

2013

Examination of the Impact of Race-Related Stress and Culture-Specific Coping on Burnout and Compassion Fatigue in Black Nursing Assistants

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Examination of the Impact of Race-Related Stress and Culture-Specific Coping
on Burnout and Compassion Fatigue in Black Nursing Assistants

by

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Submitted in Partial Fulfillment
of the Requirements for the Degree
of Doctor of Philosophy in Counseling Psychology

Seton Hall University

2013

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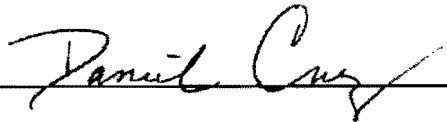
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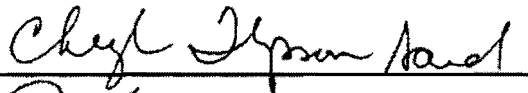
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Abstract

The study utilized a stress-process model to investigate the relationships between race-related stress, culture-specific coping and professional quality of life in a sample of Black nursing assistants working in the U.S. Despite the invaluable work provided by paraprofessionals providing direct health care services, little was known about their professional quality of life. Therefore the study was additionally exploratory and descriptive, with additional analyses aimed at yielding preliminary data regarding salient demographic, professional quality of life and stress-related variables of Black nursing assistants. Similarly, despite a large body of literature establishing compassion fatigue and burnout as workplace stress disorders impacting helping professionals there was a complete dearth regarding the professional quality of life of occupational nursing assistants.

Results indicated Black nursing assistants experienced significant levels of compassion fatigue and compassion satisfaction but not burnout. Further, exploration of the subjective impact of race-specific stressors found Black nursing assistants experienced significant levels of race-related stress, the life stressor understood as the psychological impact of racism, prejudice and discrimination. Additionally, the hypothesized impacts of race-specific stressors and cultural protective factors on professional quality of life were explored. Results indicated significant relationships between race-related stress and the factors of professional quality of life, whereby lower levels of race-related stress were associated with compassion satisfaction and higher levels of race-related stress contributed to the development of burnout in Black nursing assistants. Results revealed no significant impacts of the employment of culture-specific coping on professional quality of life. Finally, in light of resilience within the context of continued racial discrimination, the study explored a proposed moderating effect of culture-specific coping

on the relationships between race-related stress and dimensions of professional quality of life. The hypotheses were partially supported. Culture-specific coping strategies were found to moderate the relationship between race-related stress and compassion fatigue, but not burnout. Specifically, higher levels of spiritual coping weakened the relationship, while higher employments of collective coping strengthened the impact of race-related stress on the development of compassion fatigue in Black nursing assistants.

Acknowledgments

Thank you to my grandmother, a woman who at roughly my age, made a decision I could not make, to stifle her voice and postpone her happiness to provide her children and generations not yet born, with better opportunities. To my parents, thank you for so fiercely believing in my intelligence and abilities, and their limitless possibilities. As a woman, never feeling inferior has been a priceless gift I will strive to pass along to future generations. To my Meats, thank you for allowing me to feel whatever I feel, to at times, indulge, for just a second, in self-pity and for never telling me 'it's not that bad.' To my mentor and committee members, thank you for amplifying the best of me and helping to quiet the not so best of me. Also, thank you for being hilarious and for appreciating my sense of humor. We've had some hearty laughs together.

