (Ptacek, Smith, & Zanas, 1992; Xanthos & et al, 2010). The use of drugs or alcohol to cope can be viewed as negative coping mechanisms. Watkins and colleagues (2006) indicated that Black men engaged in negative coping strategies as a way to self-medicate themselves in an attempt to relieve symptoms of anxiety or depression and engaged in positive coping strategies when promoting a healthy lifestyle.

There are Black men who express their emotions when coping with stress. Mattis and colleagues (2001) found that Black men would seek advice from friends who provide a sense of support. Other studies have indicated that Black men managed stressful life events by talking with men whom they considered close friends worthy of trust (Bowman, 2008; Crawley & Freeman, 1992). Watkins and researchers (2006) found that men in committed relationships were less likely to suffer from depression. The men had support from group members to help them cope with stress. Religion has also been a major factor in the history and lifestyle of Black people, and it has an impact on their coping mechanisms. Some Black men use spirituality, religious faith, and hope to help stimulate their coping mechanisms (Herndon, 2003; Outlaw, 1993). The coping patterns of Black men are also influenced by ethnic identity, the ability to influence one's immediate environment, and the quality of one's relationship with their spouse or partner (Evans & Evans, 1995).

The relationships Black men have with their spouses or significant others has an impact on their stress levels and coping abilities. Studies have found that Black men experience stress from conflicts in communication with their partners (Cazenave, 1983; Ravenell, Johnson, & Whitaker, 2006). The stress Black men experience due to poor

communication with his partner was associated with him using withdrawal and blaming his partner as his way of coping with stress. In a study conducted by Evans and Evans (1995), they found that Black men who reported stress from their jobs or relationship used emotion coping abilities labeled as confrontative, accepting responsibility of the issue, and escape-avoidance of the problem as their coping methods. It was also found in the study that men with relationship problems tend to display more emotions when coping with stressful encounters.

Summary

A review of the literature has determined that Black men experience a higher prevalence of severe medical conditions and poorer health outcomes compared to White men. Research has found that Black men are at higher risk for negative medical conditions due in part to the effects of low SES. Research has also documented the effect of stress on health, with a sizable literature supporting a link between increased stress and hypertension. While stress levels affect the health status, an individual's SES typically predicts whether a person has the potential resources to cope with life's stressors. There is a paucity of literature on Black men and ways of coping with stress and the impact of these coping mechanisms on health status. Despite the extant research and the theoretical support for this inquiry, there is little research to date that examines the potential role of stress and coping as factors that may explain the lack of improvement in the health status of Black men. There is also a need to understand the coping mechanisms of Black men so that these strengths can be identified and amplified in future intervention development.

Chapter Three

Methodology

The methodology for the research study is described in this chapter. The chapter outlines the sampling, recruitment, and research sites for the study. The data collection methods with information on the questionnaires utilized to collect data on the variables SES, stress, coping, and health status for this study are also discussed. It concludes with the plan for data analysis for the research questions of the study.

Research Design Strategy

Due to limited research on the relationship between the SES, stress, coping, and health status of Black men, this research study is an exploratory study. Using survey methods, data was collected from participants to allow for the examination of relationships between the variables, including mediating effects. The outcome variable in this study is health status, determined by the self-reported mental and physical health of participants. The predictor variables are SES, stress level, coping, and demographic variables such as marital status, age, and number of children. The research study addresses the following research questions:

1. Is higher SES associated with a better rating of health status for Black men?,
2. What is the relationship between SES and perceived stress for Black men?,
3. What is the relationship between SES and coping for Black men?
4. Do perceived stress and coping mediate the relationship between SES and health status for Black men?

During a three-month period, participants were recruited from two locations: a community health clinic and a national chapter of a graduate level Black fraternity. The

health clinic and fraternity were selected as recruitment sites to increase variation regarding SES, which was important for this study. The health clinic is a community-based clinic that provides medical and educational services to men ages 18 to 55. The majority of the men receiving services at the health clinic are indigent. In contrast, members of the fraternity are ages 22 to 80 and have a college degree, which may increase the likelihood of higher SES among those participants.

The data for the research study was obtained by administering four instruments, with scales measuring the following variables: SES, stress level, coping, and health status. The questionnaire also included a page for demographic information such as age, marital status, and number of children. The questionnaire did not contain any personal information, such as name, address, or phone number, which could identify the participants. Paper and electronic versions of the questionnaires were used for data collection. The participants recruited from the health clinic completed the paper copy of the questionnaire due to lack of computer access while the electronic version of the questionnaire was administered to the participants recruited from the fraternity to reach more members since their meetings are monthly.

Sampling Design

The sample for the study was obtained through non-probability sampling methods, specifically a purposive sample, recruited from a community health clinic and a fraternity. Based on a power analysis conducted with Creative Research Systems (2010) software, it was determined that the sample size needed for this study was 384 participants.

Recruitment

The criteria for the sample was males between the ages of 25 and 45 who identify themselves as Black and who were able to read, write, and speak English. The participants could not have a history of mental illness or any current diagnosis of a mental health condition. The age range was selected to focus on middle age Black men in this study. It was anticipated that both research sites would have subjects in the age range because the health clinic provides services to men ages 18 to 55 and the fraternity member ages range from 22 to 80 years of age. A meeting was held with representatives from both research sites to obtain support for this research study. The social workers at the health clinic made announcements about the study and the need for participants on male clinic days. The president of the fraternity informed members of the study at the monthly meeting and sent e-mails to all members informing them about the study. Additionally, flyers were distributed in the health clinic and via e-mail to the fraternity members, which informed potential subjects about the research study, the criteria for participation, and the dates the study would be conducted. Providing prior notice and information about the study was used to help increase the response rate.

Houston, Texas was selected as the study location. The health clinic site is located in a predominantly Black neighborhood. This health clinic provides services to males who need medical attention as well as educational and personal development classes. Black males are the primary patients at the health clinic. Membership in the graduate-level chapter of the fraternity is exclusive to Black men in the Houston area who have graduated from college. The fraternity seeks members from at least four of the local universities in the city.

Participants at the health clinic were recruited from the educational and personal development classes during male clinic days, which were Thursdays and Fridays, for a 3-month period. The prospective participants were approached by the researcher and

given the option to complete the survey before or after attending educational and personal development classes. The participants were given an option to complete the survey before or after classes to ensure the participant would have adequate time to complete the questionnaire. The health clinic provided the researcher with a table and chairs so the participants would have a designated seating area to complete the paper copy of the questionnaire.

Participants from the fraternity completed the electronic version of the questionnaire. The president of the fraternity sent an e-mail to members containing a recruitment flyer, which solicited their voluntary participation to complete an online questionnaire. The flyer, attached as a word-processed document, informed potential participants of inclusion/exclusion criteria and study dates. Approximately 1 week after the president's e-mail was sent to the fraternity members, the researcher sent a follow-up e-mail asking the potential participants to participate in the study. The e-mail solicitation included the cover letter, a website link to the questionnaire on Survey Monkey, and the password. Participants completed the questionnaire from any computer connected to the Internet. It was recommended that the participants complete the questionnaire in a setting that was comfortable for them, in which they would be able to concentrate and have adequate time to respond to all items. The researcher suggested the participants complete the electronic version of the questionnaire at a home computer or in the computer station of a library at a time convenient for them. To increase response rate and to be certain that all participants received the information, the link to the electronic questionnaire was sent to the participants four times over 60 days.

Measures

Four instruments were used to measure the variables SES, stress level, coping, and health status. These questionnaires have been used in previous studies with the target population for this study. The reliability of the instruments is good, and validity is well-established.

Hollingshead (1975) developed the Hollingshead Scale to determine the SES of individuals based on occupational and educational levels. It is the most widely used instrument to measure SES in various research studies (Cirino, Chin, Sevcik, Wolf, Lovett, & et al., 2002). The original version of the Hollingshead Scale was utilized in this study. The instrument consists of two questions based on the years of school completed and occupation. The years of school completed is indicated in the range of 1 (*less than 7th grade education*) to 7 (*graduate level education*). Occupation is categorized on a range from 0 (*unemployed, student, or housewife*) to 9 (*senior management or professional*). The scores on the scale range from 0 to 66. The higher the individual scores, the higher their corresponding SES. Hollingshead (1975) determined the inter-rater reliability of the instrument to be ($r = .92$) and Cirino and researchers (2002) determined the inter-rater reliability to be ($r = .91$). The validity of the scale was determined by criterion-related validity. Hollingshead (1975) used IQ and achievement performances to validate the scale. It was found that SES correlated significantly with IQ and academic achievement in reading.

The Perceived Stress Scale (PSS) measures the degree to which situations in a person's life over the past month are evaluated as stressful by that individual (Cohen, Kamarck, & Mermelstein, 1983). A literature search has shown that the PSS has been used in many studies to measure a person's perception of stress. The instrument consists of 10 questions using a Likert scale for the responses. The scale ranges from 0 (*never*) to 4 (*very often*). The scores from the scale range from 0 to 40. Cohen and researchers (1983) demonstrated the reliability of this scale by test-retest reliability,

conducting a study in three samples, two samples from college students, and one sample from a smoking cessation program, multiple times at 6-week intervals to obtain results on the scale. The internal reliability is ($\alpha = .85$). The validity was determined using predictive validity and concurrent validity. The PSS was determined to be highly correlated with depressive symptoms ($r=.76$, $p<.001$) and moderately correlated with Life Events scale ($r=.49$, $p<.01$). It was also found that the scale has better predictions when used within a one to two month period due to perceived levels of stress being influenced by daily and major events, and there were no differences between sexes (Cohen & et al., 1983).

The Coping Self-Efficacy Scale, developed by the influence of the theories of stress and coping, self-efficacy, and social cognitive theory, measures an individual's perceived ability to cope effectively with life challenges (Chesney & et al., 2006). The instrument consists of 26 questions concerning task-oriented coping that are measured with a Likert scale. The scale has 11 points, ranging from 0 (*cannot do at all*) to 10 (*certain can do*). The Coping Self-Efficacy Scale measures three factors: the ability to use problem-focused coping, to stop unpleasant emotions and thoughts, and to get support from friends and family. The scores for the subscales are 0 to 120 for ability to use problem-focused coping, 0 to 90 to stop unpleasant emotions and thoughts, and 0 to 50 for support from friends and family. The subscale with the highest score determines the coping method the individual believes he can perform the best. The total score, determined by adding the subscale scores together can range from 0 to 260. The overall score of the scale determines the level of coping self-efficacy of the individual (Chesney & et al., 2006), which was used to determine coping self-efficacy for this study. The reliability of the instrument was determined by test-retest reliability. Chesney and researchers (2006) found the Cronbach's alpha of the three subscales to be high. The subscales use of problem-focused coping and the ability to stop unpleasant emotions

and thoughts have a reliability of ($\alpha = .91$), and the subscale ability to get support from friends and family has a reliability of ($\alpha = .80$). The validity of the instrument was determined using concurrent, predictive, and construct validity. The exploratory and confirmatory factor analysis used for construct validity determined that the factors were moderately related ($r = .54 - .67$).

The SF-36v2 Health Survey measures health status by determining the physical and mental health status of an individual. The survey has been used in several studies with general and specific populations to measure burden of diseases and to differentiate in health status (QualityMetric, 2009). The instrument is a generic measure of functional health and well-being from the person's point of view (Ware & Sherbourne, 1992). It consists of 36 questions with eight health concepts that determine the two main components of physical and mental health status. The health concepts are physical functioning, role-physical functioning, bodily pain, general health, vitality, social functioning, role-emotional functioning, and mental health. The instrument has seven different response categories for the 36 questions. The responses are ranked into various categories such as *none* to *all of the time*, *poor* to *excellent*, *definitely true* to *definitely false*, *none* to *very severe*, *not at all* to *extremely*, *a lot* to *not at all*, and *not at all* to *extremely*. Each category is assigned a score during analysis. The instrument provides numerical scores for the outcome of physical and mental health status. The scores on the scale can range from 0 to 100 (Ware, Kosinski, Bayliss, , McHorney, Rogers, & et al., 1995), but scores generally range from 30 to 70, with an average score of 50 (Saris-Baglama, Dewey, Chisholm, Plumb, King & et al., 2010). Ware and researchers (1995) determined the reliability of the scale by test-retest reliability. The Cronbach alpha for the two main components were ($\alpha = .92$) for physical health status and ($\alpha = .88$) for mental health status. The Cronbach alpha results for the subscales were ($\alpha = .93$) for physical functioning, ($\alpha = .89$) for role-physical functioning, ($\alpha = .90$) for

bodily pain, ($\alpha = .81$) for general health, ($\alpha = .86$) for vitality, ($\alpha = .68$) for social functioning, ($\alpha = .82$) for role-emotional functioning, and ($\alpha = .84$) for mental health. The validity of the scale has been determined by content, concurrent, criterion-related, construct, and predictive validity. Ware and researchers (1995) used criterion-related validity to validate the scale and determined that the subscales of mental health, role-emotional functioning, and social functioning are most valid for mental health measures and that physical functioning, role-physical functioning, and bodily pain are the most valid subscales for physical health measures.

Last, a demographic questionnaire was presented after completing the scales for SES, PSS, coping, and health status to obtain information about the participant's family such as number of children, and behaviors of smoking, drinking alcohol, and obtaining a medical exam. The participants were asked to complete 10 questions (see Appendix A) with the answer choices provided as either a no/yes response or options labeled as A through F. These questions were presented at the end to obtain information to be used as control variables for this research study, and to make comparisons with the outcome variables.

