Examining the Direct and Interactive Effects of Positive Coping on Depressive Symptomology in African American Women

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Abstract

In the larger stress and coping literature, several studies have examined ethnic differences in stress experiences and coping behaviors (Plummer and Slane, 1996; Slavin et al., 1991; Brantley et al., 2002). However, these studies are often comparative in nature and fail to examine within group variation (Plummer & Slane, 1996; Slavin et al., 1991; Smith, 1985). Similarly, studies have also neglected to examine how African American women cope when confronted with certain stressors and the associated mental health outcomes. With this in mind, the goal of the current study is to close existing gaps by examining the relationship between routine stressors and depressive symptomology in African American women. The current investigation specifically focuses on three dimensions of stress (perceived stress, family stress, and racial discrimination), which have been suggested as common stressors for African Americans. The current study examined the direct and moderating effects of positive coping (religious, active, instrumental support coping) on depressive symptomology. One hundred seventy African American females (M=20.05; SD=2.34) who attended two universities in the Southeastern region of the United States were included in the present study.

Findings from the current study indicated that racial discrimination (β's ranging from .25 to .27 across all models, $p< .01$) and family responsibility (β's ranging from .20 to .26, $p< .05$) were associated with increased depressive symptoms. Additionally, testing the interactive effects of coping strategies on depressive symptoms, analyses revealed

two significant two-way interactions. One interaction examined the moderating role of religious coping on discrimination ($\beta = .079$, $p < .05$). For females experiencing less discrimination, greater religious coping was associated with fewer depressive symptoms. However, for females experiencing more discrimination, greater religious coping was associated with more depressive symptoms. The other significant two-way interaction examined the moderating role of instrumental support on family stress ($\beta = .147$, $p < .05$). Findings indicated that females with less instrumental support, family stress was unrelated to depressive symptoms. However, for females reporting greater instrumental support, high family stress was associated with more depressive symptoms.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter I

Introduction

African American women are exposed to a litany of stressors from more ubiquitous general stressors to more specific race-related stressors which studies have shown can have negative implications for mental health outcomes (Brown, Parker-Dominguez, & Sorey, 2000; Jackson, Phillips, Hogue, & Curry-Owens, 2001; Jackson, Hogue, Phillips, 2005; Dailey 2009; Murry et al. 2008; Thomas and González-Prendes 2009). In response, African American women have had to adapt to their environments by adopting personality traits and skills such as being independent and aggressive, which may serve as protective factors or buffers against their experienced stress (Mokgatlhe & Schoemen, 1998; Molloy & Herzberger, 1998). Unfortunately, with the exception of a few investigations (King, 2003; Moradi & Subich, 2003), prior studies have discussed the types of stressors African American women experience (Jackson et al., 2001, 2005; Klonoff, Landrine, & Ullman, 1999; Kwate, Valdimarsdottir, Guevarra, & Bovbjerg, 2003) and have failed to examine how African American women cope when faced with these stressors. As a result, our understanding of which coping mechanisms African American women utilize in response to their unique social situations and responsibilities as well as the effectiveness of these strategies is unknown.

Furthermore, African American women's absence in stress and coping research has led to relatively little being known about within-group differences of employed coping strategies and their impact on mental health outcomes. While the literature has

examined stressors such as discrimination and its influence on African American women, (Moradi & Subich, 2003; Krieger, 1990; Jackson et al., 2001), there still needs to be work to understand how the routine stressors they are likely to encounter impact their overall psychological well-being. With that in mind, the purpose of this study is to close existing gaps in the literature by exploring within-group differences in coping strategies employed and how those differences may impact psychological outcomes in a sample of African American female college students. Additionally, the current study will examine the moderating role of positive coping strategies (i.e. active, religious, instrumental support coping) to buffer the effect of stressors on psychological outcomes.

1.1 African American Women and Mental Health

It is well documented that data based on people receiving psychiatric treatment does not accurately reflect the rate of mental illness in the general population and sub-populations (Brown, 1990; Office on Women's Health, 2001). As a result, prevalence estimates among African American women may not be fully understood. The dearth of data on mental disorders in African American women is likely attributed to analyses rarely focusing on gender differences within racial groups (Brown & Keith, 2003). The few studies that have examined mental health in African American women have illuminated that they experience disproportionately high rates of stress-related health problems, including cardiovascular disease, adverse birth outcomes (Office of Women's Health, 2006), higher levels of emotional distress/depression (Mays, 1995; Fellin, 1989) and the lowest sense of general well-being (Gibbs and Fuery, 1994), of any other racial or gender group.

Research suggests that a substantial interplay exists between mental health and

physical health (Brown & Keith, 2003, p.10). Poor physical health can be distressing thus increasing the likelihood of poor mental health but also engaging in specific health-promoting behaviors (i.e. regular exercise, eating a balance diet) can positively affect mental well-being (Fox, 1999). Research has documented the negative association between obesity and mental health (Carpenter et al., 2000; Siegel, Yancey and McCarthy, 2000), which is particularly relevant to African American women given their greater prevalence of obesity (National Center for Health Statistics, 2000). Research suggests that eating problems and other negative lifestyle behaviors such as smoking and alcohol consumption may be used as coping strategies to deal with stressors (i.e. poverty, racism, sexual abuse), which in turn further creates health problems for African American women (Thompsom, 1996; Wienman et al, 1994).

In addition to physical health factors, other social and interpersonal factors impact mental health outcomes in African American women. Scarinici and colleagues (2002) found that income, age, marital status, and education level were associated with depression in African American women. Specifically, they found higher levels of depression in younger African American women and women who were not married, compared to those who were married or living with an intimate partner. Woods and colleagues (1999) found that depression among African American women was contributed to a number of negative life events, conflicted network size and low levels of religious activity. Research has shown that an increased risk for depression among African American women is associated with severe psychosocial stressors such as death of a family member, divorce, loss of employment or poverty (Brown et al., 1999; Wang et al, 2000).

1.2 Stress: Definitions and Frameworks

The term *stress* has been defined and conceptualized in a variety of ways in the larger literature (Mason, 1975, Lazarus & Folkman, 1984; Selye, 1993; McNamara, 2000). In the environmental model, stress is defined as external to an organism, including threats of immediate harm or aversive environmental conditions (Suldo et al, 2008; Seyle, 1993). This type of stress is usually measured using stress inventories, which are checklists of events believed to be taxing to an individual. Psychological models focus on the concept of perceived stress, which refers to interactions between an environmental precipitant (external stress); the physiological reactions of the body (distress); and a person's cognitive, emotional, and behavioral response to this interaction (Lazarus 1966, 1991, Lazarus and Folkman 1984, McGrath 1982). Stress is perceived when an external event causes aversive physiological and cognitive distress in an individual that exceeds his or her emotional and behavioral repertoire designed to negate the harmful effects of external stressors. The conceptualization of perceived stress allows for consideration that certain individuals may possess resources, such as coping, that allows them to experience external stress without experiencing compromised functioning. In recent years, this transactional perspective of stress (Lazarus & Folkman, 1984) has come to be regarded as the most widely accepted and cited definition of stress (Grant et al., 2003; Hess & Copeland, 2006).

Stress and Coping Model

Traditionally, stress research has been oriented toward studies involving the body's reaction to stress and the cognitive processes that influence the perception of stress (Selye, 1956; Mandler, 1982; Bernard & Krupat, 1994.) Pearlin and colleagues (1981)

expounded on early models by describing stress as a process, which has three conceptual domains with two types of mediating resources: social supports and coping. This model supports Folkman and Lazarus' stress and coping model (1983) by conceptualizing stress as having two components: appraisal, (i.e., individuals' evaluation of the significance of what is happening for their well-being), and coping, (i.e., individuals' efforts in thought and action to manage specific demands) (Lazarus, 1993). Folkman and Lazarus (1985) define stress as the relationship between the person and the environment that is appraised by the person as relevant to their well-being in which the person's resources are taxed or exceeded (p. 157). Stress is subjectively perceived as a discrepancy between environmental demands and biological, psychological, or social resources (Lazarus & Folkman, 1984). In the latest version of the Lazarus theory (1991), stress is regarded as a relational concept in that it is viewed as a relationship (transaction) between individuals and their environment. Psychological stress refers to a relationship with the environment that the person appraises as significant for his or her well-being and in which the demands tax or exceed available coping resources' (Lazarus and Folkman 1986, p. 63). An important element of this definition is the perception of environmental demands or threats and perceived ability to meet these demands, labeled *stress appraisal* (Lazarus & Folkman, 1984).