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Chapter One

Introduction

Statement of the problem

Currently over 90% of the adult care is provided by nursing aides (McGilton, 2004; Williams, Kemper, and Hummert, 2003). Responsibilities of nursing aides working within the home and nursing and assistive facilities include patient feeding, bathing, toileting, dressing, ambulation assistance as well as monitoring vitals, catheters and post-mortem care (Bureau of Labor Statistics, 2008). As per the Paraprofessional Healthcare Institute (2011), nursing aides are typically working-poor, women of color who face a myriad of life stressors, including single parenting, housing instability and annual earnings under the Federal Poverty Line. As of 2008, 1,913,000 individuals 65 and over reside in assistive facilities, representing nearly 5% of this population (U.S. Census Bureau, 2008). Furthermore, the oldest old, those 85 years and older, is the most rapidly growing portion of the ageing population, with over 50% of these individuals requiring substantial assistance in activities of daily living (U.S. Census Bureau, 2008). To accommodate the long-term care needs of the increasingly older population, employment for nursing assistants is projected to increase 19 percent, significantly faster than average for all occupations (Bureau of Labor Statistics, 2008). Employment projections estimate over four million direct care positions for individuals 65 years and older will be needed by the year 2016 (Paraprofessionals Healthcare Institute, 2011). The occupational demands on nursing assistants are highly physically and emotionally demanding (Parsons, Simmons, Penn, & Furlough, 2003). Due to the intimate, physically demanding and stressful nature of the work, nursing assistants are in the 98th and 99th percentiles of non-fatal injuries and illness rates for all occupations (Bureau of Labor Statistics, 2008). Despite the alarming rates of illness and injury associated with the

profession, 37% of home health aides and 26% of direct-care workers employed in nursing and residential care facilities lack health care coverage (Paraprofessional Health Care Institute, 2011). Though the work is clearly essential, nursing assistants are undercompensated, receiving a median hourly wage of \$11.46 (Bureau of Labor Statistics, 2008), with some assistants ineligible for protection under federal wage and overtime laws (Paraprofessionals Healthcare Institute, 2011). Other occupational difficulties facing nursing assistants include minimal training, limited opportunity for advancement, erratic and variable work schedules and weekly work hours that are inconsistent (Paraprofessionals Healthcare Institute, 2011). The work related challenges faced by nursing assistants' impact job performance as nursing assistants have the highest rate of absenteeism and turnover among all healthcare providers (Bureau of Labor Statistics, 2008). Nursing facilities face the grimmest statistics with a 70% annual turnover rate (Paraprofessionals Healthcare Institute, 2011). Research has illustrated that both turn over and absenteeism within the workplace are indicative of the stress related syndromes compassion fatigue and burnout (Cordes & Dougherty, 1993; Newell and MacNeil, 2010; Rothschild & Rand, 2006).

The frequency and intimacy of the helping relationship requires nursing assistants to exhibit great empathy and compassion (Bush, 2009; Figley, 1995; Stamm, 1999). However, research illustrates those caregivers who continually show compassion and express empathy when exposed to cumulative grief and loss in their work are at risk of developing negative stress responses (Figley, 1995; Figley, 1999). A body of literature aimed at theoretically and empirically studying the aforementioned stress responses produced three overlapping constructs, compassion fatigue, secondary traumatic stress, and vicarious traumatization. Although, some researchers have attempted to differentiate the constructs, noting nuances such as course of

onset, symptomology and nature of the workplace stressors, current definitions are inclusive and recognize subtleties as naturally occurring variations of the same phenomenon (Figley, 2002; Stamm, 1995; Stamm, 2005).

Compassion fatigue, coined 'the cost of caring' is defined as "the natural, consequent behaviors and emotions..."the stress resulting from helping or wanting to help a traumatized or suffering person (Figley, 1995, p. 10)." The signs of compassion fatigue may develop over time or emerge suddenly and include emotional and physical exhaustion, withdrawal and irritability (Figley, 1995). Like, other helping professionals, nursing assistants are at a high risk of developing compassion fatigue, since, as noted by Sabo (2006), compassion fatigue is a consequence to the exposure of the suffering of another person. However research focusing on compassion fatigue within the nursing profession is scant. Compassion fatigue has been identified in emergency department nurses (Dominquez-Gomez & Rutledge, 2009), oncology nurses (Quinal, Harford, & Rutledge, 2009), forensic nurses (Towsend & Campbell, 2009), hospice nurses (Abendroth & Flannery, 2006), and pediatric nurses (Maytum, Heiman, & Garwick, 2004). Compassion fatigue and burnout are theoretically and empirically linked as two separate yet related workplace stress related constructs (Abendroth & Flannery, 2006; Figley, 1995; Halm, Peterson, & Kandels, 2005; Rothschild & Rand, 2006; Rotter et al., 2010; Sabo, 2006; Stamm, 1999; Stamm, 2005; Stamm, 2010). Burnout is a syndrome with three measurable dimensions that manifest a variety of symptoms and develops as a result of chronic stress in the workplace (Maslach & Jackson, 1981). The current body of literature has aimed to examine the organizational and individual risk factors, protective factors and consequences of burnout in a variety of occupations and settings. Working as a helping professional is consistently identified as a primary risk factor for developing professional burnout (Maslach, Schaufeli, & Leiter,

2001). The impact of demographic variables on the development of burnout, specifically race, has yielded conflicting results (Lackritz, 2004; Salyers & Bond, 2001). No studies examining the relationship between race-related stress and burnout were found.