Data Collection

Health Clinic. As previously indicated, the data was collected from paper questionnaires for a period of three months at the health clinic. Participants at the health clinic were asked to complete a self-administered hard copy of the questionnaire and were provided with a pen. The hallway or the classroom of the clinic were designated as private and quiet areas for the participants to complete the questionnaire. The participants were asked to answer each question and review their questionnaire upon completion to ensure that they answered each question. To ensure the anonymity of the participants, a drop box was placed on the researcher's table for the participants to

return the completed questionnaires. The researcher collected all questionnaires from the box at the end of clinic operating hours. Questionnaires were stored in the researcher's office off-site from the health clinic in a locked file cabinet. The responses from the questionnaire were entered in the SPSS database that was password protected to maintain confidentiality.

Fraternity. Participants from the fraternity completed the electronic questionnaires on Survey Monkey, which was available for three months. The electronic version of the questionnaire contained the same information as the paper copy. The questionnaire was completed at a location determined by the participant. The instructions for the electronic questionnaire asked the participants to complete each question and to review their responses before submitting the questionnaire. The participant had the option to select no response (NR) if they did not want to answer a question, however, an answer had to be selected for each question before they were able to progress to the next section. The researcher was the only person able to access the data from Survey Monkey after the participants submit their questionnaires. The data was password protected. The researcher reviewed the questionnaires in PDF format and exported the responses into SPSS.

Human Subjects Review

The Committee for the Protection of Human Subjects (CPHS) at University of Houston approved the proposed research study. An application containing the consent document, cover letter, and letters of approval from research sites to conduct the study was completed and submitted for review. The CPHS granted permission for the research study to be conducted at the designated research sites.

Data Analysis

The data for this study was analyzed using SPSS v18 software. The outcome variable, health status is a composite of physical health and mental health status. Health status was entered as a continuous variable. The predictor variables SES, stress, and coping are also continuous variables. The demographic variables were categorical variables. Categorical variables with more than two options (age range, marital status, yearly income, income status, and number of children) were re-coded as dummy variables for regression analysis.

A Missing Value Analysis was performed to assess for patterns of missing data and to determine whether the expected maximization or the mean value would be used to replace the missing data. The expected maximization is preferred for replacement of missing data because it forms a missing data correlation matrix and make inferences about the missing values based on the shape of the distribution (Tabachnick & Fidell, 2007). Expected maximization can only be used if the data is missing randomly.

Bivariate and multivariate statistical tests were conducted for data analysis. The Simple Mediation (Sobel) for SPSS developed by Preacher and Hayes (2004) was also used to conduct the mediation analysis within SPSS for the data analysis. Select analyses were conducted to answer each research question as presented below:

RQ1. Is higher SES associated with a better health status for Black men?

A Pearson's correlation was conducted to determine if there was a significant relationship between SES and health status for Black men.

RQ2. What is the relationship between SES and perceived stress for Black men? A Pearson's correlation was conducted to determine if there was a significant relationship between SES and perceived stress for Black men.

RQ3. What is the relationship between SES and coping for Black men?

A Pearson's correlation was conducted to determine if there was a

significant relationship between SES and coping for Black men.

RQ4. Do perceived stress and coping mediate the relationship between SES and health status for Black men? Several regression analyses were conducted with outcome variables physical and mental health status and the predictor variables SES, stress, and coping to determine if stress and coping were mediators between SES and physical and mental health status of Black men. A regression analysis was conducted while controlling for stress and coping when the demographic variables were entered into the regression models. The effects of stress and coping on physical and mental health status were examined in the regression models. If there was a significant effect between stress and coping and physical and mental health status when SES had been entered into the model, additional regression analyses were conducted controlling for SES determining if there was an effect between physical and mental health status when stress and coping were entered into the regression models.

Summary

This exploratory, quantitative research study was conducted to discover information about the variables SES, stress, coping, and health status, factors that may affect the health status of Black men. The sample for the study was obtained by a non-probability convenience sample. There were two sites at which the study was conducted, and 200 participants were expected from each site. There were four instruments used in this study to measure the variables of interest. The participants at one research site completed a paper copy of the questionnaire and the other site completed an electronic version. There were bivariate and multivariate statistical tests conducted to analyze the data.

Chapter Four

Results

The empirical findings for this study are discussed in this chapter. The results were analyzed from 251 questionnaires, with 103 questionnaires by online response (fraternity site) and 148 questionnaires completed on paper (clinic site). First, the missing data analysis is presented with the method of replacement of the missing values. Second, the descriptive analysis is presented. Finally, the statistical results for each research question are discussed.

Missing Data

There was minimal missing responses from the questionnaires and the demographic responses. The SF v36 Health Status survey was scored with the QualityMetric Health Outcomes Scoring Software 4.0. The program automatically replaced any missing values from the questionnaire with the person-specific estimate determined by calculating the mean response to the answered items in the same scale when a respondent has answered at least one-half of the items on that scale (Saris-Baglama, Dewey, Chisholm, Plumb, King & et al., 2010). The respondents had to answer at least half of the questions on the specific contents of the questionnaire for the missing data estimation to determine a value. There were missing items on a limited number of items on the questionnaires (see Appendix C), allowing for missing values to be replaced and the questionnaires to be scored by the program.

A missing value analysis was conducted using SPSSv18 for the Perceived Stress Scale and Coping Self-Efficacy Scale instruments. There were five items on the Perceived Stress Scale and 25 items on the Coping Self-Efficacy Scale that were

missing responses (see Appendix C). The data was missing randomly; therefore all missing values for the Perceived Stress Scale and Coping Self-Efficacy Scale were replaced with the expected maximization value. There were 21 total missing responses from the demographic sheet. The demographic variables were replaced with the mode value since they are categorical variables. The table one shows the missing items for the demographic sheet, and tables two and three show the missing value analysis for the questionnaires and the value that was determined to replace the missing value.

Demographics

The frequencies were calculated for the demographic data (see Table 1). The majority of the participants were 31 to 35 years of age, had children, and were not married. Most participants (70.1%) did not smoke, and 29.9% reported no alcohol consumption. A majority of the participants (67.7%) had received medical care within the past year, with 98 of the 170 participants receiving medical care being from the clinic sample.

When the demographic data was examined by the research sites, the majority of the participants from the fraternity identified themselves as middle-income status, whereas, the clinic participants almost had equal number of participants identifying themselves as low income and middle income statuses. A higher percentage of participants from the clinic (42.6%) than the fraternity (11.7%) reported the behavior of smoking. The clinic participants also had a higher percentage of participants (62.8%) who had been in jail compared to the fraternity participants (24.3%). More than 65% of the participants from both locations indicated they drink alcohol and had received medical care in the past year.

Chi-square analyses were conducted to determine if there were any significant differences in the frequencies of the samples (see table 1).

Table 1

Demographic Information (Clinic n=148, Fraternity n=103)

Variable	Clinic Frequency %	Fraternity Frequency %	Total Frequency %	χ^2
Age				
25 – 30	31 (20.9%)	16 (15.5%)	47 (18.7%)	22.80***
31 – 35	28 (18.9%)	46 (44.7%)	74 (29.5%)	19.36***
36 – 40	38 (25.7%)	25 (24.3%)	63 (25.1%)	0.64
41 – 45	51 (34.5%)	16 (15.5%)	67 (26.7%)	11.12***
Participant Highest Education				
< High school diploma	19 (12.9%)	0 (0%)	19 (7.6%)	14.31***
≥ High school diploma	94 (63.5%)	28 (27.2%)	122 (48.6%)	32.09***
Bachelor's degree	28 (18.9%)	46 (44.7%)	74 (29.5%)	19.36***
Graduate degree	7 (4.7%)	29 (28.1%)	36 (14.3%)	27.13***
Occupational Level				
Unskilled worker	17 (14.7%)	1 (1.0%)	18 (8.4%)	10.08***
Skill worker	53 (45.7%)	12 (12.2%)	65 (30.4%)	18.48***
Clerical/Sales/Technical	15 (12.9%)	18 (18.4%)	33 (15.4%)	2.87
Professional	26 (22.4%)	46 (46.9%)	72 (33.6%)	21.79***
Executive	5 (4.3%)	21 (21.5%)	26 (12.2%)	18.92***
Participant Yearly Income				
\$0 - \$29999	82 (55.4%)	12 (11.7%)	94 (37.5%)	49.64***
\$30000 - \$59999	40 (27.0%)	45 (43.7%)	85 (33.8%)	7.53**
\$60000 - \$99999	19 (12.9%)	28 (27.2%)	47 (18.7%)	8.21**
\$100000+	7 (4.7%)	18 (17.4%)	25 (10.0%)	11.01***
Participant SES				
Low Income	69 (46.6%)	13 (12.6%)	82 (32.7%)	35.99***
Middle Income	76 (51.4%)	85 (82.5%)	161 (64.1%)	15.72***
High Income	3 (2.0%)	5 (4.9%)	8 (3.2%)	3.66
Marital Status				
Married	48 (32.5%)	50 (48.5%)	98 (39.0%)	20.61***
Separated	23 (15.5%)	1 (1.0%)	24 (9.6%)	6.62***
Single	60 (40.5%)	45 (43.7%)	105 (41.8%)	14.91**
Divorced	17 (11.5%)	7 (6.8%)	24 (9.6%)	1.55
Children				
None	32 (21.6%)	47 (45.6%)	79 (31.5%)	16.23***
1 – 2	61 (41.2%)	34 (33.0%)	95 (37.8%)	1.74
3 - 4	48 (32.5%)	18 (17.5%)	66 (26.3%)	7.01**
5+	7 (4.7%)	4 (3.9%)	11 (4.4%)	0.10
Smoker	63 (42.6%)	12 (11.7%)	75 (29.9%)	27.01***
Drink Alcohol	100 (67.6%)	76 (73.8%)	176 (70.1%)	1.21
Ever Been in Jail	93 (62.8%)	25 (24.3%)	118 (47.0%)	36.26***
Medical Care in Past Year	98 (66.2%)	72 (69.9%)	170 (67.7%)	0.38

* $p < .05$, ** $p < .01$, *** $p < .001$

Results indicate that the majority of the demographic frequencies were significantly different compared by sample locations. The age range 36 to 40, occupational status of clerical, sales, and technical, high income status, and divorced had no significant differences in frequencies. The number of children, drinking alcohol, and seeking medical care in the past year also had no significant differences between the samples.

The mean scores were calculated for the demographic variables and the outcome variables mental and physical health status of Black men (see table 2).

Table 2

Mean Scores for Outcome Variables Based on Demographic Variables

Variable	Mental Health	Physical Health
Age		
25 – 30	47.8 (9.6)	54.7 (6.9)
31 – 35	51.44 (7.89)	54.09 (5.55)
36 – 40	50.34 (8.75)	53.66 (8.08)
41 – 45	47.00 (10.23)	49.41 (8.20)
Marital Status		
Married	51.60 (8.28)	53.39 (6.84)
Separated	45.08 (10.04)	52.48 (6.00)
Single	48.29 (9.33)	53.16 (7.72)
Divorced	48.30 (9.36)	50.78 (9.52)
Widowed	50.67 (19.52)	40.37 (5.89)
Children		
None	50.45 (8.57)	53.32 (7.40)
1	50.10 (9.72)	52.37 (7.84)
2	48.82 (10.41)	51.49 (8.35)
3+	48.05 (8.73)	53.61 (6.67)

Variable	Mental Health	Physical Health
Smoke		
Yes	46.18 (9.47)	51.48 (8.61)
No	50.62 (8.84)	53.44 (6.90)
Drink Alcohol		
Yes	49.30 (8.79)	53.86 (6.02)
No	49.27 (10.26)	50.50 (9.77)
Ever Been in Jail		
Yes	46.19 (10.04)	51.78 (8.57)
No	52.04 (7.48)	53.80 (6.26)
Medical Care in Past Year		
Yes	48.82 (9.40)	52.13 (7.70)
No	50.28 (8.87)	54.36 (6.82)

The results indicated there was a higher mean for the age range 31 to 35 in mental health status and, the age range 31 to 35 had a similar mean in physical health status as the age range 25 to 30. There was a higher mean between Black men who were married in comparison to those with other marital statuses based on mental health status scores. Black men who reported drinking alcohol had a higher mean in physical health status scores in comparison to Black men who reported no alcohol use.

Questionnaire Analysis

A comparison of mean scores was done with the questionnaires by the sample location (see table 3). Results indicated that the fraternity sample had better mean scores on all questionnaires. The greatest mean differences in scores between the clinic and fraternity samples were found in the SES and coping (CSES) questionnaires.

Table 3

Questionnaire Mean Score Comparisons by Sample Location

	Clinic (n=148)	Fraternity (n=108)
SES	32.03	50.29
Mean (SD)	(15.76)	(12.50)
[range]	[6 – 66]	[12 – 66]
Coping (CSES)	199.40	215.38
	(38.09)	(42.64)
	[64 – 260]	[55 – 260]
Stress (PSS)	14.81	10.99
	(7.92)	(6.43)
	[1 – 39]	[0 – 29]
Physical health	51.62	54.63
	(8.20)	(5.92)
	[21.75 – 67.21]	[19.76 – 67.82]
Mental health	47.91	51.29
	(9.82)	(7.96)
	[17.04 – 64.47]	[25.62 – 62.28]

Research Question Analyses

Research Question 1. Is higher SES associated with a better health status for Black men?