The concept of appraisal is a key factor for understanding stress-relevant transactions (Lazarus, 1966; Lazarus and Launier, 1978). This concept is based on the idea that emotional processes (including stress) are dependent on actual expectancies that persons manifest with regard to the significance and outcome of a specific encounter. This concept is necessary to explain individual differences in quality, intensity, and

duration of an elicited emotion in environments that are objectively equal for different individuals (Krohne, 2002). This theory distinguishes two basic forms of appraisal, primary and secondary appraisal (Lazarus, 1966). Primary appraisal concerns whether something of relevance to the individual's well-being occurs. It is made when the individual makes a conscious evaluation of an event as to whether it is a harm, threat or challenge (Lazarus, 1966). Secondary appraisal concerns coping options. This appraisal takes place when the individual asks him/herself "What can I do?" by evaluating the coping resources around him/her (Naughton, 1977). Within primary appraisal, three components are distinguished: goal relevance, goal congruence, and type of ego-involvement. Goal relevance describes the extent to which an encounter refers to issues about which the person cares. Goal congruence defines the extent to which an episode proceeds in accordance with personal goals. Type of ego- involvement designates aspects of personal commitment such as self- esteem, moral values, ego-ideal, or ego-identity.

1.3 African American Women and Stress

Studies have consistently linked stress to such negative mental health outcomes as anxiety, depression, and aggression (Jaser et al., 2005), substance abuse (Chassin et al., 2003), and compromised life satisfaction (McKnight, Huebner, & Suldo, 2002). Researchers and theorists have documented that African American women may become depressed in response to their stressful psychosocial environments (Barbee, 1992; A. Brown, Brody, & Stoneman, 2000; Geronimus, 1996). African American women are often involved in multiple roles as they attempt to survive economically and advance through mainstream society (Jones & Ford, 2008). Studies of African American women have shown that physical inactivity, financial strain, low social support, and stressful life

events, such as occupational stress, family life burden, violence, and poverty, are associated with depressive symptoms (Kessler, 2003; Israel, Farquhar, Schulz, James, & Parker, 2002; K. A. Brown, Parker- Dominguez, & Sorey, 2000; Gibbs & Fuery, 1994). For African American women, these factors intensify the amount of stress in their lives and can erode their self-esteem, self-efficacy, and health (Warren, 1994). Although psychosocial risk factors increase the risk of psychological distress for all women, they are particularly salient for African American women who may experience multiple effects of these factors at any given time. It is the cumulative stress that takes a toll on the strengths of African American women and can erode their emotional and physical health (Warren, 1994). Understanding and responding to mental health problems in African American women has historically been difficult because African American women tend to minimize the serious nature of their problems. Depression is often perceived as the "blues" or as a necessary condition of life that must be endured, or they fear being stigmatized as insane and therefore do not seek professional help (Office of Women's Health, 2001, p. 56).

African American women occupy a unique social position in that they are considered at-risk for poor mental health outcomes while simultaneously being considered resilient to their environments. The literature suggests that due to their cultural and social context, African American women developed a combination of personality traits in order to better manage their every day struggles and hardships (Harris, 1996; Belgrave, 2007). Studies have consistently shown that African American women often measure as being androgynous which is characterized by a combination of relatively high masculine (i.e. independent, aggressive, confident) and feminine traits (i.e.

nurturing, emotionally expressive, dependent) (Bem, 1985; Belgrave, 2007; Harris, 1996; Ladner, 1972; Binion, 1990). This combination of personality traits is said to serve as a buffer to stressful events for African American women by providing them with a repertoire of coping strategies to utilize.

African American women purportedly develop a superwoman schema, which can serve as a risk or protective mechanism to developing mental disorders. Subscribing to the superwoman schema entails taking on the roles of mother, nurturer, and breadwinner out of economic and social necessity (Harris- Lacewell, 2001; Mullings, 2006). The superwoman role has been perceived as a positive attribute for African American women by contributing to the survival of the African American population (Mullings, 2006; Angelou, 1978; Giovanni, 1996). African American women have been acclaimed for their strength (i.e. resilience, fortitude, and perseverance) in the face of societal and personal challenges (Banerjee & Pyles, 2004; Cutrona, Russell, Hessling, Brown, & Murry, 2000; Davis, 1998). It can be argued that in lieu of this survival mechanism, African Americans might not have endured and overcome tremendous historical hardships. However, research suggests that the superwoman role may have detrimental effects on African American women's mental health outcomes. Woods-Giscombe (2010) conducted a study examining the impact the superwoman role on African American women's well-being. Participants reported that the superwoman role had benefits such as preservation of self, family and community but the role also had liabilities such as relationship strain, stress-related health behaviors, and stress embodiment. Specifically, women discussed stress-related health behaviors such as emotional eating, smoking, dysfunctional sleep patterns (e.g., regularly staying up late to finish tasks), and

postponement of self-care.

Social Support Network Stress

Hall (2010) found that the multiple acute and chronic stressors that were identified by African American women as the most salient were the stressors associated with time commitments in balancing work and family responsibilities, role strain, and financial stress. Additionally, African American women's socialization as nurturers who provide emotional and instrumental care to others makes them especially vulnerable to "network stress" that affects family members and friends (Kessler & McLeod, 1984; Thoits, 1991). Social support networks of low-income African American women may not buffer them against stress and may contribute to a ''contagion of stress'' if members of their networks are also experiencing a number of financially related life events and stressful ongoing conditions (Hamilton-Mason et al, 2009).

Using data from the National Survey of Black Americans, Neighbors (1997) reported that relationships with family and friends are sources of stress when they faced stress situations or when these relationships were conflicting. Women were also more likely than men to report an interpersonal problem as causing a great deal of stress. Specifically, women reported more stress from family-related problems and conflictual relationships. Gray and Keith (2003) found that African American women were more likely to experience depressive symptoms if they perceived their network members to be critical and demanding (Gray and Keith 2003). These findings suggest that there is a cost to overall mental health by subscribing to the superwoman role and having taxing social support networks. The legacy of strength in the face of stress among African American women may contribute to the current health disparities that African American women

face.

Race-Related Stress

Chronic stressful environmental conditions, such as poor housing and discrimination, as well as acute stressors, such as crime and violence, often accompany financial stress. Using data collected from 323 African American women, Lawson, Rodgers-Rose, and Rajaram (1999) found that 70 percent of women reported that they experienced racial discrimination frequently in various settings. In a study with 481 African American women, Gary and colleagues (1989) found that 20 percent of the women reported racial discriminatory experiences within the past month in their day-to-day lives. In response to questions specifically about daily problems on their job due race, 16.2 percent believed that problems on the job were associated with their race. Using data collected from 331 African American women, Schulz and colleagues (2000) found that the majority (81.2%) of the sample reported experiencing everyday types of racial discrimination.

Examining gender differences in race and gender discrimination in African American college students, Mays and Cochran (1998) found that racial and ethnic discrimination occurred more often than did gender discrimination for African American women. African American women in the study also perceived more race-based discrimination than did African American men and the discriminatory events appeared to be more upsetting for African American women. Although, discriminatory experiences are often touted as rarely occurring, research suggests that it may be a more routine stressor for African American women. Using data collected from 323 African American women, Lawson, Rodgers-Rose and Rajaram (1999) found that 70 percent of women

reported that they experienced racism all the time. Specifically, they encountered racism in medical visits, bank transactions, hotel accommodations and retail stores. Sander-Thompson (1996) found that the chronic stress of everyday discrimination is more detrimental to mental health and physical health of African Americans. Taken together, these studies suggest that racial discrimination is a pervasive and ubiquitous stressor in the lives of many African American women.

1.4 Coping

Current stress models have introduced coping as a means to combat stress (Folkman & lazarus, 1984; Cohen & Mckay, 1984; Cohen & Wills, 1985). Coping is the process of attempting to manage the demands created by stressful events that are appraised as taxing or exceeding a person's resources (Lazarus & Folkman 1984). These efforts can be both action-oriented and intrapsychic; they seek to manage, master, tolerate, reduce, or minimize the demands of a stressful environment (Lazarus & Launier 1978, p. 311). Coping refers to a variety of cognitive and behavioral strategies individuals use to manage their stress (Folkman & Moskowitz 2004). There are two general types of coping: emotion-focused and problem-focused (Carver et al, 1989). Emotion-focused coping is aimed at reducing or managing the emotional distress that is associated with (or cued by) the situation but not actually trying to remove the stressor (Folkman & Lazarus, 1988). Emotion-focused coping involves the individual regulating their emotions as a way of adapting to their stress. Problem-focused coping is aimed at problem solving or doing something to actually alter the source of the stress Folkman & Moskowitz, 2004; Folkman & Lazarus, 1984).