As previously stated, many nursing assistants are women of color; therefore likely experience racial discrimination, as only 9% of Blacks in the United States believe they are treated as equally as their White counterparts (Tilove, 2001). The pervasive harm inflicted from racism has been clearly demonstrated throughout the scholarship of numerous disciplines. Mental health functioning variables impacted by racism include depression and somatization (Klonoff, Landrine, & Ullman, 1999), anxiety (Kessler, Mickelson, & Williams, 1999), decreased job satisfaction (Holder & Vaux, 1998), poorer evaluations of overall life satisfaction (Danoff-Burg, Prelow, & Swenson, 2004), happiness (Williams, Neighbors, & Jackson, 2003), lower levels of mastery (Broman, Mavaddat, & Hsu, 2000) and lower self-esteem (Simpson & Yinger, 1985). Researchers have utilized a variety of theoretical models of stress and resilience to encapsulate the psychological mechanisms by which racism is experienced, felt, processed and understood (Constantine, Donnelly, & Myers, 2002; Utsey & Ponterotto, 1996; Utsey, Adams, & Bolden, 2000; Utsey, Bolden, Lanier, & Williams, 2007). Recent health psychology and public health research has aimed to identify race related stress as a significant contributor in minority health disparities (Brondolo, Gallo, & Myers, 2009; Geronimus, Hicken, Keene, & Bound, 2006; Myers, 2009; Utsey & Hook, 2007).

Stress models have implicated systemic inequitable access to services and personal experiences of race related stress as some of the antecedents that initiate a series of acute and enduring changes in both psychological and physiological functioning (Brondolo, Gallo, & Myers, 2009; Chakraborty & McKenzie, 2002; Myers, 2009). Although the models and their

respective terminology differ, physiological alterations of the stress response system in African Americans are evidenced. According to Geronimus, and colleagues (2006), Black participants had increased indications of high allostatic load. Allostatic load represents the residual burden and subsequent impairment of a chronically overactivated stress response system (McEwen, 1998). Therefore, a restricted stress response system as seen in some Blacks results in biologic risk for chronic disease and stress-related disorders (Myers, 2009; Steptoe et al., 2003).

However, a body of literature that examines the resources of Black Americans indicates that internal and external resources facilitate coping with chronic adversity, bolster resilience and promote positive health outcomes (Constantine, Donnelly, & Myers, 2002; Parks, 1998; Utsey, Adams, & Bolden, 2000). A four component culture-specific model of coping created by Utsey, Adams, & Bolden (2000) captures the unique matrix of coping strategies adopted by Black Americans (Utsey, Brown, & Bolden, 2004).

This study examined the impact of race-related stress and culture specific coping strategies on burnout and compassion fatigue in a sample of Black nursing assistants. The results explored the incidence of burnout and compassion fatigue in nursing assistants, provided evidence of race related stress as a risk factor of compassion fatigue and burnout, and explored the protective impact of culture-specific coping strategies on burnout and compassion fatigue. The study was rooted in a review of the existing literature and aims to contribute to the understanding of the aforementioned constructs.

Race Related Stress. Racism has been defined within the literature as a psychosocial stressor ‘that is characterized by both social ostracism and blocked economic opportunity (Brondolo, Gallo, & Myers, 2009, p. 2).’ Racial discrimination is expressed through both implicit and explicit communication and across varied contexts include interpersonal, cultural,

and institutional (Utsey & Ponterotto, 1996; Harrell, 2000; Guerin, 2003, Krieger, 1999). The countless theoretical and empirical definitions of racism illustrate the complexity of the construct and its subsequent problems.