A Pearson's correlation was conducted to determine if there was a relationship between SES and health status for Black men. The correlation for SES and physical health was positive, significant, and of weak to moderate magnitude ($r=.252$, $p<.001$) (see table 4). The $R^2 = .064$ indicates that SES accounts for 6.4% of the variability in physical health status. The correlation for SES and mental health was also significant, positive, and of moderate magnitude ($r=.345$, $p<.001$). It was found that SES accounts for 12% of the variability in mental health status ($R^2 = .12$). Based on the Pearson's correlation of a

significant positive relationship between SES and both physical and mental health status, it was concluded that higher SES is associated with better physical and mental health status.

Research Question 2. What is the relationship between SES and perceived stress for Black men?

A Pearson's correlation was conducted to determine if there was a relationship between SES and perceived stress for Black men. The correlation for SES and perceived stress was negative, significant, and of weak to moderate magnitude ($r = -.309$, $p < .001$) (see table 4). The $R^2 = (.095)$ indicating that SES accounts for 9.5% of the variability for perceived stress. It is concluded from the Pearson's correlation that there is a relationship between SES and perceived stress for Black men.

Research Question 3. What is the relationship between SES and coping for Black men?

A Pearson's correlation was conducted to determine if there was a relationship between SES and coping for Black men. It was determined to be a positive, significant, weak to moderate relationship between the variables ($r = .329$, $p < .001$) (see table 4). SES accounted for 10.8% of the variance in coping ($R^2 = .108$). The Pearson's correlation of a significant positive relationship between SES and coping interprets there is a relationship between SES and coping for Black men.

Table 4

Correlation Matrix of Predictor and Outcome Variables

	1	2	3	4	5
1. Physical Health	1				
2. Mental Health	.161*	1			
3. SES	.252***	.345***	1		
4. Stress (PSS)	-.017	-.634***	-.309***	1	
5. Coping (CSES)	.071	.609***	.329***	-.570***	1

N= 251, * $p < .05$, ** $p < .01$, *** $p < .001$

Research Question 4. Do perceived stress and coping mediate the relationship between SES and health status for Black men?

Several regression analyses were conducted with the demographic variables, SES, the proposed mediating variables stress (PSS) and coping (CSES) and outcome variables mental and physical health status. The analysis was conducted to determine if the variables were significant predictors for mental and physical health status of Black men and to examine any potential effects. A regression was conducted with the variables grouping the demographic variables into categories of basic demographic and health behaviors. The basic demographics consisted of age, marital status, number of children, ever been in jail, and the sample location. Health behaviors were the variables smoke, drink alcohol, and medical care in the past year. The variable SES was obtained from the Hollingshead instrument. The results yield four models for each proposed mediator consisting of demographic variables in the categories and the last model being a regression model with all of the demographic variables and SES.

Stress , Demographic Variables, and SES with Mental Status as Outcome Variable.

Model 1. A regression was done with stress (PSS) as the predictor variable and mental health status as the outcome variable. The results illustrate that *stress* was a significant predictor of mental health status for Black men ($b = -.774$, $SE = .060$, $p < .001$) (see table 5). *Stress* accounted for 40.2% of the variance of mental health status of Black men in the model ($R^2 = .402$).

Model 2. The second model consists of the basic demographics and stress as the predictor variables for mental health status of Black men. *Stress* ($b = -.724$, $SE = .065$, $p < .001$) and *ever been in jail* ($b = -2.147$, $SE = 1.079$, $p < .05$) were significant predictors in the model. The variables accounted for 43.7% of the variance ($R^2 = .437$) of mental health status of Black men, a 3.5% increase from model one.

Model 3. A regression was conducted with the basic and health behavior demographic variables and *stress* to predict mental health status of Black men in the third model. Results indicated that *stress* ($b = -.725$, $SE = .065$, $p < .001$) was the only significant predictor of mental health status of Black men and there was a slight increase in the b-value from previous regression (see table 5). *Stress* accounted for 44.3% of the variance in mental health status of Black men ($R^2 = .443$), an increase in variance compared to model two.

Model 4. The last model consisted of *stress* predicting mental health status of Black men while controlling for the basic and health behavior demographic variables and SES. *Stress* ($b = -.707$, $SE = .065$, $p < .001$) and *SES* ($b = .083$, $SE = .036$, $p < .05$) were

Mental Health Regressed on Stress, Basic Demographic, Health Behaviors and Socioeconomic Status

	1	2	3	4
Stress (PSS)	-.774*** (.060)	-.724*** (.064)	-.725*** (.065)	-.707*** (.065)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		1.028 (1.452)	1.049 (1.469)	.522 (1.472)
36 – 40		.145 (1.580)	.444 (1.615)	-.151 (1.620)
41 – 45		-1.729 (1.556)	-1.179 (1.628)	-1.574 (1.622)
Marital Status				
Single		--	--	--
Married		1.079 (1.210)	1.004 (1.214)	.769 (1.207)
Separated		-.983 (1.812)	-1.168 (1.818)	-1.186 (1.801)
Divorced		.196 (1.782)	.060 (1.795)	-.302 (1.785)
Widowed		-.084 (5.222)	.881 (5.352)	1.839 (5.318)
Children				
None		--	--	--
1 Child		1.008 (1.510)	1.293 (1.526)	.812 (1.526)
2 Children		.775 (1.485)	.662 (1.490)	.993 (1.483)
3+ Children		.885 (1.498)	.825 (1.508)	1.029 (1.497)
Ever Been in Jail		-2.147* (1.079)	-2.150 (1.114)	-1.537 (1.134)
Clinic		.910 (1.054)	1.037 (1.074)	1.971 (1.137)
<u>Health Behaviors</u>				
Smoke			-.465 (1.177)	-.079 (1.178)
Drink Alcohol			1.407 (1.028)	1.184 (1.023)
Med. Care in Past Yr			-.895 (1.029)	-.866 (1.020)
<u>Socioeconomic</u>				
SES				.083* (.036)
R ²	.402	.437	.443	.456

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

both significant predictors of mental health status of Black men. The b-value for *stress* was decreased by (.018) from model three. The variables *stress* and *SES* accounted for 45.6% of its variance ($R^2 = .456$), an increase in variance of 1.3% from model three.

Stress, Demographic Variables, and SES with Physical Status as Outcome Variable.

Model 1. Model one consists of *stress* (PSS) as the predictor variable and physical health of Black men as the outcome variable. It was found that *stress* is not a significant predictor of physical health status for Black men ($b = -.017$, $SE = .063$, $p = .789$) (see table 6). Since *stress* is not a significant predictor of physical health status of Black men, it will not be significant in the other models.

Model 2. The second regression model consisted of the basic demographic variables and *stress* as the predictors of physical health status of Black men. The variable *age range 41 to 45* ($b = -6.175$, $SE = 1.546$, $p < .001$) was a significant predictor of physical health status of Black men. The variable *age range 41 to 45* accounted for 15.4% of the variability of physical health status of Black men ($R^2 = .154$).

Model 3. The basic and health behavior demographic variables and *stress* composed the third regression conducted to predict physical health status of Black men. The variables *age range 41 to 45* ($b = -5.217$, $SE = 1.591$, $p < .001$), the *clinic sample* ($b = -2.169$, $SE = 1.050$, $p < .05$), *3+ children* ($b = 3.564$, $SE = 1.474$, $p < .05$), and *drink alcohol* ($b = 2.815$, $SE = 1.005$, $p < .05$) were the only significant predictors of physical health status of Black men (see table 6). The variables *age range 41 to 45* and *clinic sample* have a

Table 6

Physical Health Regressed on Stress, Basic Demographic, Health Behaviors and Socioeconomic Status

	1	2	3	4
Stress (PSS)	-.017 (.063)	.015 (.064)	.016 (.064)	.038 (.063)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		-1.909 (1.443)	-1.965 (1.435)	-2.596 (1.430)
36 – 40		-2.308 (1.570)	-1.850 (1.578)	-2.562 (1.574)
41 – 45		-6.175*** (1.546)	-5.217*** (1.591)	-5.689*** (1.576)
Marital Status				
Single		--	--	--
Married		-.117 (1.202)	-.286 (1.186)	-.568 (1.173)
Separated		.857 (1.801)	.502 (1.777)	.481 (1.750)
Divorced		-1.729 (1.770)	-1.919 (1.755)	-2.353 (1.735)
Widowed		-9.974 (5.189)	-7.607 (5.231)	-6.459 (5.167)
Children				
None		--	--	--
1 Child		.499 (1.500)	1.029 (1.492)	.453 (1.483)
2 Children		1.313 (1.475)	1.057 (1.456)	1.452 (1.441)
3+ Children		3.610* (1.488)	3.564* (1.474)	3.809** (1.454)
Ever Been in Jail		-1.195 (1.072)	-1.083 (1.088)	-.348 (1.102)
Clinic		-2.505 (1.047)	-2.169* (1.050)	-1.051 (1.105)
<u>Health Behaviors</u>				
Smoke			-1.423 (1.151)	.962 (1.145)
Drink Alcohol			2.815* (1.005)	2.548* (.994)
Med. Care in Past Yr			-1.579 (1.006)	-1.544 (.991)
<u>Socioeconomic</u>				
SES				.099** (.035)
R ²	.000	.154	.191	.218

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

negative relationship with physical health status of Black men indicated by the negative b-values, while the variables *drink alcohol* and *3+ children* have a positive relationship with physical health status of Black men. The *clinic sample* possibly contributed to being a significant predictor of physical health status due to the significant differences in frequencies with the fraternity sample for the variables that were found significant in this model. The variables accounted for 19.1% ($R^2=.191$) of physical health status of Black men, a 3.7% increase from model two.

Model 4. The fourth regression consisted of the basic demographic, health behavior variables, SES, and *stress* as predictors of physical health status of Black men. The variables of age range *41 to 45* ($b= -5.689$, $SE= 1.576$, $p<.001$) has a negative b-value indicating a negative relationship with physical health status as determined in the previous model. The variables *3+ children*, *drink alcohol*, and *SES* were significant predictors of physical health status of Black men (see table 6). The variables *3+ children* ($b= 3.809$, $SE=1.474$, $p<.01$), *drink alcohol* ($b= 2.548$, $SE= .994$, $p<.05$), and *SES* ($b= .099$, $SE=.035$, $p<.01$) had a positive b-value indicating a positive relationship with physical health status of Black men. The three variables accounted for 21.8% of the variability of physical health status of Black men ($R^2=.218$).

Coping, Demographic Variables, and SES with Mental Status as Outcome Variable.

Model 1. The first regression conducted was with *coping* (CSES) and mental health. It was determined from the results that *coping* is a significant predictor of mental health status of Black men ($b=.138$, $SE= .011$, $p<.001$) (see table 7). *Coping* accounted for 37.1% of the variability of mental health status of Black men ($R^2=.371$).

Table 7

Mental Health Regressed on Coping, Basic Demographic, Health Behaviors and Socioeconomic Status

	1	2	3	4
Coping (CSES)	.138*** (.011)	.128*** (.012)	.129*** (.012)	.126*** (.012)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		.130 (1.490)	.228 (1.494)	-.111 (1.504)
36 – 40		-.992 (1.628)	-.546 (1.647)	-.920 (1.658)
41 – 45		-2.125 (1.593)	-1.132 (1.649)	-1.393 (1.652)
Marital Status				
Single		--	--	--
Married		1.848 (1.229)	1.656 (1.226)	1.485 (1.226)
Separated		-.816 (1.849)	-1.023 (1.842)	-1.038 (1.836)
Divorced		1.577 (1.819)	1.489 (1.817)	1.202 (1.820)
Widowed		3.909 (5.321)	4.982 (5.411)	5.581 (5.407)
Children				
None		--	--	--
1 Child		.806 (1.540)	1.343 (1.547)	.990 (1.557)
2 Children		-.086 (1.510)	-.235 (1.503)	.007 (1.506)
3+ Children		.019 (1.521)	.024 (1.521)	.171 (1.519)
Ever Been in Jail		-2.111* (1.103)	-1.946 (1.131)	-1.536 (1.156)
Clinic		.221 (1.069)	.351 (1.083)	1.016 (1.157)
<u>Health Behaviors</u>				
Smoke			-1.088 (1.188)	-.814 (1.196)
Drink Alcohol			1.356 (1.041)	1.192 (1.043)
Med. Care in Past Yr			-2.159 (1.041)	-2.111 (1.038)
<u>Socioeconomic</u>				
SES				.059 (.037)
R ²	.371	.414	.429	.435

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

Model 2. A regression was conducted with the basic demographic variables and *coping* as predictors of mental health status of Black men. Results indicated that *coping* ($b=.128$, $SE=.012$, $p<.001$) and the variable *ever been in jail* ($b=-2.111$, $SE=1.103$, $p<.05$) were significant predictors of mental health status of Black men (see table 7). There was a reduction in the b-value for coping with the basic demographic variables introduced in this model. The variables accounted for 41.4% of the variability of the predictor variable ($R^2=.414$).