In stress and coping theory (e.g., Lazarus & Folkman 1984; Cohen and Mckay

1984; Cohen & Wills 1985), cognitive reappraisal processes regarding a stressful

situation are considered important antecedents to coping processes. The coping process is

initiated in response to the individual's appraisal that important goals have been harmed,

lost, or threatened (Folkman & Moskowitz, 2004). These appraisals are characterized by

negative emotions that are often intense. Coping responses are thus initiated in an

emotional environment, and often one of the first coping tasks is to down-regulate

negative emotions that are stressful and may be interfering with instrumental forms of

coping. Emotions continue to be integral to the coping process throughout a stressful

encounter as an outcome of coping, as a response to new information, and as a result of

reappraisals of the status of the encounter. If the encounter has a successful resolution,

positive emotions will predominate; if the resolution is unclear or unfavorable, negative

emotions will predominate. To date, emphasis has been given to negative emotions in the

stress process (Lazarus & Moskowitz, 2004). The contextual approach to coping that

guides much of coping research states explicitly that coping processes are not inherently

good or bad (Lazarus & Folkman 1984). Instead, the adaptive qualities of coping

processes need to be evaluated in the specific stressful context (i.e. coping-environment

fit) in which they occur. A given coping process may be effective in one situation but not

in another, depending, for example, on the extent to which the situation is controllable.

1.5 Coping Strategies and Mental Health

Coping strategies are defined as ''constantly changing cognitive and behavioral

efforts to manage specific external and internal demands that are appraised as taxing or

exceeding the resources of the person'' (Lazarus & Folkman, 1984, p. 141). Coping has

been viewed as having two major and widely recognized functions (see Folkman &

Lazarus, 1980): the regulation of distressing emotions (emotion-focused coping) and actively doing something to change the problem causing the distress (problem-focused coping). The current literature supports the link between coping strategies and mental health outcomes (Aldwin, 1999; Lazarus & Folkman, 1994; Zeidner & Saklofske, 1996). Certain coping strategies are evidenced to be more adaptive than others. Problem focused coping, which is attempting to remove a stressor by altering the situations, or environment is considered positive because it allows for identification of goals and allows the individuals to feel a sense of mastery and control (Folkman & Moskowitz, 2000; Nolen-Hoeksama, 1987). Problem focused coping is often seen as a more masculine and adaptive approach to coping and it is used less by women. Research suggests (Folkman & Moskowitz, 2004) that problem-focused coping is related to lower rates of depression, which is often cited as an explanation as to why depression is higher in women. Positive distraction, which is a problem-focused coping strategy, is associated with better social functioning and less depression. Not to be confused with negative distraction, this involves reorienting oneself to something negative in order to get your mind off the current stressor.

Emotion-focused coping involves attempting to manage the emotions associated with a stressor, not trying to remove the stressors, as in problem-focused coping (Lazarus, 1980). This type of coping involves the individual regulating their emotions as a way of adapting to their stress. Emotion-focused coping is considered a more feminine coping strategy (Folkman & Lazarus, 1988). While emotion-focused coping may not be directly linked to depression, literature suggests that an individual who uses this approach is more vulnerable to depression than an individual who uses problem-focused coping (Kasch et

al., 2001; Nolen-Hoeksama, 1987). In addition, emotion-focused coping is associated with an increase likelihood of alcohol abuse and alcohol related problems (Tennen, Affleck, Armeli, & Carney, 2000). Rumination, which is an emotion-focused coping strategy, involves directing attention inwardly toward negative feelings and thoughts. Individuals who ruminate tend to focus on the causes and consequences of their stressors on themselves. Rumination has consistently been linked to longer depressive episodes and more severe depression (Kasch et al., 2001). Rumination has a strong relationship with depression and is considered to be a cognitive risk factor for the development of depression (Lam et al, 2003; Nolen-Hoeksama, 1987).

1.6 Coping Strategies for African American Women

Although, African American women are experiencing disparities in physical health, overall well-being and exposure to stress, few studies have look specifically at how stress impacts psychological outcomes and the coping strategies African American women use (Cockerman, 2002; Redmond, 1988; Taymor Gibbs & Fuery, 1994). Unfortunately, the few studies that have examined the types of coping strategies used by African Americans are often comparative in nature and fail to explicate within group differences (Plummer & Slane, 1996; Slavin et al., 1991; Smith, 1985). The examination of coping in both racially stressful situations (Plummer & Slane , 1996) and non-racially stressful situations (Brantley, O'Hea, Jones & Mehan, 2002) demonstrate ethnic differences in coping strategies used. Specifically, evidence suggests that African Americans are significantly more likely to utilize both problem-focused and emotion-focused coping compared to European Americans (Brantley, O'Hea, Jones & Mehan, 2002; Plummer & Slane, 1996).

Using a sample of African American and Caucasian college students, Plummer and Slane (1996) found that African American students used problem-focused and emotion-focused coping significantly more than Caucasian students when faced with race-related and general stressors. However, racial stress elicited significantly less emotion-focused coping than race related stress. African Americans also used more types of coping strategies in response to stress. Given the higher and more frequent levels of stress that African Americans experience compared to Caucasians, they may be more practiced and more flexible in coping with stress. Similarly, Brantley and colleagues (2002) found that that African Americans reported using all coping strategies (emotion- and problem- focused) significantly more than a Caucasians in the sample. One explanation for this finding is that minority samples report a great number of chronic, daily stressors (Scarinci et al., 1999). As previously discussed, high levels of stress may call for a wider range and greater use of coping strategies (Plummer & Slane, 1996; Smith, 1985)

One of the coping strategies most often used by African Americans is positive reappraisal. African American's more frequent use positive reappraisal, which involves focusing on personal growth or meaning, may be related to spirituality and religious beliefs (Jagers & Smith, 1996; Landrine & Klonoff, 1996). Spirituality and prayer are sources of emotional and moral support, and they are also primary coping strategies used by African American women (McAdoo, 1995). African Americans report more use of religious resources as coping techniques and demonstrate higher levels of both public (e.g., church attendance) and private (e.g., prayer) religious behaviors when compared to Caucasian American (Chatters, Taylor, Bullard, & Jackson, 2009; Chatters, Taylor,

Jackson, & Lincoln, 2008; Harrison, Koenig, Hays, Eme-Akwari, & Pargament, 2001;

Taylor, Chatters, & Jackson, 2007; Taylor, Chatters, & Levin, 2004). Utilization of

religious coping is particularly prevalent in the southern region of the United States.

Chatters et al. (2008) reported that African Americans residing in the Southern region of

the United States are more likely than those in other regions of to endorse religious

coping in response to stress.

Mays and colleagues (1996) found that Black women who lived in the south were

less likely to use private therapists than were women in other parts of the country. Black

women often rely on Black churches to provide emotional, economic, and social support

in addition to religious and spiritual guidance (Caldwell, 2000; Mattis and Jager, 2001;

Thompson and McRae, 2001; Taylor and Chatters, 1988). Life stress has been found to

be inversely related to spiritual health in African American women (Brown, Parker-

Dominguez, & Sorey, 2000; Handal, Black-Lopez, & Moergen, 1989). In addition,

spirituality and religion provide more than comfort and protection from distress (Mattis,

2002). Spirituality has been shown to assist African American Women in gaining insight

into problems, confronting and overcoming physical limitations, resolving tension,

identifying purpose and destiny, uncovering lessons from challenging experiences and

accepting reality (Mattis, 2002; Bowen-Reid & Harrell, 2002). These findings suggest

that spirituality based coping can be conceptualized as a type of both emotion-focused

and problem-focused coping.

In the larger literature, religious coping is conceptualized as having 3 distinct sub

category styles: self-directing, collaborating, and deferring (Parament et al., 1998; Wong-

McDonald & Gorsuch, 2000). Self-directing coping style is characterized by active

participation in problem solving with minimal involvement with a higher power. Self directed coping occurs when the individual is active and God is primarily passive: "I solve my problems on my own". A collaborative coping style is characterized by a cooperative relationship with God in which the individual is in an active partnership with God to solve problems. Deferring coping is characterized by an individual waiting passively for God to solve his or her problem in life: "God will fix my problems without me doing anything" (Parament, 1998).