A body of literature documents disparity in health status between ethnic groups within the United States. Ethnic minorities suffer from significant negative health outcomes in cancer, cardiovascular disease, HIV/AIDS, birth outcomes and diabetes (American Heart Association, 2008; National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), 2004; U.S. Department of Health And Human Services, 2000). Furthermore ethnic minorities, including African Americans, Latino/as, Native Americans and South East Asians have disproportionate morbidity and mortality rates across disease states (Myers, 2009). Research aimed at elucidating the factors that create and maintain inequities include distribution of material and psychological resources, risk behaviors and inadequate health care (Link & Phelan, 1995; Lynch, Smith, Kaplan, & House, 2000; Williams and Collins, 2002). Consequently, a biopsychosocial model of understanding health disparities emerged.

Racial discrimination remains an insidious and pervasive stressor for people of color and can be defined as ‘any action that differentially treats individuals or groups of color based on prejudice (Sue, 2003). Research illustrates that people of color report frequent experiences of racially motivated discrimination and harassing, unfair and exclusionary social interactions (Brondolo et al., 2009). Furthermore, the aforementioned experiences are theorized to create a heightened expectancy of future discrimination and hyperarousal (Geronimus et al., 2006). Ethnic minorities also report greater exposure to negative life events, generic life stressors including financial, occupational and relationship stressors and greater psychological distress, thereby increasing the overall stress burden (Chen & Matthews, 2001).

Healthy functioning requires a flexible stress response system that regulates the fluctuations of physiological systems responding to a myriad of stressors (McEwen, 1998). Allostatic load is the residual burden of chronic activation and the subsequent impairment of the stress response system. Markers of allostatic load include elevated cortisol levels (McEwen, 1994). Unpredictable, uncontrollable, long-term and intractable stressors have been associated with higher subjective ratings of stress and hypercortisolism (Baum & Fleming, 1993; Baum, Garofalo, & Yali, 2000). Thus ethnic minorities chronically exposed to racial discrimination are at risk of increased allostatic load (Chen & Matthews, 2001; Gallo and Matthews, 2003; Geronimus et al., 2006).

Race-related stress is defined as 'the race related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that tax or exceed existing individual and collective resources or threaten well-being (Harrell, 2000).' Thus, those exposed to racial discrimination may experience race-related stress and in turn the myriad of health consequences associated with increased allostatic load. Research by Klonoff, Landrine, and Ullman (1999) found racial discrimination was a predictor of anxiety, negative health symptoms and somatization of emotion. Identified moderators of the relationship between racial discrimination and negative health outcomes included coping styles and personality traits (Gallo & Matthews, 2003; Brondolo, Gallo, & Myers, 2009; Myers, 2009). However, the literature remains inconclusive and requires more attention. Particular paucity exists in the research examining the impact of racial discrimination on workplace stress-related disorders. Exploratory research examining the impact of racial and ethnic differences between nursing staff and residents within nursing institutions found 73% of nursing staff reported incidences of racism

(Berdes & Eckert, 2001). Of the 27% of staff that did not report instances of workplace racism, all participants relayed stories of racist behaviors.

Culture-Specific Coping. Coping models, which are often embedded in stress models, have aimed to illuminate both the internal and external resources utilized to maintain or restore functioning in the presence of stressors. Depending on the model of stress, coping resources are conceptualized as both protective factors that prevent distress and reactive resources that counteract the negative experience of distress (Lazarus, 1993; Hobfoll, 2001; Utsey, Giesbrecht, Hook, & Stanard, 2008). Theoretical and empirical models of coping define adaptive and maladaptive coping and their respective impacts on psychological well-being. As per the transactional model of stress, the personal appraisal of the stressor is the most salient and significant element of the response and determines the course of action (Lazarus & Folkman, 1984). However, as critics point out, the transactional model is overly individualistic and overlooks the impact of the greater context. Hobfoll's (2001) conservation of resources understands stress and coping appraisal as a function of the individual nested, within concentric layers of culture; bolstering an investigation of culture-specific coping strategies.