Model 3. The third model consisted of the basic and health behavior demographic variables and *coping* as predictors of mental health status of Black men. *Coping* was the only significant predictor of mental health status of Black men in this model ($b=.129$, $SE=.012$, $p<.001$) (see table 7). There was a slight increase (.001) of the b-value for *coping* in this model. The variable *coping* accounted for 42.9% of the variability in mental health status of Black men, an 1.5% increase in variance from model two.

Model 4. The final model was composed of all the demographic variable categories, *SES* and *coping* to predict mental health status of Black men. *Coping* ($b=.126$, $SE=.012$, $p<.001$) was the only significant predictor of mental health status, accounting for 43.5% of its variability ($R^2=.435$) (see table 7), an increase in variance from model three. There was also a reduction in the b-value for *coping* in this model.

Coping, Demographic Variables, and SES with Physical Status as Outcome Variable.

Model 1. Model one was a regression with *coping* (CSES) as the predictor and physical health status of Black men as the outcome variables. Results indicated that *coping* was not a significant predictor of physical health status for Black men ($b=.013$, $SE=.012$, $p=.265$) (see table 8). Since *coping* was found to not be a significant

Table 8

Physical Health Regressed on Coping, Basic Demographic, Health Behaviors and Socioeconomic Status

	1	2	3	4
Coping (CSES)	.013 (.012)	.007 (.012)	.009 (.012)	.003 (.012)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		-2.041 (1.450)	-2.115 (1.440)	-2.662 (1.435)
36 – 40		-2.516 (1.584)	-2.076 (1.587)	-2.683 (1.582)
41 – 45		-6.329*** (1.550)	-5.378*** (1.589)	-5.801*** (1.576)
Marital Status				
Single		--	--	--
Married		-.184 (1.196)	-.359 (1.181)	-.636 (1.170)
Separated		.859 (1.799)	.496 (1.775)	.472 (1.751)
Divorced		-1.699 (1.770)	-1.899 (1.751)	-2.364 (1.737)
Widowed		-9.992 (5.178)	-7.652 (5.215)	-6.683 (5.158)
Children				
None		--	--	--
1 Child		.578 (1.498)	1.130 (1.490)	.560 (1.486)
2 Children		1.389 (1.469)	1.147 (1.449)	1.538 (1.437)
3+ Children		3.727* (1.480)	3.684* (1.466)	3.922** (1.449)
Ever Been in Jail		-1.028 (1.073)	-.909 (1.090)	-.246 (1.103)
Clinic		-2.434 (1.041)	-2.093* (1.044)	-1.016 (1.104)
<u>Health Behaviors</u>				
Smoke			-1.327 (1.145)	-.884 (1.141)
Drink Alcohol			2.879** (1.003)	2.614 (.995)
Med. Care in Past Yr			-1.592 (1.003)	-1.515 (.990)
<u>Socioeconomic</u>				
SES			.	.095** (.035)

	1	2	3	4
R ²	.005	.155	.193	.217

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

predictor of physical health status of Black men, it will not be significant in models two through four.

Model 2. A regression was conducted with the basic demographic variables and *coping* to predict physical health status of Black men. The variables *age range 41 to 45* ($b = -6.329$, $SE = 1.550$, $p < .001$) and *3+ children* ($b = 3.727$, $SE = 1.480$, $p < .05$) were the only significant predictors of physical health status of Black men. *Age range 41 to 45* has a negative relationship with physical health status of Black men indicated by the negative b-value and *3+ children* has a positive relationship with physical health status of Black men indicated by the positive b-value. The variables accounted for 15.5% of the variability of physical health status of Black men.

Model 3. Model three was composed of the basic and health behavior demographic variables and *coping* as the predictors of physical health status of Black men. The variables *age range 41 to 45* ($b = -5.378$, $SE = 1.589$, $p < .001$), *3+ children* ($b = 3.684$, $SE = 1.466$, $p < .05$), *clinic sample* ($b = -2.093$, $SE = 1.044$, $p < .05$), and *drink alcohol* ($b = 2.879$, $SE = 1.003$, $p < .01$) were found to be significant predictors of physical health status of Black men, accounting for 19.3% of its variability, 3.8% increase in variability from model two.

Model 4. The fourth regression model consisted of all the demographic variable categories, *SES*, and *coping* to predict physical health status of Black men. The variables *age range 41 to 45* ($b = -5.801$, $SE = 1.576$, $p < .001$), *3+ children* ($b = 3.922$, $SE = 1.449$, $p < .01$), and *SES* ($b = .095$, $SE = .035$, $p < .001$) were predictors of physical health

status of Black men for this model (see table 8). The three variables accounted for 21.7% of the variability of physical health status of Black men.

Stress, Coping, Demographic Variables, and SES with Mental Status as Outcome Variable.

Model 1. Model one was a regression with *stress* (PSS) and *coping* (CSES) as the predictors and mental health status as the outcome variables. Results indicated that *stress* and *coping* were significant predictors of mental health status for Black men (*stress* $b = -.518$, $SE = .067$, $p < .001$ and *coping* $b = .083$, $SE = .012$, $p < .001$) (see table 9). The variables accounted for 49.3% of the variability of the predictor variable.

Model 2. A regression was conducted with the basic demographic variables and *stress* and *coping* as predictors of mental health status of Black men. Results indicated that *coping* ($b = .081$, $SE = .013$, $p < .001$) and *stress* ($b = -.498$, $SE = .069$, $p < .001$) were significant predictors of mental health status of Black men (see table 9). The b-value for *stress* and *coping* were reduced in this model. The variables accounted for 51.9% of the variability of the predictor variable ($R^2 = .519$).

Model 3. The third model consisted of the basic and health behavior demographic variables, *stress*, and *coping* as predictors of mental health status of Black men. *Stress* and *coping* were significant predictors of mental health status of Black men in this model, (*stress* $b = -.492$, $SE = .070$, $p < .001$ and *coping* $b = .083$, $SE = .013$, $p < .001$) (see table 9). There was a reduction in the b-value for *stress* and an increase in the b-value for *coping* compared to model two. The variables accounted for 52.9% of the variability in mental health status of Black men, an increase of 1% from model two.

Model 4. The final model was composed of all the demographic variable categories, *SES*, *stress*, and *coping* to predict mental health status of Black men. *Stress* ($b = -.489$, $SE = .070$, $p < .001$) and *coping* ($b = .080$, $SE = .013$, $p < .001$) were the only

Table 9

Mental Health Regressed on Stress, Coping, Basic Demographic, Health Behaviors and Socioeconomic Status

	1	2	3	4
Stress	-.518*** (.067)	-.498*** (.069)	-.492*** (.070)	-.489*** (.070)
Coping	.083*** (.012)	.081*** (.013)	.083*** (.013)	.080*** (.013)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		.132 (1.353)	.213 (1.360)	-.086 (1.369)
36 – 40		-1.155 (1.478)	-.720 (1.499)	-1.051 (1.510)
41 – 45		-2.512 (1.447)	-1.710 (1.503)	-1.938 (1.506)
Marital Status				
Single		--	--	--
Married		1.113 (1.121)	1.015 (1.119)	.868 (1.120)
Separated		-.908 (1.679)	-1.132 (1.676)	-1.145 (1.671)
Divorced		.872 (1.654)	.697 (1.658)	.448 (1.661)
Widowed		1.433 (4.844)	2.359 (4.939)	2.906 (4.937)
Children				
None		--	--	--
1 Child		1.248 (1.400)	1.657 (1.408)	1.343 (1.418)
2 Children		.740 (1.376)	.614 (1.374)	.823 (1.376)
3+ Children		1.018 (1.388)	.914 (1.390)	1.038 (1.388)
Ever Been in Jail		-1.452 (1.006)	-1.477 (1.032)	-1.117 (1.055)
Clinic		.931 (.976)	1.022 (.990)	1.607 (1.057)
<u>Health Behaviors</u>				
Smoke				-.150 (1.093)
Drink Alcohol				1.459 (.950)
Med. Care in Past Yr				-1.405 (.950)
<u>Socioeconomic</u>				

	1	2	3	4
SES				.052 (.033)
R ²	.493	.519	.529	.534

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

significant predictor of mental health status, accounting for 53.4% of its variability ($R^2=.534$). Although remaining significant, there was a change in the b-value for *stress* and *coping* for this model (see table 9).

Stress, Coping, Demographic Variables, and SES with Physical Status as Outcome Variable.

Model 1. Model one was a regression with *stress* (PSS) and *coping* (CSES) as the predictors and physical health status as the outcome variables. Results indicated that *stress* and *coping* were not significant predictors of physical health status for Black men (*stress* $b = .034$, $SE = .076$, $p = .656$ and *coping* $b = .017$, $SE = .014$, $p = .243$). The variables accounted for 0.6% ($R^2 = .006$) of the variability of the predictor variable. Since *stress* and *coping* are not significant predictors of physical health status of Black men, the variables will not be significant in models two through four (see table 10).

Model 2. A regression was conducted with the basic demographic variables and *stress* and *coping* as predictors of physical health status of Black men. *Age range 41 – 45* ($b = -6.291$, $SE = 1.553$, $p < .001$), *3+ children* ($b = 3.629$, $SE = 1.489$, $p < .05$), *clinic sample* ($b = -2.503$, $SE = 1.047$, $p < .05$) were significant predictors of physical health status of Black men. The variables *age range 41 to 45* and *clinic sample* have a negative relationship with physical health status indicated by the negative b-value. The variables accounted for 15.7% of the variability of the predictor variable ($R^2 = .157$).

Table 10

*Physical Health Regressed on Stress, Coping, Basic Demographic, Health Behaviors
and Socioeconomic Status*

	1	2	3	4
Stress	.034 (.076)	.049 (.075)	.058 (.074)	.063 (.073)
Coping	.017 (.014)	.012 (.014)	.015 (.014)	.009 (.014)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		-2.042 (1.451)	-2.113 (1.441)	-2.666 (1.436)
36 – 40		-2.500 (1.586)	-2.056 (1.589)	-2.666 (1.583)
41 – 45		-6.291*** (1.553)	-5.310*** (1.593)	-5.731*** (1.579)
Marital Status				
Single		--	--	--
Married		-.112 (1.203)	-.284 (1.186)	-.556 (1.174)
Separated		.868 (1.802)	.590 (1.776)	.485 (1.752)
Divorced		-1.630 (1.775)	-1.806 (1.757)	-2.267 (1.741)
Widowed		-9.751 (5.198)	-7.346 (5.234)	-6.337 (5.176)
Children				
None		--	--	--
1 Child		.534 (1.502)	1.094 (1.492)	.514 (1.487)
2 Children		1.308 (1.476)	1.048 (1.456)	1.433 (1.443)
3+ Children		3.629* (1.489)	3.580* (1.473)	3.810** (1.456)
Ever Been in Jail		-1.093 (1.079)	-.964 (1.094)	-.300 (1.106)
Clinic		-2.503* (1.047)	-2.172* (1.049)	-1.093 (1.108)
<u>Health Behaviors</u>				
Smoke			-1.409 (1.150)	-.970 (1.146)
Drink Alcohol			2.850** (1.005)	2.580** (.996)
Med. Care in Past Yr			-1.676 (1.009)	-1.606 (.996)
<u>Socioeconomic</u>				

	1	2	3	4
SES				.096** (.035)
R ²	.006	.157	.195	.220

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

Model 3. The third model consisted of all the demographic variable categories, *stress*, and *coping* as predictors of physical health status of Black men. *Age range 41 to 45* ($b = -5.310$, $SE = 1.539$, $p < .001$), the variable *3+ children* ($b = 3.580$, $SE = 1.473$, $p < .05$), *clinic sample* ($b = -2.172$, $SE = 1.049$, $p < .05$), and *drink alcohol* ($b = 2.850$, $SE = 1.005$, $p < .05$) were significant predictors of the physical health status of Black men. The variables accounted for 19.5% of the variability in physical health status of Black men, a 3.8% increase in variability from model three.

Model 4. The final model was composed of all the demographic variable categories, *SES*, *stress*, and *coping* to predict physical health status of Black men. *Age ranges 41 to 45* ($b = -5.731$, $SE = 1.579$, $p < .001$) and *3+ children* ($b = 3.810$, $SE = 1.456$, $p < .01$) were also significant predictors of physical health status of Black men in this model. The variables *drink alcohol* ($b = 2.580$, $SE = .996$, $p < .01$) and *SES* ($b = .096$, $SE = .035$, $p < .01$) were also significant predictors of physical health status of Black men. The variables together accounted for 22.8% ($R^2 = .220$) in physical health status of Black men.

In the regression analysis, it was determined that there is a relationship between stress and mental health status of Black men and coping and mental health status of Black men, and the variables together have a relationship with mental health status of Black men. It was also concluded that *SES* has an effect on mental health status of Black men even when controlling for *stress*. Results from the regression analysis also indicate that after controlling for *coping* and the demographic variables that *SES* does

not have an effect on mental health status of Black men. Another analysis controlling for *stress* and *coping* together with the demographic variables indicated that *SES* does not have an effect on mental health status of Black men. Due to these findings, additional regression analyses were conducted to determine if stress and coping are mediating the relationship between *SES* and mental health status. The regression analyses consist of *SES* while controlling for all demographic variables. The variables were entered in the categories as the previous regression. The variables stress and coping were entered in the regression models last.

Regression for Determination of Stress and Coping as Mediators of Socioeconomic Status and Mental Health Status.