Several studies have examined the relationship between the various types of religious coping and mental health outcomes (Gray & Molock, 1999; Fabricotore et al., 2004; Gilner, 2004). Gray and Molock (1999) found that among college students, collaborative religious coping styles were associated with lower levels of hopelessness and suicide ideation than self-directing or deferring style coping. They also found that self-directing coping styles were associated with suicide ideation. Fabricotore, Handal, Rubio and Gilner (2004) found that collaborative religious coping mediated the relationships of religiousness to well-being and distress in a sample of undergraduates. Across several studies, collaborative religious coping has been found to be associated with increased optimism and decreased depressive affect and stress (Ai, Peterson, & Huang, 2003; Bickel et al., 1998; Corbett, 1999; Harrison et al., 2001; Laurencelle, Steven, Schwartz, 2002; Murphy et al., 2000; Pargament et al., 1988) and positive health outcomes in the face of negative events (Pargament et al., 1990).

Historically, the Black church has fulfilled several important roles for African Americans. Specifically, the Black church has served as a primary source of informal social support and a range of prevention and treatment-oriented programs that focus on

improving the overall well being of the African American population (Blank, 2002; Eng et al., 1985; Caldwell, 1994). An emerging body of research examines the role of church members in the informal social support networks of African Americans (Taylor & Chatters, 1988; Taylor, Chatters & Jackson, 1997). This research indicates that many African Americans receive various forms of support from their church members include advice, encouragement and prayer. Studies indicate that religious involvement is positively associated with life satisfaction, self-esteem and well-being (Ellison, 1993; Thomas & Holmes, 1992) and is related inversely to depression and distress (Brown et al, 1990).

Although, religion has been linked to positive mental health outcomes, studies have also found that mental health help- seeking behaviors are often discouraged in the Black church (Blank, Mahmood, Fox, & Guterbock, 2002; Molicca et al., 1986; Veroff et al, 1981). In a study examining links between the black church and formal systems of care, Blank and colleagues (2002) found that 84.7% of respondents (clergy) reported making less than 10 referrals to formal services in the last year. Similarly 82.9% of congregants surveyed reported receiving less than 10 referrals in the past year. Since clergy are often well revered in the community, they could work with community practitioners to dispel myths around mental illness and seeking mental health support. This collaboration could help to normalize seeking formal support for depressive symptoms or just as a resource to deal with frequent stressors. Perhaps African Americans would be better served by utilizing religious forms of social support initially and formal systems of care when more specialized services are warranted.

For African American women, prayer, spiritual beliefs, and religiosity are central coping strategies (Mattis, 2002; Shorter-Gooden, 2004). Although organized religious institutions serve as sources of formal and informal support (Taylor & Chatters, 1986), many African American women are more likely to use their religiosity and prayer to cope with stress. African American women use formal religious involvement and private devotional practices (e.g., prayer) to negotiate a range of adversities including race, class, and gender oppression (Dodson & Townsend-Gilkes, 1986; Grant, 1989; Higginbotham, 1997; McKay, 1989; Mattis, 2001), family and parenting stress, financial stress, illness, psychological distress, and a vast array of daily hassles (Baer, 1993; Brodsky, 2000; Dull & Skokan, 1995; Ellison, 1997; Handal, Black-Lopez, & Moergen, 1989; McAdoo, 1995; Neighbors, Jackson, Bowman, & Gurin, 1983; Neighbors, Musick, & Williams, 1998; Nelson, 1997; Woods, Antoni, Ironson, & Kling, 1999). In fact, regardless of their level of involvement in organized religious life, African American women tend to use prayer as the primary means of coping with hardship (McAdoo, 1995; Neighbors et al., 1998).

Several studies (e.g., Shorter-Gooden, 2004; Utsey, Ponterotto, Reynolds, & Cancelli, 2000) suggest that African American women commonly use passive and avoidant strategies to address race-related experiences. Brantley and colleagues (2002) found that distancing, minimization, and avoidance are also forms of coping that are used by African American women in response to stress. Distancing and avoidant coping, which are usually identified as passive forms of coping, can have both adaptive and detrimental effects. Krieger (1990) found that African American middle-aged women who responded by keeping quiet about or accepting unfair treatment were more likely to be at risk for hypertension than African American women who used more active coping

responses. Also, Harburg, Blakelock and Roeper (1979) found that passive coping styles were related to higher blood pressure when compared to a more reflective coping style (assertively and calmly using rationale to resolve conflict). Despite negative outcomes associated with the use of distancing, avoidance, or repressive coping, these approaches may have emotionally adaptive qualities. Individuals who are faced with stressful situations that cannot be resolved through the use of more active problem-solving techniques may use passive forms of coping to manage stressors (Smyth & Yardani, 1996). In lower control situations (i.e. institutional racial, gender or class discrimination) individuals are less likely to use problem-focused coping (Hall, 2010; Brantley et al., 2002; Folkman & Lazarus, 1988) and are more likely to use distancing and avoidance coping strategies. It has been suggested that African American women's use of avoidance coping is related to their adherence to a "strong Black Woman" role (Hooks, 1993) commonly labeled as the "Superwoman Schema." African American women feel obligated to remain silent about their feelings of stress or vulnerability in order to project an image of strength for their families and communities (lovejoy, 2001). Verbalization of emotional stress or seeking professional mental health counseling may be interpreted as a sigh of weakness or as a failure to uphold their image (Curphey, 2003).

1.7 Coping Strategies as a Moderator

Several studies have looked at coping strategies as a moderator between stress, psychological well-being and health outcomes (Greer & Brown, 2011, Greer, 2010; Qiu & Yan, 2009; Suldo et al., 2008, Krieger, 1990) Moderation implies that the causal relation between two variables changes as a function of the third variable. In general terms, a moderator (coping strategies) buffers or reduces the impact of stress on well-

being (e.g. depression). Greer (2011) evaluated the moderating effect of culture-specific coping strategies to understand the relationships between race- and gender-based discrimination and psychological symptoms for African American women. She found that race and gender discrimination were associated with increased psychological symptoms but no moderating effect of coping strategies was found. As suggested by the contagion of stress notion (Hamilton-Mason et al., 2009), seeking advices from equally stressed social support groups may have an accumulative effect on the impact of stress experienced by African American women.

Social support networks for African American women may not buffer against stress if network members are also experiencing a number of stressors in their own lives. Examining the relationship between perceived stresses and internalizing symptoms, Suldo and colleagues (2008) found that coping styles (i.e. anger and positive appraisal) moderated the influence of stress on global life satisfaction and internalizing symptoms of psychopathology. Specifically, they found that as stress increases, high-achieving students who use anger coping are more likely to experience internalizing disorders (e.g., depression, anxiety, somatic complaints). They also found that students who reported using fewer positive appraisal coping behaviors (e.g., thinking about the good things in life) showed sharper declines in life satisfaction as perceived stress increased compared to students who reported using this coping strategy more frequently.

Among Black women residing in the United States, Krieger (1990) found that passive responses to racism were associated with high blood pressure, while the use of more direct approaches, such as talking to others or taking action, was related to lower blood pressure levels. Budescu and colleagues (2011) found that kin social support

moderated the association of poverty-related stress with smoking and drinking in an African American female sample. Specifically, women with higher levels of kin support, the positive association of neighborhood crime and drinking was less apparent compared to women with low support. Although the data is somewhat mixed, taken together, these studies suggest that more active forms of coping are associated with better mental health outcomes than more passive forms of coping in response to stressors.

1.8 Goals of the Current Study

The current study attempts to close existing gaps by examining the relationship between routine stressors and depressive symptomology among a sample of African American women. The current investigation specifically focuses on three dimensions of stress (family, racial discrimination and perceived stress), which have been suggested as common stressors for African American women. We expect that increased family responsibility, racial discrimination and perceived stress to be associated with decreased psychological functioning. Additionally, utilizing the stress and coping framework (Folkman & Lazarus, 1984) this study examines positive coping as a moderator of the relationship between stressors and depressive symptomology. The specific hypotheses for this investigation are as follows:

Hypothesis 1: Greater family responsibility, perceived stress and racial discrimination will be associated with decreased psychological functioning (increased depressive symptoms).

Hypothesis 2: Coping strategies will moderate the relationship between stressors and depressive symptoms in our African American female sample. We posit that religious coping, active coping and instrumental support coping will buffer the relationship between stress and African American females' depressive symptomology.