The strategies employed by members of a cultural group that are reflective of their overarching values, morals, attitudes, traditions and customs is referred to as culture-specific coping (Utsey, Adams, & Bolden, 2000). Culture-specific coping strategies are utilized in a myriad of cultures, with much of the research examining members of collectivistic cultures (Esteban, 2006; Wong, 2002; Hussain & Cochrane, 2003). Some culture-specific coping strategies of Black Americans include prayer and spiritual practices (Aranda, 2001; Christian & Barbarin, 2001; Potts, 1996). Also, Black Americans use sociofamilial coping. Specifically,

research with Black American children and adolescents accessed their interethnic peers during times of stress (Constantine, Donnelly, & Myers, 2002; Stevenson, Reed, & Bodison, 1996). Africentric theory centers around the Black worldviews and values of connectivity. This connectedness with ancestors, a higher being and power and the collective group is expressed through the use of prayer, rituals, customs and elders within the community when in need of guidance (Coleman & Johnson, 2009; Parham, 2009; Utsey et al., 2000). A four-factor model of Black culture-specific coping was conceptualized by Utsey et al. (2000). Cognitive and emotional debriefing, is the naturally occurring adaptive process of attempting to understand and thereby manage the stressor. Collective coping, refers to the ascription that the greater good of the culture subsumes the good of the individual. Both spiritual centered and ritual centered coping are strength derived from behaviors aimed at bolstering connections to a larger network including a higher power and ancestors. Subsequent research supports the Black culture-specific coping model's validity with increased use of the four factor coping associated with improved psychological health and overall well-being (Greer, 2011; Utsey et al., 2000; (Utsey et al., 2007; Nasim, Belgrave, Jagers, Wilson, & Owens, 2007).

Burnout. Burnout was first defined by Freudenberg (1974), who described a response pattern that developed from the chronic stress experienced in occupations involving frequent direct interactions with others. Currently, burnout is conceptualized as a three dimensional response pattern marked by emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach & Jackson, 1986). The emotional exhaustion, as defined by Maslach, is "a lack of energy and a feeling that one's emotional resources are used up." Depersonalization is characterized by a pervasive sense of detachment and cynicism in reference to work duties. Reduced personal accomplishment, which has been identified as the last step in the process of

burnout, is marked by a declination of personal efficacy and expectations in the work environment. Factors contributing to the development of professional burnout and its consequences occur at an individual level, an organizational level or in combination.

The ill effects and symptoms of burnout are salient and without treatment are stable across time (Shaufeli & Enzman, 1998). These consequences are multidimensional, impacting the individual physically, emotionally, cognitively and behaviorally. Somatic symptoms include chronic fatigue, gastrointestinal disturbances and headaches (Barak, Nissly, & Levin, 2001). Behavioral manifestations of burnout within the workplace include frequent absenteeism, chronic tardiness, evidence of poor client care, and low completion rates of clinical and administrative duties (Barak, Nissly, & Levin, 2001; Newell & MacNeil, 2010). Irritability, depression, decreased concentration and lowered self-esteem are emotional and cognitive consequences associated with the presence of burnout (Cordes, Dougherty, 1993).

Research on the precursors of burnout can be divided into three categories: job and role characteristics, organizational characteristics and personal characteristics (Cordes, Dougherty, 1993). Job and role characteristics associated with high burnout include role overload, role conflict and role ambiguity. The organizational characteristics found to contribute to the development of burnout include work environments that are excessively punitive, politically driven and lack adequate rewards (Cordes and Dougherty, 1993). Furthermore, organizational elements of job context that have been related to burnout include unstable work shift, lower level position within the company and lack of autonomy (Gaines & Jermier, 1983; Pretty, McCarthy, Catano, 1992). Personal characteristics such as conflicting relationships with coworkers, individual personality and coping styles, poor perceived social support and difficulty interacting with and understanding clients have been implicated in the development of burnout (Barak,

Nissly, & Levin, 2001; Cordes and Dougherty, 1993; Lloyd, King, & Chenoweth, 2002; Thorton, 1992).

The impact of demographic variables on burnout have focused on the roles of gender, marital status, and age; yielding conflicting results (Cordes & Dougherty, 1993; Lackritz, 2004). Racial comparison studies of informal adult caregivers and university faculty found that levels of burnout did not differ by race (Lackritz, 2004; Salyers and Bond, 2001). Conversely, in a sample of case managers there was a significant relationship between race and burnout (Salyers & Bond, 2001). Research on the impact of race is scant and merited further investigation.