In the regression analysis to determine if *stress* and *coping* are mediators of *SES* and mental health status, the models one through three were the same for each analysis (see table 11 – 13). The following information was found in those models:

Model 1. The first regression conducted was with *SES* and mental health. It was determined from the results that *SES* is a significant predictor of mental health status of Black men ($b=.187$, $SE=.032$, $p<.001$) (see table 11-13). *SES* accounted for 11.9% of the variability of mental health status of Black men ($R^2=.119$).

Model 2. A regression was conducted with the basic demographic variables and *SES* as predictors of mental health status of Black men. Results indicated that *SES* ($b=.136$, $SE=.043$, $p<.001$) and the variable *ever been in jail* ($b=-3.026$, $SE=1.345$, $p<.05$) were significant predictors of mental health status of Black men (see tables 11-13). There was a (.051) decrease in the b-value for *SES* with this model. The variables *SES* and *ever been in jail* accounted for 17.2% of the variability of the predictor variable ($R^2=.172$), a 5.3% increase in variability from model one.

Model 3. The third model consisted of the basic and health behavior demographic variables and *SES* as predictors of mental health status of Black men. *SES* ($b=.130$, $SE=.043$, $p<.01$) and the variable *ever been in jail* ($b= -2.806$, $SE= 1.382$, $p<.05$) were the only significant predictors of mental health status of Black men (see table 11 - 13). The b-values for both variables decreased in this model. The variables accounted for 18.0% of the variability in mental health status of Black men, an 0.8% increase in variance from model two.

Mental Health Regressed on Socioeconomic Status and Stress as the Mediator.

Model 4. The model was composed of all the demographic variables in the categories of basic demographic and health behavior, *stress*, and *SES* to predict mental health status of Black men. *SES* ($b=.083$, $SE=.036$, $p<.05$), with a (.047) reduction in b-value from model three, and *stress* ($b= -.707$, $SE=.065$, $p<.001$) were the only significant predictors of mental health status, accounting for 45.6% of its variability ($R^2=.456$) (see table 11). Since *SES* remained significant with *stress* entered into the model, this indicates that *stress* does not mediate in the relationship of *SES* and mental health status of Black men. It is concluded that *SES* has an effect on mental health status of Black men regardless of stress level.

Table 11

Mental Health Regressed on Socioeconomic Status and Stress as the Mediator

	1	2	3	4
SES	.187*** (.032)	.136** (.043)	.130** (.043)	.083* (.036)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		1.051 (1.785)	1.140 (1.802)	.522 (1.472)
36 – 40		.842 (1.939)	1.085 (1.980)	-.151 (1.620)
41 – 45		-.774 (1.893)	-.124 (1.980)	-1.574 (1.622)
Marital Status				
Single			--	--
Married		2.004 (1.468)	1.852 (1.474)	.769 (1.207)
Separated		-.956 (2.198)	-1.025 (2.207)	-1.186 (1.801)
Divorced		.239 (2.168)	.336 (2.186)	-.302 (1.785)
Widowed		5.193 (6.360)	5.845 (6.500)	1.839 (5.318)
Children				
None			--	--
1 Child		-.839 (1.841)	-.452 (1.864)	.812 (1.526)
2 Children		-.265 (1.801)	-.399 (1.810)	.993 (1.483)
3+ Children		-.748 (1.809)	-.658 (1.824)	1.029 (1.497)
Ever Been in Jail		-3.026* (1.345)	-2.806* (1.382)	-1.537 (1.134)
Clinic		1.202 (1.378)	1.226 (1.391)	1.971 (1.137)
<u>Health Behaviors</u>				
Smoke			-1.287 (1.437)	-.079 (1.178)
Drink Alcohol			.369 (1.250)	1.184 (1.023)
Med. Care in Past Yr			-1.641 (1.246)	-.866 (1.020)
Stress				-.707*** (.065)
R ²	.119	.172	.180	.456

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

Mental Health Regressed on Socioeconomic Status and Coping as the Mediator.

Model 4. The model was composed of all the demographic variables in the categories of basic demographic and health behavior, *coping*, and *SES* to predict mental health status of Black men. *SES* ($b=.059$, $SE=.037$, $p=.112$) was not a significant predictor of mental health status which was a change from models one through three, and *coping* ($b=.126$, $SE=.012$, $p<.001$) was the only significant predictor of mental health status, accounting for 43.5% of its variability ($R^2=.435$) (see table 12). Since *SES* change to be non-significant as a predictor of mental health status of Black men when *coping* was entered into the model, it is indicated that *coping* mediates in the relationship of *SES* and mental health status of Black men.

Table 12

Mental Health Regressed on Socioeconomic Status and Coping Mediator

	1	2	3	4
SES	.187*** (.032)	.136** (.043)	.130** (.043)	.059 (.037)
<u>Basic Demographic</u>				
<u>Age</u>				
25 – 30		--	--	--
31 – 35		1.051 (1.785)	1.140 (1.802)	-.111 (1.504)
36 – 40		.842 (1.939)	1.085 (1.980)	-.920 (1.658)
41 – 45		-.774 (1.893)	-.124 (1.980)	-1.393 (1.652)
<u>Marital Status</u>				
Single			--	--
Married		2.004 (1.468)	1.852 (1.474)	1.485 (1.226)
Separated		-.956 (2.198)	-1.025 (2.207)	-1.038 (1.836)
Divorced		.239 (2.168)	.336 (2.186)	1.202 (1.820)
Widowed		5.193 (6.360)	5.845 (6.500)	5.581 (5.407)

	1	2	3	4
Children				
None			--	--
1 Child		-.839 (1.841)	-.452 (1.864)	.990 (1.557)
2 Children		-.265 (1.801)	-.399 (1.810)	.007 (1.506)
3+ Children		-.748 (1.809)	-.658 (1.824)	.171 (1.519)
Ever Been in Jail		-3.026* (1.345)	-2.806* (1.382)	-1.536 (1.156)
Clinic		1.202 (1.378)	1.226 (1.391)	1.016 (1.157)
<u>Health Behaviors</u>				
Smoke			-1.287 (1.437)	-.814 (1.178)
Drink Alcohol			.369 (1.250)	1.192 (1.023)
Med. Care in Past Yr			-1.641 (1.246)	-2.111 (1.038)
Coping				.126*** (.012)
R ²	.119	.172	.180	.435

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

Mental Health Regressed on Socioeconomic Status and Both Stress and Coping as the Mediator.

Model 4. The model was composed of all the demographic variables in the categories of basic demographic and health behavior, *stress* and *coping* enter in the model at the same time, and *SES* to predict mental health status of Black men. *SES* ($b=.052$, $SE=.033$, $p=.122$) was not a significant predictor of mental health status which was a change from models one through three (see table 13). *Stress* ($b= -.489$, $SE=.070$, $p<.001$) and *coping* ($b= .080$, $SE=.013$, $p<.001$) were the only significant predictors of mental health status, accounting for 53.4% of its variability ($R^2=.534$) (see table 12). Since *SES* change to be non-significant as a predictor of mental health status of Black men when *stress* and *coping* were entered into the model together, it is

Table 13

Mental Health Regressed on Socioeconomic Status and Stress and Coping

	1	2	3	4
SES	.187*** (.032)	.136** (.043)	.130** (.043)	.052 (.033)
<u>Basic Demographic</u>				
Age				
25 – 30		--	--	--
31 – 35		1.051 (1.785)	1.140 (1.802)	-.086 (1.369)
36 – 40		.842 (1.939)	1.085 (1.980)	-1.051 (1.510)
41 – 45		-.774 (1.893)	-.124 (1.980)	-1.938 (1.506)
Marital Status				
Single			--	--
Married		2.004 (1.468)	1.852 (1.474)	.868 (1.120)
Separated		-.956 (2.198)	-1.025 (2.207)	-1.145 (1.671)
Divorced		.239 (2.168)	.336 (2.186)	.448 (1.661)
Widowed		5.193 (6.360)	5.845 (6.500)	2.906 (4.937)
Children				
None			--	--
1 Child		-.839 (1.841)	-.452 (1.864)	1.343 (1.418)
2 Children		-.265 (1.801)	-.399 (1.810)	.823 (1.376)
3+ Children		-.748 (1.809)	-.658 (1.824)	1.038 (1.388)
Ever Been in Jail		-3.026* (1.345)	-2.806* (1.382)	-1.117 (1.055)
Clinic		1.202 (1.378)	1.226 (1.391)	1.607 (1.057)
<u>Health Behaviors</u>				
Smoke			-1.287 (1.437)	-.150 (1.093)
Drink Alcohol			.369 (1.250)	1.459 (.950)
Med. Care in Past Yr			-1.641 (1.246)	-1.405 (.950)
Stress				-.489*** (.070)
Coping				.080*** (.013)
R ²	.119	.172	.180	.534

Note: (---) are excluded variables from the model, * $p < .05$, ** $p < .01$, *** $p < .001$

indicated that *stress* and *coping* together mediates in the relationship of SES and mental health status of Black men.

Summary

There were 251 questionnaires analyzed from both research sites for statistical analysis of correlations and regressions. The questionnaires had minimal randomly missing responses that allowed for missing values to be replaced with expected maximization values. Comparisons were made between the clinic and fraternity research sites on demographic data. Correlations were conducted on the first three research questions, which indicated a significant positive relationship between SES and physical and mental health status and between SES and coping. There was a significant negative relationship between SES and stress. A regression analysis with the demographic variables, stress, and coping were conducted to determine if the variables were significant predictors of physical and mental health status for Black men. Results indicate stress and coping were not significant predictors of physical health status of Black men. The variables stress and coping were found to be significant predictors of mental health status of Black men. An additional analysis was conducted to determine if stress and coping were mediators of SES and mental health status of Black men. Results indicated that the variable coping and variables stress and coping together are mediators of SES and mental health status of Black men, but the variable stress alone is not a mediator for SES and mental health status of Black men.

Chapter Five

Discussion

The purpose of this study was to explore stress and coping as factors that intervene in the health status of Black males. The findings indicate there are relationships between SES, stress, coping, and health status for Black males. The results also indicate that stress and coping are significant predictors of mental health status of Black males. This chapter discusses the findings, the limitations of the study, and the implications for future social work practice, policy, and research.

Findings

Demographic Variables.

Alcohol. A majority of the participants reported drinking alcohol, and the statistical analysis shows that alcohol consumption was positively related with the physical health status of Black males in that, those men who drink alcohol have better physical health status. Research has indicated that people who drink alcohol are more physically active than non-alcohol drinkers (Piazza-Gardner & Barry, 2012). Previous studies have also found that light to moderate drinkers have lower health care costs and better health status than non-alcohol drinkers (Williams, Peytremann-Bridevaux, Fan, Bryson, Blough, & et al., 2012; Green, Polen, Perrin, Leo, Lynch, & et al., 2004). This study provides information on the relationship between drinking alcohol and the physical health status of Black men; however, this finding must be scrutinized and interpreted with caution. The question used to obtain information about drinking alcohol was broad. On the question, it did not allow for an examination of whether the participants' drinking was current, the nature or times when the men consumed the alcohol, or how many

drinks a participant had over a period of time. Inferences cannot suggest that alcohol was a method of coping for the men, which helped to improve their physical health status. Because of the limited scope of the question, a relationship between drinking alcohol and the physical health status of Black men warrants further exploration.

Seeking Medical Care in Past Year. A higher than expected number of men reported receiving medical care in the past year. Previous studies indicate that participants within the same income brackets are less likely to seek medical care (Bonhomme, 2007; Ravenell & et al., 2006), due to lack of health insurance or knowledge of places to receive healthcare services without insurance (Williams, 2003). The comparatively high rate of participants in this study who recently sought medical care was unexpected and suggests there may be unaccounted for differences between the low-income Black males in this study and similar participants in other research studies that examined men seeking medical care. This unexpected finding can possibly be explained by the sample location at the clinic which may have skewed the data for the variable *received medical care in the past year*. This seemingly allowed for a higher than normal number of male participants receiving medical care in this study than reported by other studies with similar participants. The participants who were sampled from the clinic could have received medical care at the clinic at some previous time, or they could have been provided healthcare services information and locations to access healthcare services in the educational classes.

However, the fact that the majority of the fraternity participants had also sought medical care within the past year was also unexpected. The contribution to the a higher than normal number of the participants seeking healthcare could be due to the fraternity participants having an educational background, suggesting a heightened awareness of the importance to seek healthcare. Additionally, they were more likely to have healthcare coverage from their employers. The brotherhood and support among the

fraternity members could also have been a contributing factor to them seeking medical care. Research studies have found that men who have male peer support are more likely to have concerns about their health and seek medical care (Courtenay & Keeling, 2000; Tudiver & Talbot, 1999).

The question regarding medical seeking behavior was generic, not taking into consideration the reasons for them seeking medical care in the past. There was no relationship between medical care seeking behavior in the past year and the health status of Black men, leading to inferences that this sample population may not have characteristics similar to the general population. Since the sample of Black men surveyed in this study appeared to have better medical care seeking behavior than the general population of Black men, the resources held by or acquired the men in this study could help determine if such resources are influencing their health seeking behavior of Black men.

Research Questions.