Chapter II

Methods

2.1 Participants

This study is part of a larger, university-based investigation exploring youths'

views about adult responsibilities, including familial responsibilities, perceived gender

roles, beliefs about community involvement and career-related/educational goals.

Additionally, this investigation explores contextual stressors (e.g. school/work stress;

encounters with racial discrimination; family stress) that may adversely influence youth

functioning and developmentally appropriate protective factors (e.g., social support;

coping behaviors). One hundred seventy African American students who attended two

Universities in the Southeastern region of the United States were included in the present

study. The first site was at a predominantly Caucasian liberal arts University and the

second site was at a predominately African American University. Students ranged in age

from 18 to 25 years, with 20.05 ($SD = 2.34$) years being the mean age for the entire

sample.

2.2 Procedure

After obtaining human subjects approval through the University's Internal

Review Board (IRB), participants of the current study were recruited from two

Universities in the Southeastern region of the United States through the psychology

participant pool and student email listservs. After completing the study, participants

received compensation through Psychology course credits or in the form of a gift card

(worth $10). All participants who elected to participate in the study completed a web-based survey, which took approximately 45 to 60 minutes to complete. Participants were given informed consent forms, which explained the broad goals of the study and informed them that their responses would be completely anonymous. Additionally, participants were informed that their participation was completely voluntary and they could withdraw from the study without penalty at any time.

2.3 Measures

Perceived Stress Scale

Cohen, Kamarck & Mermlstein's (1983) Perceived Stress Scale was used in this investigation. The survey consists 10 items to assess the degree to which situations in one's life are appraised as stressful. Participants were asked to respond on a 5-point likert scale (0=never to 4= very often) indicating how often stress is perceived. Sample items included (e.g. "In the last month, how often have you been upset because of something that happened unexpectedly?"; "In the last month, how often have you felt nervous and stressed." Reliability estimates for the current investigation was .82.

Family Responsibility Scale

Ansell's (2006) Family Responsibility Scale (FRS) was used in the current investigation. Items for the FRS were adapted from the Index of Clinical Stress, a previously validated measure reflecting an individual's experience of imbalance between the demands of daily living and one's capacity to respond (Abell, 1991). The survey consisted of 10 items and participants were asked to respond on a 5-point likert scale (1=never to 5=all the time) indicating how often they experience these pressures. Samples items included (e.g. "taking care of my family is overwhelming"; "After

handling my family's needs, I have not energy for anything else"; "I feel I can't keep up with everything that's expected of me at home." Reliability for the current investigation was .95.

Experiences with Discrimination

Harrell's (1994) the Daily Life Experiences (DLE) subscale of the Racism and Life Experience scale was used to assess experiences with racism in the current investigation. The DLE is a self-report measure that assesses the frequency and impact of experiencing 18 "microaggressions" due to race in the past year. The participants were asked to respond on a 6-point likert scale (0= none to 5= 5 times or more) indicating how frequently participants experienced each racial hassle. Sample items included: "Being ignored, overlooked, or not given service (in a restaurant, store, etc)"; and "Being mistaken for someone who serves (i.e. janitor, bellboy, maid). Reliability estimates for the current investigation was .96.

Coping with Problems Experienced Inventory (COPE)

Coping Strategies were measured using the brief version of Coping with Problems Experienced Inventory (COPE) (Carver, Scheier, and Weinstein, 1989). The brief COPE consists of 14 two-item scales subscales to measure both adaptive and maladaptive coping strategies. Participants were asked to respond on a 4-point likert scale (1=never to 4=often) indicating how often the coping strategy is used. Sample items included (e.g. I concentrate my efforts on doing something about this situation I'm in"; I use alcohol or other drugs to make myself feel better"; I do something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping or shopping." Keeping in line with previous investigations (Carver, Weintraub, & Scheier, 1989), active coping,

and seeking instrumental support are regarded as problem-focused (adaptive) forms of coping for this investigation. Although venting has been cited as both emotion and problem focused in the current investigation we are considering it to be problem focused because research shows that African American women that keep quiet about stressors have more negative mental health outcomes (Keiger, 1990). Distraction and denial will be considered as emotion-focused coping, similarly to other investigations (Carver et al., 1989; Seltzer, 1995). Reliability of the problem focused coping dimension and the emotion focused coping dimension for the current investigation was .73 and .64 respectively.

Center for Epidemiology Studies Depression Scale (CES-D)

Depression was measured using Radloff's (1977) Center for Epidemiologic Studies Depression Scale (CES-D). Specifically this 20-item scale was designed to measure current level of depressive symptomatology, with emphasis on the affective component, depressed mood. Participants were asked to rate each item of 1=rarely or none of the time (less than 1 day) to 4=most/all of the time (5-7 days) indicating how often they have experienced those symptoms. Sample items included (e.g. I was bothered by things that usually don't bother me"; I thought my life had been a failure"; "I had crying spells." The reliability estimate for the current investigation was .85.

Control Variables

In examining the associations between family and school stress, coping strategies and depression within a sample of African American college females, it is important to consider which factors studies have suggested are related to the variables of interest.

Thus, the current investigation includes age and work time (If employed, how many hours do you work each week) as study control variables.

Chapter III

Results

3.1 Descriptive Statistics

Means, standard deviations, and bivariate correlations of study variables are shown in table 1. The mean age for the sample was 20.50 (SD=2.94) and the average number of hours worked per week was 3.01 (SD= 1.83). As seen in table 1, family responsibility stress (*M*= 1.72: *SD*= .89), and discrimination (*M*= 1.46; *SD*=. 1.25) were found to be moderate for the sample. However, perceived stress (*M*=3.27; *SD*= .55) scores were found to be in the higher range. Follow up t-tests revealed no significant mean differences between types of stressors. T-tests were also conducted to examine mean differences in coping styles. There were significant mean differences between all of the coping strategies. Active coping strategies were utilized most often in the sample (M=3.05, SD=.75) followed by religious coping (M=2.99, SD=.94), and instrumental support (M=2.94, SD=.83).

3.2 Bivariate Analysis

Age was positively correlated with work hours per week (r= .401, p< .01) and family responsibility (r=.235, p< .01). Number of hours worked per week was negatively and significantly correlated with depressive symptoms (p= -.092, p= .01). Family responsibility (r= .180 p < .05) and racial discrimination (r= .294, p< .01) were significantly and positively related to depressive symptoms. Perceived stress was positively and significantly correlated with instrumental support (r= .266, p< .01), active

coping(r= .457, p< .01) and religious coping (r= .202, p= .05). Several of the coping dimensions were correlated. There was a positive correlation between instrumental support coping and active coping (r= .364, p< .01), and instrumental support and religious coping (r= .500, p< .01). Active coping was positively correlated to religious coping (r= .318, r= .05). Correlations among all study variables are shown in table 1.

3.3 Data Analysis

Age and work time were included as control variables in all regression models. To reduce multicollinearity between interaction terms and the comprising variables, all continuous variables were centered and used to compute interactions terms (e.g. Racial Discrimination x active coping, family responsibility stress x religious coping, perceived stress x instrumental support). The interactive roles of the stressors (racial discrimination, family stress, and perceived stress) and active coping strategies (problem solving, religious and instrumental support coping) on depressive symptoms were examined using a hierarchical regression model. After covariates (age and work time) were entered in Step 1, stressors (racial discrimination, family responsibility stress, perceived stress) were added to the model in step 2 and active coping strategies (problem solving, instrumental support and religion) were added in step 3. Lastly, two-way interactions between racial discrimination, family responsibility stress, perceived stress, religious coping, problem solving coping and instrumental support coping were included in step 4. Significant moderating relationships were explored using Aiken and West's (1991) guidelines for interpreting interactions (e.g. one standard deviation above and below the mean) and plotted using Sibley's (2008) utility for examining interactions in multiple regressions.

3.4 Direct Effects

With regard to depression, numbers of hour worked per week (step 1) was significantly predictive of depressive symptoms for the sample, $F = 2, 128 = 5.160$, p< .01. The addition of racial discrimination (F (3, 127= 7.193, p<. 01.) and family responsibility stress (F (9,121=3.115, p< .01) in step two contributed significantly to the predictive ability of the model. Specifically, increased racial discrimination (β 's ranging from .25 to .27 across all models, p<.01) and increased family responsibility (β's ranging from .20 to .26, p< .05) were associated with increased depressive symptoms. Perceived stress did not significantly predict depressive symptoms in any of the models.