The risk factors and impacts of burnout in nurses are well studied. Factors associated with nurse burnout include intense workloads, poor administrative support, poor nurse-physician relationships and overall lack of support services (Hooper, Craig, Janvrin, & Wetsel, 2010; Vahey et al., 2004). Subsequently, nurse burnout impacts the individual, institution and patient, with higher rates of poor patient satisfaction and outcomes (Aiken, Clarke, & Sloane, 2002; Halm, Peterson, & Kandels, 2005; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004).

Compassion Fatigue. The term compassion fatigue was first used by Joinson (1992) when describing burnout in nurses, although, the construct remains tied to burnout, its definition remains elusive and controversial. A significant distinction among the definitions of compassion fatigue is the inclusion or exclusion of the knowledge of trauma. As per Figley (1995), compassion fatigue results from the stress of helping or wanting to help a traumatized or suffering individual. Whereas Stamm (1999) described compassion fatigue as ‘the natural, predictable, treatable and preventable unwanted consequence of working with suffering people.’ Construct definition issues are further exacerbated by changes in nomenclature; as compassion fatigue, secondary traumatic stress and vicarious trauma are used interchangeably (Adams,

Boscarino, & Figley, 2006; Bride, Radney, & Figley, 2007; Figley, 1995). Consistent across all definitions, compassion fatigue is a natural consequence of interpersonal interactions and empathy and compassion in the context of care (Sabo, 2006). Compassion fatigue recently emerged in the literature as a more general term describing the overall experience of emotional and physical fatigue that social service professionals experience due to the chronic use of empathy when treating patients who are suffering (Figley, 2002b; Rothschild & Rand, 2006).

Research on the symptoms, risk factors and impacts of compassion fatigue have been hampered by the lack of conceptual clarity. Symptoms of compassion fatigue can include irritability, increased negative arousal, hypervigilance, depressive symptoms and decreased self-efficacy (Gentry, Baranowsky, & Dunning, 2002; Figley, 2002). Individual risk factors associated with the development of compassion fatigue include personal stressors, a lack of adequate support systems, and personal trauma history (Newell & MacNeil, 2010). Organizational features that have been identified as risk factors for compassion fatigue include inadequate supervision, lack of availability of client resources, and lack of support from professional colleagues (Catherall, 1995; Dunkley & Whalen, 2006; Farrell & Turpin, 2003). Research investigating the impacts of race and ethnicity on the development of compassion fatigue were not found.

Significance of the Study

Since the turn of the century the ageing population of the United States has grown at a rate four times the rate of residents 55 years and younger (U.S. Census Bureau, 2011). Within the next 5 years, a significant increase in the ageing population is projected as the 'baby boomer' generation reaches the senior stages of life. As the American population ages and the oldest old population continues to swell, an increased demand for direct health care providers will be

created. Unfortunately, healthcare organizations struggle with pervasive issues of retention and turnover in direct caregivers, leaving their resources depleted and overtaxed (Rotter et al., 2010). Research has identified that both burnout and compassion fatigue are significant syndromes that are correlated to staff satisfaction and turnover as well as patient outcome variables (Jennings, 2007; Aiken, Clarke, & Sloane, 2002). Investigations of the impact of stress related syndromes in health care providers on patient outcomes have consistently illustrated the adverse effects, including slower patient recovery rates, patient dissatisfaction and increased mortality (Aiken, Clarke, & Sloane, 2002; Halm, Peterson, & Kandels, 2005; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004; Leiter, Harvie, & Frizzell, 1998). Although the research has aimed to identify antecedents and factors relevant to the development of stress related syndromes, little to no research examined the specific role of racial discrimination or race related stress. This knowledge is particularly timely as many of the direct care providers of the ageing are people of color (Paraprofessional Health Care Institute, 2011). As such, the study aimed to address the dearth in the literature and illuminate the stress related issues facing many nursing assistants across workplace settings.

Definition of terms

Race. Race has no agreed upon biological or physiological definition and as per Helms and Cook (1999) racial differentiation can occur only in satisfaction of 3 criteria including: biological or genetic material delineating the races, evidence of acceptance and conformance of the criteria within the groups, and an apriori method to distinguish any characteristics that may overlap between the races. Due to the impossibility of the criteria, the social construction of race and research in psychology has measured race as a nominal, mutually exclusive category, whereby race can be defined by quasi-biological criteria such as phenotype (Helms, 1992).