Research Question One. Positive significant relationships between SES and physical health status of Black men and SES and mental health status of Black men were observed in the first correlation. The theory of fundamental social causes (Link & Phelan, 1995), which indicates fundamental social causes involves the resources a person possess, contributed by the SES, influences the health status of a person, provides reasoning for this relationship. The high number of participants seeking medical care in the past year is an indication that the participants had resources such as money or social connections to access health care. The sample from the clinic may have had resources such as knowledge of free to low cost medical care and information on the importance of seeking medical care. Knowledge is a resource that can influence the health of a person, as indicated in the theory of fundamental social causes.

Research Question Two. The finding for this research question suggests that higher SES is associated with lower levels of perceived stress level for Black men. Research has found that SES has a negative relationship with stress, but emphasis have been made that the relationship for Black men is positive (Williams, 2003). As indicated by the results, a positive relationship was not found for Black men in this study with SES and stress.

There were significant findings for Black men being married and mental health status, which lead to post hoc analysis, that provided more insight into the relationship between SES and stress for Black men. The men who identified themselves as married with their spouse currently working reported lower stress levels and higher scores on the mental health component of the health status survey than single men and married men whose spouse was unemployed or a homemaker. A difference in Black married men whose spouse works with the married men whose spouse did not work was income. The married men with working spouses had dual incomes, which possibly has some contributing factors in reduction of stress levels for those men. Since marriage has an effect on stress levels of Black men in this study, there needs to be an examination of the effects of marriage on the stress level of Black men.

Research Question Three. The positive relationship found between SES and coping abilities suggest for Black males that higher SES is associated with better coping abilities. There is limited research on the coping abilities of Black males (Cole, 2009), and the results from this study provide information on coping ability and SES, however, the results should be analyzed with discretion. The Black men from the clinic sample who reported lower levels of SES had coping abilities similar to the Black men in the fraternity sample who reported higher levels of SES. Coping abilities are developed from self-perceptions of capabilities learn by cognitive, social, and behavior skills as indicated in the self-efficacy theory of coping. The men from both sample locations may

have experience higher levels of cognitive and social skills, which influence higher coping abilities for both sample locations. Those skills could have been obtained by the fraternity sample due to higher education and brother hood networking, and the clinic sample from actively receiving education and learning social skills.

In addition, the findings lead to inferences that the instrument for coping may not have been the best instrument to measure coping ability for Black men. Chesney (personal communication, 2010) indicated the instrument had not been widely used with the population for this study, but was a reliable measurement of coping ability. Since the coping ability results for both sample locations were similar even with differences in income, and the instrument to measure coping had not been utilize in many studies with Black men, the results should be interpret with caution. Further research should examine the relationship between SES and coping of Black men with an instrument that has been used with a similar population to account for any differences.

Research Question Four. Coping was a mediator between SES and mental health status of Black men, and stress was only a mediator between SES and mental health status of Black men if coping was included as a mediator as well. The theory of stress and coping provides understanding to stress and coping working together as mediators for SES and mental health status of Black men. In this study, stress had a negative relationship with both SES and coping, and coping had a positive relationship with SES of Black men, leading to inferences that Black men may need more coping abilities to reduce stress levels. Stress was found to have an inverse relationship with coping ability in this study, suggesting coping acts as a defense mechanism of stress in the mediating relationship between SES and mental health status of Black men. Assumptions have been made that Black men with higher SES may have access to more coping resources, contributing to better coping abilities, which leads to presumptions that Black men with lower income need to obtain more resources to have

better coping abilities thus reducing stress levels possibly contributing to better mental health status. Further exploration on the effect coping has on stress for Black men should be examined to make a definitive determination on the effect.

In contrast to finding stress and coping as mediators of mental health status, the variables were neither predictors nor mediators of physical health status of Black men. The finding of stress not being a significant predictor of physical health status of Black men can be related to stress causing effects on health over a period of time. Studies have found that prolong stress has a negative effect on health status (Lantz, House, Mero, & Williams, 2005; Seyle, 1975). Since stress has long-term effects on health, the effect that stress has on the physical health status of Black men for this study may not have been illustrated at the time of this study contributing to non-significant findings between stress and physical health status. Coping may not have been a significant predictor of physical health status since it is a behavior linked in researched to mental health (Matud, 2004; Pearlin & Schooler, 1978) and often viewed as a buffer of stress examined in regards to the effect of coping on physical health status (Meyer, Schwartz, & Frost, 2008; Taylor & Stanton, 2007).

Since there is limited research on the associations between SES, stress, coping, and health status for Black males, the findings from this study contribute significant information to the literature on the health status of Black males. The findings indicate there are relationships between SES, stress, coping, and the health status of Black males, and that stress and coping are mediators between SES and mental health status. The study was exploratory, thus it provides background information for further research in an experimental design to make more determinations and contributions to the literature for the SES, stress, coping, and health status of Black males.

Limitations of the Research

This study was exploratory because limited research has been conducted on the relationship between SES, stress, coping, and the health status of Black males. Drs. C. Hill and J. Saint Onge, experts in research on Black males, were consulted while developing the plan for this study (personal communication, 2009). Advice was given regarding the theories and instruments that have been previously used with the study population. However, there were limitations to this study, which posed threats to internal and external validity.

Internal Validity. The study design was an exploratory design. An exploratory study has no comparison or control group, which poses a threat to the internal validity of the study. Since there was no control or comparison group, the impact of extraneous variables could not be controlled for in this study. There could not be an inference that the predictor variables produced the observed differences in the outcome variable. The results could only be used to explore associations between the predictor and outcome variables.

Another threat to internal validity was the personal history of the participants. Some participants may have recently experienced high-stress-level events such as a death, marriage, divorce, or job change, all of which could have contributed to higher perceived stress levels than the average response. The participants conducting the questionnaire after the fraternity meeting may also have had reduced stress levels from receiving social support during the meeting. This study did not allow an opportunity to control for any of these differences in stress events. The design of the study only allowed variables to be explored to obtain information that may be used for further research. Future studies may examine life stress issues to determine if they are the causes for participants who have higher perceived stress levels.

The instrument to measure SES was also a threat to internal validity. SES was determined by a composition of education and occupation. Factors such as social and cultural were not considered in measuring SES. Differences in social and cultural aspects among the participants could contribute to SES but were unknown and unaccounted for in this study.

External Validity. The threats to external validity were sample selection and the specificity of the variables. The sample for the study was a non-probability purposive sample, which was not generalizable to the population. The non-probability sample of subjects may have had specific characteristics that may not have been generalizable to the population. The sample may have had an inordinate amount of participants with higher education, income, emotional and financial support, better health, sought medical care, etc. than the general Black male population. This limitation could only be addressed by probability sampling, so a larger sample size than the one determined by the power analysis would help to increase the chances of identifying significant relationship between the variables. Unfortunately, a sample size greater than the power analysis was not reached for this study. In addition to the characteristics of the subjects not being generalizable to the overall population, the purposive sample was obtained by taking any voluntary participants. This method of participant selection did not control for investigator bias. Due to the sampling method, a sampling error or estimate of sample precision was not calculated for this study.

In addition to limitations of sample of subjects, participants from the fraternity may have passed the link to the electronic version of the questionnaire by e-mail to men who were not members of the fraternity or members in the college level of the fraternity. There were participants in the fraternity sample reporting no college degree, which could have been a result of those participants receiving the electronic version of the

questionnaire from fraternity members they may have known. Participants were informed the questionnaire was for members of the fraternity, but there was no control over the electronic version of the questionnaire being sent to other people via e-mail. Although the men who may have received the link from fraternity members may have met the criteria to participate in the study, they may not have had the qualities of the fraternity members such as SES.

Another limitation of the study is that the members of the fraternity may have had better coping mechanisms than the general population due to their involvement in social networks that provide social support. This may have caused their coping ability score to be higher than the general population. In addition, the low-income participants from the health clinic's educational classes may have had more knowledge about the importance of seeking medical exams. They may also have been more aware of locations where medical exams are available to low-income or under-insured individuals. This could have contributed to the higher number of participants in this study who reported receiving medical care within the past year when similar studies reported much different findings.

Although this study was an exploratory study and cannot make inferences about the cause for the health status of Black males not improving to the same degree as White men when they experience increases in SES, the findings make significant contributions to discovering factors that may influence the health status of Black males. Knowing the relationship between SES, stress, coping, and health status for Black males is only a beginning to determining factors that influence the health status of Black males from improving with increases in SES. The significant findings encourage future research on the predictor and outcome variables with a study design that may limit these threats to internal and external validity.

Implications for Social Work Practice, Policy, and Research

The results from this study have implications for social work practice, policy, and research. This study enhanced the understanding of the relationship between SES, stress, coping, and the health status of Black males, an important population with limited research on factors affecting their health status. Social workers should be concerned about the health status of Black males because studies have shown their health status is worse than White and Hispanic males (Ravenell & et al., 2006) and similar to the people living in poor, international countries (Gadson, 2006). The findings inferring that stress and coping are mediators of SES and mental health status of Black males provide opportunities for social workers to develop interventions and policies to help improve the health status of this population. The results also provide knowledge for further research on stress and coping for Black males.

Social Work Practice. The study findings reinforce the importance of helping people with low-income status manage their stressors and resulting stress. With more findings that indicate Black males of low-income status have higher levels of stress and less ability to cope with that stress, social workers in medical and community settings should work to develop coping interventions that will help low-income Black males reduce their stress levels in order to prevent the negative outcomes of stress (Littrell, 2008). Effective coping mechanisms may help the indigent population of Black males prevent or reduce high stress levels, thus possibly improving the mental health status of Black males.

In addition to social workers developing interventions for low-income Black males, social workers should assess the stressors for the middle-income Black males. With the knowledge that coping abilities improve with higher education and income, social workers should determine coping interventions that help middle-income Black males overcome the stressors they may encounter. Social workers should examine

social position and the stress experiences in those positions. The middle-income Black males may encounter stress that is different or additional to the stressors that low-income Black males encounter on a daily basis. Having the coping abilities to overcome the stressors that minimize the stress one may encounter with an increase in income could help the middle-income Black males reduce their stress levels and also improve their mental health status.

Social Work Policy. The data from this study can also be used to support the continuation of social workers developing and advocating policies that help reduce health disparities. Results indicating that stress has a negative impact on the mental health status of Black males can be used by social workers to support the policies that create access to health care providers and mental health services with knowledge and experience of working with Black males. Studies have shown that many Blacks do not seek services for mental and physical healthcare due to cultural biases of the treatment approaches, providers (Snowden, 2003; Copeland, 2005), and lack of resources or services (Bonhomme, 2007). Social workers need to promote the development and funding of culturally sensitive health care services for Black males so they feel comfortable seeking healthcare services. Social workers can work with Black males to overcome their reasons for not seeking mental health services by empowering them to advocate in the community, thus promoting awareness of men's health through education.

As well as advocating, social workers can also empower Black males to persuade their legislative representatives to advocate for the government funding of mental and physical health services and providers for Black males. Black males should be educated by social workers on the importance of voting and speaking with legislative representatives to make changes in the health care policies and services provided in their community. Participation of members from this population in advocating for the

need for change, with help from social workers, may get more public attention and funding for mental and physical health services that are better suited to this population. The promotion of diversity in the health care system, along with the implementation of diversity policies by social workers may also cause a change in Black males seeking both mental and physical health services, a change that could improve their overall health status.

Social Work Research. The results from this study yield information that contributes ideas for future social work research. This study is exploratory and provides basic knowledge on the relationships between SES, stress, coping, and the health status of Black males. Social workers in research should conduct this study with the same predictor and outcome variables, using a subjective measure of SES and a different instrument to measure coping. An objective measure of SES should also be utilized in the study to determine if there are any differences in the measurements as predictors of physical and mental health status of Black men. Researchers have indicated that the path that SES influences health status is not well-defined, but has shown income differences effect health status (Adler, Epel, Castellazzo, & Ickovics, 2000). Objective measures of SES as used in this study examine education, income, and occupation of the person, without considering a person's social or cultural perspective and any differences it may reflect on a person's SES. A subjective measures of SES, which considers a wide range of socioeconomic development (Singh-Manoux, Marmot, & Adler, 2005), such as social position, may be a better measure of SES for Black males. Additionally, a different instrument, which has been used in research studies with similar populations, to measure coping should be used in the study. A coping instrument that has been used with Black men will help to determine if there are any differences in coping ability and SES for Black men.

An experimental study design of this study also should be conducted to compare the relationship between the variables SES, stress, coping, and health status with other ethnicities and include a wider age range. The study could determine if a relationship between those variables exist, and if perceived stress levels and coping abilities among the ethnicities have any differences. It should also be determined if stress and coping are mediators between SES and mental health status for other ethnicities. The medical care seeking behavior should be examined in the study as well to determine if there are any differences among ethnicities for seeking medical care, and if there is a relationship with physical and mental health status among the ethnicities.

The results from this study can also be used to inform the development of a longitudinal design study to determine if stress and coping abilities may be factors contributing to the health status of Black males not improving with increases in SES. A longitudinal study that examines the coping ability and stress levels of a specific group of individuals who experience changes in SES over a period of time could determine if such changes actually have an effect on health status of Black men. A study focusing on the changes of the Black man's SES, stress, and coping abilities over a set time span will help to determine if the changes of stress and SES affect their health status. Social work researchers should also consider examining the relationship of marital status and stress of Black men in this study. The stress levels of Black men should be examined as the men's marital status changes along with SES. A longitudinal study will not only help to determine if changes in coping ability that may accompany changes in SES helps to improve the health status of Black males, but will also provide knowledge on Black men being married and any effect marriage may contribute to stress levels, coping ability, and the health status of the men.