3.5 Interactive Effects

In examining the interactive role of stress (racial discrimination, family responsibility stress, and perceived stress) and coping strategies (active, religion, instrumental support) on depressive symptoms, results of the overall models were significant for racial discrimination, $R^2 = .20$, (F (9, 130) = 3.48, p< .01), family responsibility, $R^2 = .12$, (F (9, 30) = 3.12, p< .01), and perceived stress, $R^2 = .18$, (F (9, 130) = 1.97, p< .05). Testing the interactive effects of coping strategies on depressive symptoms, analyses revealed two significant two-way interactions. One interaction examined the moderating role of religious coping on racial discrimination ($\beta = .079$, p < .05). For females experiencing less racial discrimination, greater religious coping was associated with fewer depressive symptoms. However, for females experiencing more racial discrimination, greater religious coping was associated with more depressive symptoms.

Additionally, instrumental support moderated the association between family stress and depressive symptoms ($\beta = .147$, p < .05). As shown in Figure x, for females

30

with less instrumental support, family stress was unrelated to depressive symptoms. However, for females reporting greater instrumental support, high family stress was associated with more depressive symptoms.

Chapter IV

Discussion

In spite of the large body of literature examining stress and coping and its impact on mental health outcomes (Lincoln et al, 2003; Thomas et al., 2008, Gutherie et al., 2001; 2002; Townsend et al. 2007; Woods-Giscombe and Lobel 2008), few studies have examine this relationship among African American females. A goal of this investigation was to examine the association between frequent stressors experienced by African American women and mental health outcomes. Partially consistent with our initial hypothesis, this investigation indicated that increased family responsibility was associated with greater depressive symptoms. African American women historically have been characterized as both the backbone of their communities and the cohesive force in their families. This sense of "we-ness" is likely to manifest through multiple role fulfillment and various responsibilities to network members (Beauboeuf-LaFontant, 2008; Harris-Lacewell, 2001). Women may experience increased stress and strain that over time distracts them from maintaining healthy behaviors (Pearson 2008; Ainsworth et al. 2003). Various studies have shown that the implications of taking on multiple familial roles are compromised health outcomes among African American women.

The current investigation also found that increased racial discrimination was associated with greater depressive symptoms. This finding is in line with previous investigations (Banks et al., 2006), which found that increased perceived everyday discrimination was significantly associated with depressive symptoms for African

American women. Researchers and theorists have documented that African American women may become depressed in response to an accumulation of psychosocial stressors within their environments (Brown et al., 2000; Carrington, 2006; McLoyd, 1990; Murry et al., 2003). African American women, particularly those living in the South, face distinct stressors that may be associated with depression (Brown et al., 2000). Specifically, racial discrimination, which has been consistently linked to greater risk for depressive symptomology and major depressive episodes (Belle & Doucet, 2003; Schulz et al., 2006; Siefert et al., 2007; Williams, Neighbors, & Jackson, 2003). Moreover, some researchers suggest that chronic stress, which is perceived as uncontrollable, like racial discrimination, may amplify the negative effects of time-limited events, such as loss of a job or divorce (Clark, Anderson, Clark, & Williams, 1999; Grote, Bledsoe, Larkin & Brown, 2008; McLoyd, 1990). This proliferation of stress, which is the tendency for strains to merge together, can increase the overall impact of the stressor (Pearlin, 1997; Aneshnel & Blanc, 1997), which in turn has an even more detrimental impact on mental health outcomes.

In line with the stress and coping model (Lazarus & Folkman 1984) this investigation examined whether commonly used coping strategies used by African American women would moderate the relationship between family stress, perceived stress and racial discrimination and depressive symptoms. Although we found a significant interaction of racial discrimination and religious coping, further analysis revealed that the association was not buffering. Initially, this finding seems contradictory to what is present in the larger literature about the positive impact of religious coping on mental health outcomes. In recent years, a wealth of research has shown a direct effect of

33

religion on mental healthy (Hackney and Sanders, 2003; Koenig and Larson, 2001). However, less well studied is research on the buffering effect of religion on mental health outcomes. Studies on religious buffering have examined a variety of dimensions of religiosity and a number of chronic stressors with surprisingly inconsistent results.

For instance, some studies have found that a composite measure of religiosity (prayer and attendance) buffers the effect of chronic stressors on depression (Wink et al. 2005), while others have shown that neither prayer nor religious attendance buffer the effect of stressors on mental health (Ellison, 2001) and still others have found that attendance at religious services buffers the effect of stress on psychological distress (Williams, 1991). Krause et al. (2001) found that attendance at religious services buffered the effect of chronic discrimination on mental health. However, there was no significant buffering effect of seeking religious comfort for discrimination on mental health outcomes. A closer examination of the literature suggests that religious involvement has been found to buffer the relationship of discrimination and depression in African American populations. In the current investigation, we looked specifically at behaviors consistent with seeking religious comfort (i.e. I've been praying or meditating; I've been trying to find comfort in my religious or spiritual beliefs), which may explain why there was no buffering effect as expected in the present study.

Several studies suggest that African American women commonly use passive and avoidant strategies to address race-related experiences (Shorter-Gooden, 2004; Utsey et al, 2000; Brantley et al., 2002). Specifically, study findings suggest that using more passive and avoidant types of coping may have emotionally adaptive qualities when faced with a stressful situation that are unable to be resolved through the use of more active

problem-solving types of coping (Smith & Yardani, 1996). In low control situations, (i.e. institutional racial, gender or class discrimination) individuals are less likely to use problem-focused coping (Hall, 2010; Brantley et al., 2002) and more likely to use avoidance coping strategies. A small body of literature suggests that the use of avoidant types of coping may be adaptive because actively trying to cope with a low control stressor such as discrimination may in fact be more stressful (Hall et al., 2010). This use of avoidance coping has also been suggested to be related to maintaining the superwoman Schema where African American women would whether avoid of distract themselves with other roles and responsibilities than to actively attend to a stressor. Perhaps if the current study examined how avoidance coping buffers the relationship between discrimination and depressive symptoms a significant moderating effect may have been found.

Another possible explanation for the findings is that individuals who use high levels or religious coping may use a type of religious coping that is maladaptive. A burgeoning area of research suggests that individuals who use higher levels of religious coping are also likely to use the deferring style of coping (Molock et al., 2006). Since studies consistently show that utilizing this type of religious coping has a detrimental influence on overall well-being, it can be garnered that individuals in the present study who used more religious coping and had more depressive symptoms perhaps use this strategy. African Americans who use higher levels of religious coping or deferring coping styles may feel like their particular stressors and hardships will be taken care of by a higher power and fail to see the value in actively making changes or a conscious effort to deal with stressors in their lives. This ideology can create a diffusion of

responsibility to actively attempt to cope with stressors personally and instead rely solely on a higher power to decrease stress and thus alleviate the psychological effects of certain stressors. This could have detrimental implications for mental health when stressors are not ameliorated though divine intervention and consequently become even more taxing on the individual.

Another possible explanation for the findings is that African Americans who use higher levels of religious coping are less likely to seek formal social support (i.e. professional mental health services). A study conducted by Privette and colleagues (1994) examining the use of mental health services of an African American sample found that 30 percent of participants said they would rather use religious than non-religious counseling. Specifically, they found that people who reported high levels of religious coping (e.g. frequent prayer) were more likely to seek religious counseling and less likely to seek secular mental health treatment. This is likely contributed to stigma of seeking formal mental health services and concern trained therapist are not culturally competent (Blank, 2002; Neighbors, 1988). African Americans may also be more willing to tolerate higher levels of distress from a fear of being stigmatized for seeking formal mental health services. Churches can offer counseling and guidance in non-stigmatizing ways but this could negatively impact one's mental health status.

Although, counseling from a minster is a traditional benefit of church membership, the adequacy of the training that ministers receive to address specific stressors experienced by African American women may be lacking (Taylor et al., 2000). Research supports the positive impact of religious coping, however, negative outcomes are possible. For example, most clergy members are not trained to address mental illness;

hence people relying solely on the clergy may not receive the necessary care or may delay seeking assistance from trained mental health providers. Ministers may not be familiar with various forms of psychopathology and the symptoms of severe mental illnesses (Bentz, 1970; Gottlieb & Olfson, 1987). Because African American women commonly endorse the use of religious and informal social support coping as their preferred coping strategies, it can be gathered that they would select these in lieu of professional services possibly to their detriment. Studies have also shown that clergy discourage African Americans from seeking formal mental health services (Blank, Mahmood, Fox, & Guterbock, 2002; Molicca et al., 1986; Veroff et al, 1981) which may further explain our findings.