There is further research needed to examine Black males and alcohol usage. A high percentage of Black males reported drinking alcohol from both research sites. This

study did not gather information on the reasons for alcohol usage or the number of drinks consumed daily. Future research should determine factors that influence Black males consumption of alcohol. The research should also examine if there are different reasons for the consumption of alcohol among the SES levels of Black males. Finally, a comparison should be made to determine if there are any differences in alcohol consumption among the different ethnicities.

Finally, the social workers in the practice setting should work with the social work researchers to determine effective coping mechanisms for Black males. Researchers could test the coping interventions developed by social work practitioners and develop an evidence-based intervention for effective coping mechanisms for Black males. Knowledge of effective coping interventions would make a valuable contribution to mental health interventions for Black males. An evidence-based intervention on coping for Black men would also be an asset to social work practice and research.

Conclusion

The health status of Black men in the United States is a social problem. Despite the advances in technology and efforts to eliminate health disparities between ethnic populations, Black men continue to exhibit signs of poor physical and mental health. Research needs to be conducted to determine factors that are influencing the health status of Black men. The findings of this study suggest a positive association between SES and physical and mental health status of Black men and SES and coping. A negative association was found between SES and perceived stress. Stress and coping were found to be mediators between SES and mental health status of Black men. Since the study was exploratory, the study provides information for future research to examine SES, stress, coping, and health status for Black men in an exploratory design, and to investigate other factors that are influencing the health status of Black males. Future

research on factors influencing the health status of Black men may lead to information to help improve their health status. Social workers should strive to determine effective coping mechanism for Black men and engage in research to determine factors to improve the health status of Black men.

APPENDIX A

Questionnaires

Hollingshead
Perceived Stress Scale
Coping Self-Efficacy Scale
SF 36 v2 Health Status
Demographic Sheet

HOLLINGSHEAD FOUR FACTOR INDEX OF SOCIAL STATUS

Please place an "X" in the appropriate spot to indicate your level of school completed and occupation level. If you are married, please place an "X" in the appropriate spot to indicate your spouse's level of school completed and occupational level.

LEVEL OF SCHOOL COMPLETED	YOU	SPOUSE
Less than 7th grade		
Junior high (9th grade)		
Partial high school (10th or 11th grade)		
High School Graduate		
Partial college (at least one year)		
College education (BA, BS degree)		
Graduate degree		

OCCUPATION	YOU	SPOUSE
Unemployed, fulltime student, homemaker		
Farm laborer, day laborer		
Unskilled worker, service worker		
Machine operator, semiskilled worker		
Skilled manual worker, craftsman, police and fire services, enlisted military and non-commissioned officers		
Clerical/sales, small farm owner		
Technicians, semiprofessional, supervisor, office manager		
Small business owner, farm owner, teacher, low level manager, salaried worker		
Mid-level manager or professional (architect, engineer, accountant, attorney), mid-sized business owner, military officer		
Senior manager or professional (physician, college professor, minister) owner or CEO of large business		

PERCEIVED STRESS SCALE

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

0= Never 1= Almost Never 2= Sometimes 3= Fairly Often 4= Very Often

- | | | | | | |
|--|---|---|---|---|---|
| 1. In the last month, how often have you been upset because of something that happened unexpectedly? | 0 | 1 | 2 | 3 | 4 |
| 2. In the last month, how often have you felt that you were unable to control the important things in your life? | 0 | 1 | 2 | 3 | 4 |
| 3. In the last month, how often have you felt nervous and "stressed"? | 0 | 1 | 2 | 3 | 4 |
| 4. In the last month, how often have you felt confident about your ability to handle your personal problems? | 0 | 1 | 2 | 3 | 4 |
| 5. In the last month, how often have you felt that things were going your way? | 0 | 1 | 2 | 3 | 4 |
| 6. In the last month, how often have you found that you could not cope with all the things that you had to do? | 0 | 1 | 2 | 3 | 4 |
| 7. In the last month, how often have you been able to control irritations in your life? | 0 | 1 | 2 | 3 | 4 |
| 8. In the last month, how often have you felt that you were on top of things? | 0 | 1 | 2 | 3 | 4 |
| 9. In the last month, how often have you been angered because of things that were outside of your control? | 0 | 1 | 2 | 3 | 4 |
| 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? | 0 | 1 | 2 | 3 | 4 |

COPING SELF-EFFICACY SCALE

When things aren't going well for you, or when you're having problems, how confident or certain are you that you can do the following:

Can
not do
at all

Moderately
certain can
do

Certain
can do

1 2 3 4 5 6 7 8 9 10

For each of the following items, write a number from 0 – 10, using the scale above.

When things aren't going well for you, how confident are you that you can:

1. Keep from getting down in the dumps. _____
2. Talk positively to yourself. _____
3. Sort out what can be changed, and what can not be changed. _____
4. Get emotional support from friends and family. _____
5. Find solutions by your most difficult problems. _____
6. Break an upsetting problem down into smaller parts. _____
7. Leave options open when things get stressed. _____
8. Make a plan of action and follow it when confronted with a problem. _____
9. Develop new hobbies or recreations. _____
10. Take your mind off unpleasant thoughts. _____
11. Look for something good in a negative situation. _____
12. Keep from feeling sad. _____
13. See things from the other person's point of view during a heated argument. _____
14. Try other solutions to your problems if your first solutions don't work. _____
15. Stop yourself from being upset by unpleasant thoughts. _____

16. Make new friends. _____
17. Get friends to help you with things you need. _____
18. Do something positive for yourself when you are feeling discouraged. _____
19. Make unpleasant thoughts go away. _____
20. Think about one part of the problem at a time. _____
21. Visualize a pleasant activity or place. _____
22. Keep yourself from feeling lonely. _____
23. Pray or meditate. _____
24. Get emotional support from community organizations or resources. _____
25. Stand your ground and fight for what you want. _____
26. Resist the impulse to act hastily when under pressure. _____

SF-36 HEALTH STATUS SURVEY INSTRUMENT

Please circle your response for each question.

1. In general, would you say your health is:

Excellent

Very Good

Good

Fair

Poor

2. Compared to one year ago, how would you rate your health in general now?

**Much better
now than
one year ago**

**Somewhat
better now than
one year ago**

**About the
same as one
year ago**

**Somewhat
worse now
than one
year ago**

**Much worse
now than one
year ago**

***The following questions are about activities you might do during a typical day.
Does your health now limit you in these activities? If so, how much?***

3. Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports.

Yes, limited a lot

Yes, limited a little

No not limited at all

4. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.

Yes, limited a lot

Yes, limited a little

No not limited at all

5. Lifting or carrying groceries

Yes, limited a lot

Yes, limited a little

No not limited at all

6. Climbing several flights of stairs

Yes, limited a lot

Yes, limited a little

No not limited at all

7. Climbing one flight of stairs

Yes, limited a lot

Yes, limited a little

No not limited at all

8. Bending, kneeling, or stooping

Yes, limited a lot

Yes, limited a little

No not limited at all

9. Walking more than a mile

Yes, limited a lot

Yes, limited a little

No not limited at all

10. Walking several hundred yards

Yes, limited a lot

Yes, limited a little

No not limited at all

11. Walking one hundred yards

Yes, limited a lot

Yes, limited a little

No not limited at all

12. Bathing or dressing yourself

Yes, limited a lot

Yes, limited a little

No not limited at all

During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

13. Cut down on the amount of times you spend on work or other activities.

**All of the
time**

**Most of the
time**

**Some of the
time**

**A little of the
time**

**None of the
time**

14. Accomplished less than you would like

**All of the
time**

**Most of the
time**

**Some of the
time**

**A little of the
time**

**None of the
time**

15. Were limited in the kind of work or activities

**All of the
time**

**Most of the
time**

**Some of the
time**

**A little of the
time**

**None of the
time**

16. Had difficulty performing the work or other activities (for example, it took extra effort)

**All of the
time**

**Most of the
time**

**Some of the
time**

**A little of the
time**

**None of the
time**

During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

17. Cut down on the amount of time you spent on work or activities

**All of the
time**

**Most of the
time**

**Some of the
time**

**A little of the
time**

**None of the
time**

18. Accomplish less than you would like

**All of the
time**

**Most of the
time**

**Some of the
time**

**A little of the
time**

**None of the
time**

19. Did work or other activities less carefully than usual

**All of the
time**

**Most of the
time**

**Some of the
time**

**A little of the
time**

**None of the
time**

20. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

Not at all Slightly Moderately Quite a bit Extremely

21. How much bodily pain have you had during the past 4 weeks?

None Very Mild Mild Moderate Severe Very Severe

22. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all A little bit Moderately Quite a bit Extremely

These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks.

23. Did you feel full of life?

All of the time Most of the time Some of the time A little of the time None of the time

24. Have you been very nervous?

All of the time Most of the time Some of the time A little of the time None of the time

25. Have you felt so down in the dumps that nothing could cheer you up?

All of the time Most of the time Some of the time A little of the time None of the time

26. Have you felt calm and peaceful?

All of the time Most of the time Some of the time A little of the time None of the time

27. Did you have a lot of energy?

All of the time Most of the time Some of the time A little of the time None of the time

28. Have you felt downhearted and depressed?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
----------------------------	-----------------------------	-----------------------------	---------------------------------	-----------------------------

29. Did you feel worn out?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
----------------------------	-----------------------------	-----------------------------	---------------------------------	-----------------------------

30. Have you been happy?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
----------------------------	-----------------------------	-----------------------------	---------------------------------	-----------------------------

31. Did you feel tired?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
----------------------------	-----------------------------	-----------------------------	---------------------------------	-----------------------------

32. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
----------------------------	-----------------------------	-----------------------------	---------------------------------	-----------------------------

How TRUE or FALSE is each of the following statements for you?

33. I seem to get sick a little easier than other people.

Definitely true	Mostly true	Don't know	Mostly false	Definitely false
------------------------	--------------------	-------------------	---------------------	-------------------------

34. I am as health as anybody I know.

Definitely true	Mostly true	Don't know	Mostly false	Definitely false
------------------------	--------------------	-------------------	---------------------	-------------------------

35. I expect my health to get worse.

Definitely true	Mostly true	Don't know	Mostly false	Definitely false
------------------------	--------------------	-------------------	---------------------	-------------------------

36. My health is excellent.

Definitely true	Mostly true	Don't know	Mostly false	Definitely false
------------------------	--------------------	-------------------	---------------------	-------------------------

DEMOGRAPHIC QUESTIONS**1. What is your age range?**

- A. 25-30
- B. 31-35
- C. 36-40
- D. 41-45

2. What is your marital status?

- A. Single
- B. Married
- C. Separated
- D. Divorced
- E. Widowed

3. Are you currently working/employed?

- A. No
- B. Yes

4. What is your yearly income range?

- A. \$0 - \$14,999
- B. \$15,000 – \$29,999
- C. \$30,000 - \$44,999
- D. \$45,000 - \$59,999
- E. \$60,000 - \$99,999
- F. \$100,000+

5. What do you consider your income status?

- A. Low income
- B. Middle-low income
- C. Middle income
- D. Middle-high income
- E. High income

6. How many children do you have?

- A. No children
- B. 1 child
- C. 2 children
- D. 3 children
- E. 4 children
- F. 5 or more children

7. Do you smoke?

- A. No
- B. Yes

8. Do you drink alcohol?

- A. No
- B. Yes

9. Have you ever been in jail?

- A. No
- B. Yes

10. Have you seen a doctor, nurse practitioner, or physician assistant in the past year for medical care?

- A. No
- B. Yes

Appendix B

Consent Document
Cover Letter

UNIVERSITY OF HOUSTON
COVER LETTER FOR RESEARCH

Dear Sir,

I am a doctoral candidate in the Graduate College of Social Work at the University of Houston. I am conducting a research study titled "Stress and Coping: Factors that Influence the Health Status of Black Men". This study is being used for my dissertation. The dissertation is chaired by Dr. Sheara Williams at the Graduate College of Social Work at the University of Houston.

The purpose of this research study is to explore how stress and coping may prevent the health status of Black men from improving as their income and social status increases.

Participation in this study is voluntary and requires the use of a computer. You will need to have Internet access to complete the questionnaires on an online tool named Survey Monkey. You may refuse to participate or withdraw from this study at any time without penalty. You also have the right to cancel your permission to use and disclose information collected about you at any time. If you withdraw from the research study, the researcher will not use any information collected from you before withdrawal.

There are no known risks associated with this research study. This study does ask questions about your occupation, education, stress, coping, and health status. Sample questions include:

- In the last month, how often have you felt nervous and stressed?
- Do you feel full of life?
- Compared to one year ago, how would you rate your health in general now?

If at any time you feel uncomfortable answering the questions, you may stop, and your information will not be used for the study. Participants completing the questions who feel distress should contact the Houston Crisis Hotline at 713-468-5463 for immediate assistance. If you would like more information on the topics discussed in this study, you may contact me.

A total of 400 men from 2 locations will be asked to participate in this study. You will be one of 200 participants to complete the online questionnaires on Survey Monkey. The questions on Survey Monkey are about income, social status, stress, coping style, and health status. Please do not include any personal information such as name, address, or phone number. The questions should take approximately 30 minutes to complete. After completing the questionnaires, you will be asked to click the "submit" button. If after completing the questions you decide that you do not want your results included in the research study, please exit the survey without clicking the "submit" button.