We found a similar pattern in examining the buffering effect of instrumental support on family responsibility stress. Although a significant interaction of instrumental support coping and family responsibility stress was found, there was no buffering effect on depressive symptoms. Females in the sample who experienced lower levels of family stress and used a higher level of instrumental support coping had lower depressive symptoms and females in the sample who experienced higher levels of family responsibility stress and used higher levels of instrumental support coping had higher depressive symptoms. Females in the sample who experience lower family stress and used a lower level of instrumental support coping had higher depressive symptoms than females who experienced higher levels of family responsibility stress with lower instrumental support. A possible explanation for this finding is that studies suggest that African American women tend to delay help seeking (Ward, 2009). . Although most studies concerning delayed help seeking behaviors of African American women focus on

seeking formal social support (i.e professional services), the same pattern could be present in seeking informal social support.

Although, the superwoman schema is often touted as a protective factor for preserving the family unit and community, studies suggest that it can have detrimental effects on psychological functioning and help seeking behaviors (Woods-Giscombe, 2010). In an attempt to adhere to this identity, African American women may put the needs of their family and community above their mental health needs. Research suggests that there is a cost to overall mental health by subscribing to the superwoman role (Woods-Giscombe, 2010). Delaying help seeking behavior is consistent with the notion that African American women are suppose to be strong, resilient and persevere in the face of stressors and not succumb to them. As evidenced in previous studies (Waite & Killian, 2008) African American Women believe that an individual develops depression due to having a "weak mind, poor health, a troubled spirit, and lack of self-love". As a consequence, they believe that they are not susceptible to depression. African American women may choose to wait until their stressors become overwhelming to seek informal advice from social support systems (i.e. spouse, family, friends) in an effort to maintain this image of strength. Consistent with Waite and Killian, in two earlier studies focusing on African American women, stigma was prevalent and a barrier to help seeking in African American, as well as Latina and White women (Alvidrez, 1999; Van Hook, 1999). African American women may feel an obligation to suffer in silence about their feelings of stress or vulnerability in order to project an image of strength for their families and communities.

Most researchers focusing on African Americans and stigma related to mental

illness have found a long history of negative attitudes toward mental illness and a high degree of stigma associated with seeking formal treatment (National Mental Health Association (NMHA), 1998; Silva de Crane & Spielberger, 1981; Thompson-Sanders et al., 2004; US DHHS, 2001). As a result, African American women prefer the use of informal social support and religion in lieu for professional mental health services. A consequence of the sole use of informal social support or religious networks in response to stressors is that African American women they tend to delay formal treatment seeking (Ward, 2009). While seeking informal support may have some therapeutic value toward overall mental health, family and friends may not offer the best advice to African American women concerning stressors that they frequently encounter. As suggested by the contagion of stress notion (Hamilton-Mason et al., 2009), seeking advices from equally stressed social support groups may have an accumulative effect on the impact of stress experienced by African American women. Social support networks for African American women may not buffer against stress if network members are also experiencing a number of stressors in their own lives.

Negative social support interactions can also be a source of stress for African American women. Studies exploring negative social interactions (e.g., criticisms, excessive demands) indicate that there are certain costs and benefits of social relationships on mental health outcomes (e.g., Lakey, Tardiff, & Drew, 1994; Okun & Keith, 1998; Swindle, Heller, & Frank, 2000). Using a community-based sample of 927 African Americans, Brown and colleagues (1992) found no beneficial effect of close family ties (e.g., social support) on levels of depressive symptoms. Moreover, family ties did not buffer the influence of chronic economic strain on depressive symptoms (Brown

et al., 1992).

The negative impact of interpersonal relationships may originate from African American women's involvement in multiple roles and from feeling a sense of obligation to family and friends. This is can be especially true if she has the most financial resources or is the most educated individual in her family. This is particularly relevant for African American female college students who may be the first generation to attend college. Higginbotham & Weber (1992) found that African American professional women, in particular, feel a strong pull to nurture significant others, and they express a sense of guilt for indulging in behaviors that do not directly benefit their families. Carrington (1980) argues that this sense of obligation to social networks contributes to depression in African American women because it leads them to put energy into others and ignore their overall well-being. The seemingly counterintuitive findings in the current study maybe directly related to an incorrect fit between this particular stressor (family stress) and seeking social support. Perhaps this is not the most appropriate coping strategy to use when dealing with family responsibility stress because these social support networks are likely the source of the stress. Perhaps seeking social support from a neutral party such as a mental health professional would yield better mental health outcomes for African American women than seeking support from networks that maybe contributing to stress.

Chapter V

Study Limitations and Directions for Future Research

Given the nature of cross sectional design of the current investigation, we were not able to determine the directionality of our findings. Future studies should explore how family responsibility, racial discrimination and perceived stress contribute to long-term psychological functioning among African American women as well as the potential buffering role of positive types of coping. Also, given the possibility that these findings may not generalize to a diverse range of African American females, future studies should explore these associations among females from various contexts and consider whether demographic characteristics (e.g. age; SES) may further moderate these relationships. Given the relationship between avoidance type coping strategies and low control stressors (e.g. discrimination), future studies should further explore this relationship and whether avoidance coping buffers the relationship of stress and psychological functioning. Subsequent studies should also look at the buffering effect of religious involvement on racial discrimination and if involvement has a different impact than seeking religious comfort in this population. Lastly, subsequent studies should explore the effectiveness of certain coping strategies in moderating the effect of particular stressors on psychological functioning. Specifically, studies should examine which coping strategies often used by African American women are most helpful buffering the effect of family responsibility stress, discrimination and perceived stress on psychological functioning.

Chapter VI

Conclusion

The current study contributes to the existing literature in that it highlights the manner in which various stressors are associated with African American females' psychological functioning. Moreover, this investigation provides further evidence that discrimination and family responsibility stress has a direct relationship with depressive symptoms in African American females'. The largest contribution of the current study is to our understanding of the effectiveness of commonly used coping strategies by African American females in response to frequent stressors. These findings have implications for research and practice with African American females. Specifically, this study highlights the need for additional research to understanding the underlying mechanisms involved in coping strategies utilized by African American women. A closer examination of coping strategies previously thought to be adaptive may have negative consequences for psychological functioning. Understanding which coping strategies African American women are likely to use and the effectiveness of these coping strategies could be beneficial to clinicians working with this population.

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Table A.1 Bivariate analysis, means, and standard deviations among study variables

	1	2	3	4	5	6	7	8	9
1. Age	1								
2. Work time	.401**	1							
3. Perceived Stress	.137	.022	1						
4. Family Respon	.235**	.115	.046	1					
5. Discrimination	-.003	-.051	.091	.116	1				
6. Instrumental	.077	.027	.266**	-.020	-.015	1			
7. Active Coping	.141	.163	.457**	-.046	-.071	.364**	1		
8. Religion	-.096	.022	.202*	-.075	-.127	.500**	.318**	1	
9. CESD	-.092	-.282**	.077	.180*	.294**	-.042	-.147	-.123	1
Mean	20.50	3.01	3.26	1.72	1.45	2.94	3.05	2.98	2.09
Standard Dev	2.940	1.834	.553	.894	1.24	.831	.747	.941	.410

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table A.2 Regression Analysis of Perceived Stress and Coping Strategies Predicting Depressive
   Symptoms

	Model 1			Model 2			Model 3			Model 4		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Age	.003	013	.018	.001	.013	.006	-.002	.013	-.011	.000	.014	.003
Work Time	-.065	.021	-.280**	-.064	.021	-.277**	-.057	.022	-.245**	-.062	.022	-.267**
Perceived Stress				.061	.064	.082	.126	.071	.171	.150	.086	.202
Religion							-.053	.044	-.122	-.065	.047	-.149
Active							-.087	.056	-.159	-.091	.056	-.165
Instrumental support							.020	.050	.040	.037	.053	.074
Religion x Perc. Stress										.133	.118	.198
Active x Perc. Stress										-.007	.093	-.009
Instr. Supp. X Perc. Stress										-.087	.132	-.120
R^2		.			075			.081			.118		.123
F-Statistic			5.160		3.741			2.755			1.978		

**P< .01
*p<.05

Table A.3 Regression Analysis of Family Responsibility Stress and Coping Strategies Predicting
       Depressive Symptoms