The results of this study may be published in professional and/or scientific journals. They may also be used for educational purposes or for professional presentations. However, no individual participant will be identified. If you have any questions, you may contact me at 713-743-8080 or tdcummin@mail.uh.edu. You may also contact Dr. Sheara Williams, faculty sponsor, at 713-743-8120 or swilliams3@uh.edu. Any

questions regarding your rights as a research participant may be addressed to the University of Houston Committee for the Protection of Human Subjects at 713-743-9204.

Sincerely,

Tawana Cummings, MA, LMSW, CHES

UNIVERSITY OF HOUSTON
CONSENT TO PARTICIPATE IN RESEARCH

PROJECT TITLE: Stress and Coping: Factors that Influence the Health Status of Black Men

You are being asked to participate in a research study conducted by Tawana Cummings. I am a PhD student in the Graduate College of Social Work at the University of Houston. This study is required to complete my PhD. The research is supervised by Dr. Sheara Williams at the Graduate College of Social Work at the University of Houston.

PURPOSE OF THE STUDY

The purpose of this study is to learn if and how stress, coping, social status, and income may prevent the health status of Black men from improving.

NON-PARTICIPATION STATEMENT

Your participation is voluntary and you are not required to sign this Informed Consent. You may refuse to participate at any time without penalty. You also have the right to stop participating in the study at any time and stop the researcher from using any information collected from you. If you cancel permission to use your information, the researcher will not use any information collected from you.

PROCEDURES

A total of 400 men from 2 locations will be asked to participate in this study. You will be one of 200 men asked to complete a paper questionnaire. As a participant of this research study, you will be asked to answer questions about social status, income, stress, coping style, and your health status. Please do not write any personal information on the questionnaires such as name, address, phone number, or e-mail address. The questions will take about 30 minutes to complete. After completing the questionnaire, please place it in the questionnaire box. If you have any questions at anytime, please see me. You may refuse to participate in the study at any time for any reason, and your information will not be used in this study.

CONFIDENTIALITY

The information you provide for this study will be unknown to the researcher because you will not write your name on any of the papers or questions you complete.

RISKS/DISCOMFORTS

There are no known risks linked to this research study. This study does ask questions about your job history, education, stress, coping, and health status. Here are examples of some of the questions:

- In the last month, how often have you felt nervous and stressed?
- Do you feel full of life?
- Compared to one year ago, how would you rate your health in general now?

If at anytime you feel uncomfortable answering questions, you may stop and your information will not be used for the study. Participants completing the questions who feel distress may ask to speak to a health professional at the clinic. In the event you feel distress after clinic hours, please contact the clinic hotline for assistance. If you would like more information on the topics discussed in this study, you may contact me.

BENEFITS

There are no direct benefits from participating in this study. Your answers may help researchers better understand how income, social status, stress and coping affect the health status of Black men ages 25 to 45.

ALTERNATIVES

Participation in this study is voluntary and the only other choice is non-participation.

PUBLICATION STATEMENT

The results of this study may be printed in professional and/or scientific journals. They may also be used for educational purposes or for professional presentations. However, names of participants will not be included.

If you have any questions, you may contact me, Tawana Cummings, at 713-743-8080 or tdcummin@mail.uh.edu. You may also contact Dr. Sheara Williams, faculty sponsor, at 713-743-8120 or swilliams3@uh.edu.

ANY QUESTIONS ABOUT YOUR RIGHTS AS A RESEARCH PARTICIPANT MAY BE ADDRESSED TO THE UNIVERSITY OF HOUSTON COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (713-743-9204).

Principal Investigator's Name: _____

Signature of Principal Investigator: _____

Appendix C

Missing Value Analysis

Scores on the questionnaires

Table 14

Demographic Questionnaire Missing Data Analysis (N=251)

	N	Missing	
		Count	Percent
Age	249	2	.8
Income yearly	247	4	1.6
No. of children	250	1	.4
Marital status	251	0	.0
Currently working	247	4	1.6
Income status	248	3	1.2
Smoke	250	1	.4
Drink alcohol	248	3	1.2
Been in jail	249	2	.8
Med. care in past yr	250	1	.4

Table 15

Perceived Stress Scale Missing Value Analysis (N=251)

	N	Mean	Std. Deviation	Missing		Expected Maximization Value
				Count	Percent	
pss1	251	1.91	2.203	0	.0	1.91
pss2	251	1.56	1.183	0	.0	1.56
pss3	251	1.78	1.053	0	.0	1.78
pss4	251	3.18	.986	0	.0	3.18
pss5	251	2.80	1.004	0	.0	2.80
pss6	250	1.26	1.145	1	.4	1.26
pss7	250	2.91	1.049	1	.4	2.92
pss8	250	2.96	.983	1	.4	2.96
pss9	249	1.59	1.071	2	.8	1.58
pss10	251	1.18	1.229	0	.0	1.18

Table 16

Coping Self-Efficacy Scale Missing Value Analysis (N=251)

	N	Mean	Std. Deviation	Missing		Expected Maximization Value
				Count	Percent	
cses1	251	8.10	2.108	0	.0	8.10
cses2	251	8.46	1.976	0	.0	8.46
cses3	251	8.29	1.907	0	.0	8.29
cses4	251	7.74	2.500	0	.0	7.74
cses5	251	8.05	2.210	0	.0	8.05
cses6	251	7.94	2.299	0	.0	7.94
cses7	250	7.95	2.355	1	.4	7.95
cses8	251	7.93	2.357	0	.0	7.93
cses9	251	7.14	2.597	0	.0	7.14
cses10	249	7.89	2.219	2	.8	7.90
cses11	250	8.00	2.174	1	.4	8.01
cses12	250	8.48	6.258	1	.4	8.49
cses13	250	7.98	4.878	1	.4	7.98
cses14	250	8.00	2.224	1	.4	8.01
cses15	250	7.86	2.330	1	.4	7.86
cses16	249	7.55	2.462	2	.8	7.56
cses17	249	7.36	2.447	2	.8	7.35
cses18	251	8.44	2.078	0	.0	8.44
cses19	249	7.74	2.393	2	.8	7.73
cses20	249	7.80	2.208	2	.8	7.80
cses21	251	8.48	6.096	0	.0	8.48
cses22	249	8.14	2.279	2	.8	8.15
cses23	250	8.84	2.168	1	.4	8.82
cses24	248	6.52	2.760	3	1.2	6.52
cses25	249	8.87	1.965	2	.8	8.88
cses26	250	8.07	2.238	1	.4	8.08

Table 17

Combined Sample Scores on the Questionnaires (N=251)

	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic
SES	6.00	66.00	39.52	17.05
Physical health	19.76	67.82	52.85	7.49
Mental health	17.04	64.47	49.29	9.24
CSES	55.00	260.00	205.96	40.70
PSS	.00	39.00	13.24	7.57

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EDUCATION

2008 – Present	Ph.D. Candidate, Social Work, University of Houston Houston, TX 77004 Anticipated Date of Graduation: May 11, 2012 Dissertation Topic: <i>Stress and Coping: Factors that Influence the Health Status of Black Men</i> Dissertation Committee Chair: Dr. Sheara Williams
2005 – 2007	MSW, Social Work, University of Houston
2001 – 2002	M.A., Interdisciplinary Studies, University of Texas at Dallas
1996 – 2000	B.S., Health, College of Education, University of Houston

LICENSURE/CERTIFICATION

Licensed Master Social Worker – Texas State Board of Social Work Examiners
Austin, TX

Certified Health Education Specialist – National Commission for Health Education
Credentialing
Whitehall, PA

RESEARCH INTEREST

Health disparities
Stress and coping interventions
Pregnant women adjustment to pregnancy complications and bedrest

RESEARCH EXPERIENCE

2011 – Present	<i>Principal Investigator</i> (Dissertation Chair: Dr. Sheara Williams) <i>Stress and Coping: Factors that Influence the Health Status of Black Men</i>
	Conducted an exploratory study to determine factors that may influence the health status of Black men. Recruited 251 Black men to participate in the study. The dissertation utilizes the theories of fundamental social causes, stress and coping, and

self-efficacy to explore the relationships between stress and coping and health status.

2008 – 2009

Graduate Research Assistant

Research Supervisor: Dr. Patrick Leung

Conduct literature search for writing of publications and grants. Conduct searches for grant funding opportunities. Write and submit protocols for Institutional Review Board. Analyze research data for studies. Coordinate and attend meetings with the research team.

2005 – 2007

Graduate Research Assistant

Research Supervisor: Dr. James Conyers

Conduct literature searches for historical publications. Coordinate information for book publication. Work with Organize and edit articles for publication. Provide support and coordination to professors for symposiums and conferences.

PRESENTATIONS

Balkan, B., **Cummings, T.***, Leal, R., Pappadis, M., Rose, A., & Walijarvi, C. (2009). Interdisciplinary and multidisciplinary research: Concepts and practice. Fifth Annual Doctoral Social Work Research Symposium of the University of Houston GCSW Doctoral Program & G.C.S.W. Alumni Association, March 5.

Cummings, T. (2010). Conceptual framework: Relationship between socioeconomic status, stress, coping style, and health status of African American men. Sixth Annual Doctoral Social Work Research Symposium of the University of Houston GCSW Doctoral Program & GCSW Alumni Association, March 4.

Cummings, T.* & Hill, C. . (2011). Health disparities for black men. Ninth Annual Disparities in Health in the Global Context Summer Workshop. UT MD Anderson Cancer Center, Houston, TX, June 20-25.

Cummings, T.*, Moss, M., Phoenix, J., & Trott, J. (2011). Panel discussion: Health, health disparities, & health policy. Ninth Annual Disparities in Health in the Global Context Summer Workshop. UT MD Anderson Cancer Center, Houston, TX, June 20-25.

TEACING INTEREST

Health disparities; Medical social work; Introductory research methods; Human behavior in the social environment; Health education

TEACHING EXPERIENCE

- 2010 - Present *Adjunct Instructor*
Graduate College of Social Work, University of Houston, Houston, TX
Course: *Disparities in Health in America*
- 2011 *Invited Guest Lecturer*
Graduate College of Social Work, University of Houston, Houston, TX
Instructor: Alexis Rose, MSW
Course: *Practice Evaluation*
- Provided an overview of measurement tools to evaluate practice in a variety of settings.
- 2009 *Invited Guest Lecturer*
Graduate College of Social Work, University of Houston, Houston, TX
Instructor: Sheara Williams, PhD
Course: *Assessment*
- Provided information on assessment tools and techniques to use with clients.

ACADEMIC SERVICE

- 2010 Planning Committee
Sixth Doctoral Social Work Student Research Symposium
Graduate College of Social Work, University of Houston
- 2009 Planning Committee
Fifth Doctoral Social Work Student Research Symposium
Graduate College of Social Work, University of Houston
- 2009 – 2010 Member
Editorial Board
Perspectives in Social Work, doctoral student edited online journal
Graduate College of Social Work, University of Houston

PRACTICE EXPERIENCE

Social Worker

- 2007 – Present *Renal Social Worker, DaVita Reliant Dialysis, Houston, TX*
Conduct psychosocial assessments on patients receiving dialysis treatment. Develop treatment and psychosocial goals for plan of care. Provide crisis intervention expertise as necessary as well as grief and bereavement counseling as needed. Coordinate and

participate in patient/family care conferences with multidisciplinary team. Make referrals for social services or psychological evaluation.

Health Educator

- 2003 – 2005 *Health Education Coordinator, UTHSC-Houston, Houston, TX*
Provides assistance with coordination of dental school neuroscience classes in order to ensure the achievement of the program goals and objectives. Advise students on educational or social issues which may affect their academic performance. Makes recommendations regarding the development and implementation of new policies and procedure to improve the dental school neuroscience program.
- 2003 – 2003 *Health Educator, Harris County Public Health & Environmental Services, Houston, TX*
Provides and ensures provision of health education activities at clinic sessions and within community. Manage, develop, and evaluate health education materials and programs. Provide adolescents with information and services to help risk behavior reduction. Write and submit grant applications for perspective programs and funding. Supervise and train VISTA staff members and volunteers.
- 2001 – 2002 *Health Education Coordinator, UT Southwestern Medical Center, Dallas, TX*
Coordinate programs and provide educational information for adolescents and adults on sexually transmitted diseases/HIV. Provide adolescents with help on risk behavior reduction. Write program materials and documents for presentations. Preparation of grant documents and research data.

COMMUNITY SERVICE

- 2009 - present Program Services Committee Member
March of Dimes, Houston, TX
Serve as an advisor on the committee for all program services conducted in the community by the agency.
- 2010 - present Antepartum Program Support Volunteer
March of Dimes, Houston, TX
Serve as a volunteer/social support provider to pregnant women on the Antepartum unit at Memorial Hermann Medical Center Hospital

AWARDS/HONORS

- 2008 – 2009 Doctoral Research Assistant, University of Houston, Graduate College of Social Work, Dr. Patrick Leung, Ph.D., Research Supervisor.
- 2005 – 2007 Graduate Research Assistant, University of Houston, College of Liberal Arts African American Studies, Dr. James Conyers, Jr., Ph.D., Research Supervisor.

PROFESSIONAL AFFILIATIONS

- 2007 – 2009 Council for Nephrology Social Workers