	Model 1			Model 2			Model 3			Model 4		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Age	.003	.013	.018	-.004	.013	-.029	-.005	.013	-.037	-.009	.014	-.063
Work Time	-.065	.021	-.280**	-.066	.021	-.286**	-.062	.021	-.269	-.059	.022	-.256**
Family Responsibility				.101	.039	.219*	.096	.039	.209*	.099	.039	.261*
Religion							-.047	.043	-.108	-.051	.043	-.117
Active							-.041	.051	-.074	-.023	.051	-.042
Instrumental support							.027	.050	.054	.037	.050	.076
Religion x Fam. Resp.										-.032	.056	-.056
Active x Fam. Resp.										-.049	.060	.077
Instr. Supp. X Fam. Resp.										.147	.058	.228*

**P< .01
*p<.05

R^2	.075	.120	.136	.188
F-Statistic	5.160	5.781	3.261	3.115

Table A.4 Regression Analysis of Discrimination and Coping Strategies Predicting Depressive Symptoms

|	Model 1			Model 2			Model 3			Model 4		
	B	SE	β	B	SE	β	B	SE	β	B	SE	β
Age	.003	.013	.018	.002	.013	.013	.001	.013	.008	.005	.013	.038
Work Time	-.065	.021	-.280**	-.062	.021	-.266**	-.058	.021	-.251**	-.065	.021	-.279**
Discrimination				.094	.029	.266**	.089	.029	.253**	.092	.032	.261**
Religion							-.036	.043	-.082	-.043	.043	-.099
Active							-.043	.050	-.078	-.032	.050	-.058
Instrumental support							.018	.049	.037	.035	.050	.071
Religion x Discrim.										.079	.035	.197*
Active x Discrim.										.021	.045	.041
Instr. Supp. X Discrim.										.027	.043	.059
R^2	.075			.145			.158			.206		
F-statistic	5.160			7.193			3.875			3.482		

**P< .01
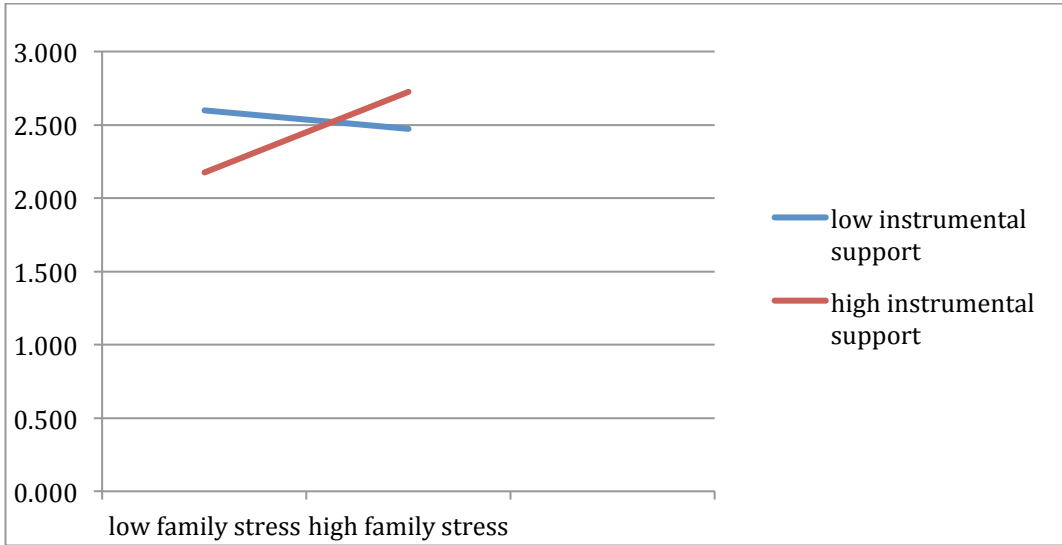*p<.05
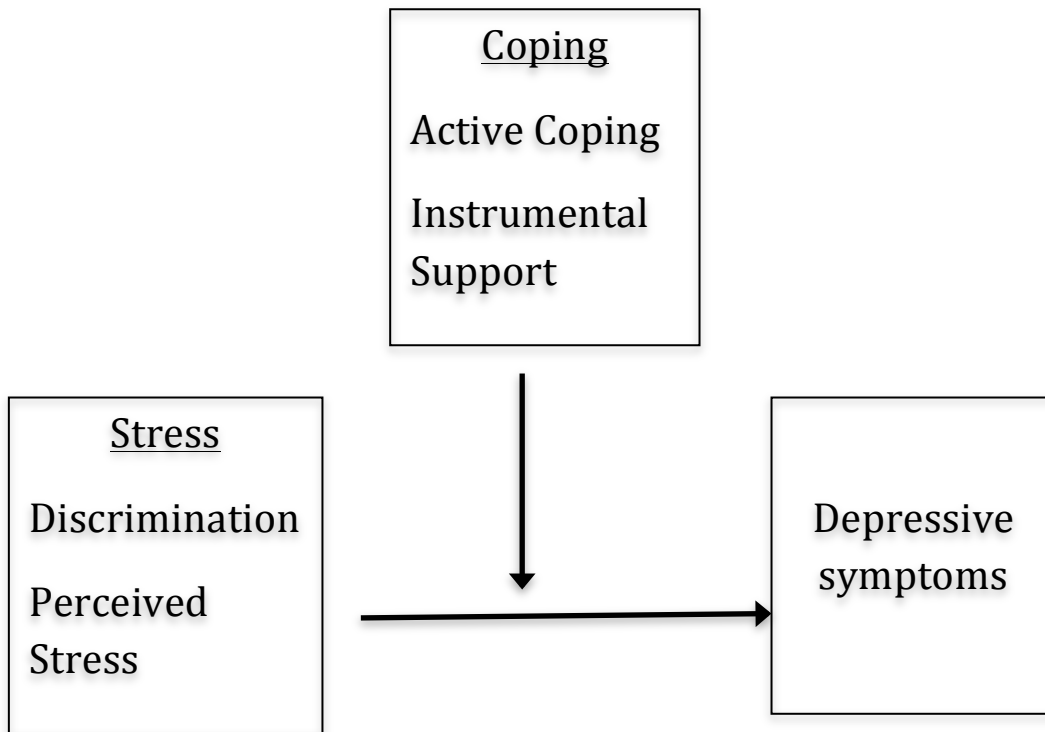
Figure 1: Conceptual Model

Figure A.2 Plotted Interaction of Family Responsibility Stress and Instrumental
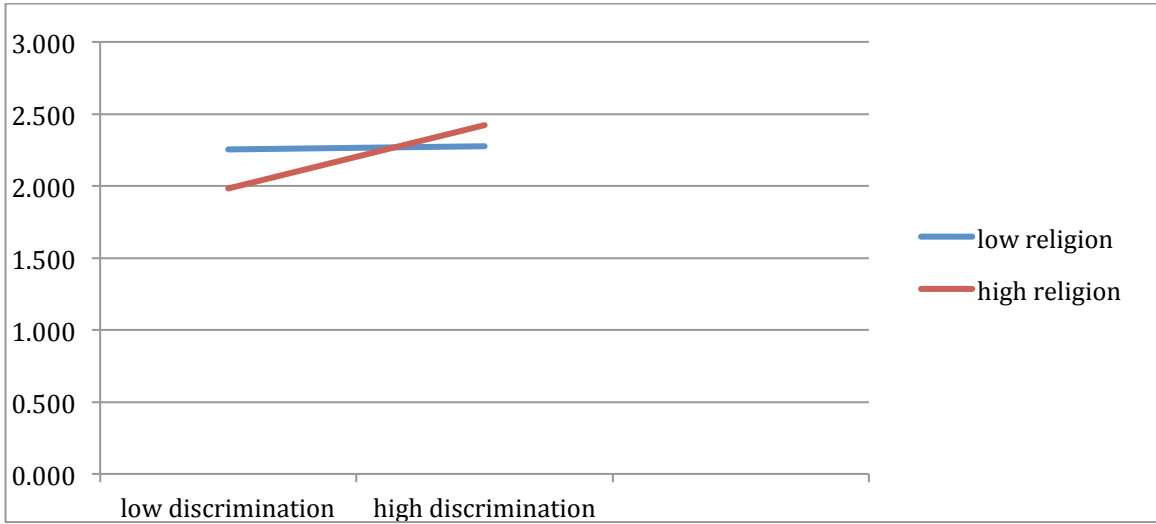
   Support Coping

Figure A.3 Plotted Interaction of Discrimination and Religious Coping