Furthermore, race is defined by the identification of a group based on the perception of shared physical characteristics that are viewed as biologically based. In the current study, race was measured with an open-ended question on a demographic questionnaire. Although some theories of Black culture require the individual to identify as a descendant of Africa (Kambon, 1998), the current prevailing view is inclusionary of all ‘humanity from a cultural frame of reference rooted in African cultural traditions and worldviews (Myers, 2009, p. 36).’ Furthermore, African culture encompasses a myriad of ethnic groups as it is reflective of an overarching historically based unity and consciousness (Coleman & Johnson, 2009; Myers, 2009; Parham, 2009).

Burnout. Burnout, as defined by Maslach and Jackson (1986) is a deleterious reaction comprised of three dimensions, including emotional exhaustion, depersonalization and reduced personal accomplishment. Burnout develops from prolonged exposure to emotional and interpersonal stressors experienced in the workplace. Symptoms of burnout include fatigue, difficulty sleeping, absenteeism, anger and decreased self-esteem. For the purposes of this study, burnout was assessed using the Burnout scale of the Professional Quality of Life Scale-Version 5 (ProQOL 5; Stamm, 2009).

Compassion fatigue. Compassion fatigue was defined as “the natural, predictable, treatable, and preventable unwanted consequence of working with suffering people (Stamm, 1999).” Symptoms of compassion fatigue include decreased job performance, hypervigilance, avoidance and avoidance (Hooper et al., 2010; Gentry et al., 2002). Compassion fatigue was measured using the Secondary Traumatic Stress scale of the ProQOL 5.

Race-related stress. Race-related stress is defined as the cumulative impact of racial discrimination that is in excess of the resources available to the individual (Clark, Anderson,

Clark, & Williams, 1999). For the purposes of this study, race-related stress was measured using the Index of Race-Related Stress-Brief version (IRRS-B; Utsey, 1999).

Culture-specific coping. Culture-specific coping was measured by scores on the Africultural Coping Systems Inventory (ACSI; Utsey et al., 2000). The ACSI measures the culture-specific coping strategies used by African Americans and is comprised of the four subscales; cognitive and emotional debriefing, spiritual-centered coping, collective coping and ritual centered coping.

Research Questions

Question 1: To what extent are Black nursing assistants experiencing compassion fatigue and burnout?

Question 2: Do Black nursing assistants experience race related stress?

Question 3: What is the relationship between race-related stress, compassion fatigue, and burnout in Black nursing assistants?

Question 4: What is the relationship between culture-specific coping strategies, compassion fatigue, and burnout in Black nursing assistants?

Question 5: What impact do culture-specific coping strategies have on the relationship between race-related stress and compassion fatigue?

Question 6: What impact do culture-specific coping strategies have on the relationship between race-related stress and burnout?

Statement of Hypotheses

Hypothesis 1: It was hypothesized that Black nursing assistants would report elevated levels of compassion fatigue and elevated levels of burnout.

Hypothesis 2: It was hypothesized that Black nursing assistants would demonstrate race related stress.

Hypothesis 3: It was hypothesized that race-related stress and work related stress would be related in Black nursing assistants.

Hypothesis 4: It was hypothesized that utilization of culture-specific coping strategies would be associated with compassion fatigue and burnout in Black nursing assistants.

Hypothesis 5: It was hypothesized that higher levels of culture-specific coping strategies would moderate the relationship between race-related stress and compassion fatigue in Black nursing assistants.

Hypothesis 6: It was hypothesized that higher levels of culture-specific coping strategies would moderate the relationship between race-related stress and burnout in Black nursing assistants.

Limitations

To best understand the relationships among the multiple variables of interest, preserve external validity, gather exploratory data on a understudied population, and generate questions for future research a non-experimental, correlational design was utilized. The design and subsequent methodology introduced a number of limitations which are presented here.

Generalizability of the results was limited by the self-selected, nonprobability convenience sample. Specifically, all enrolled participants were employed by a staffing company located in a large city in the Northeast. Because there is scant literature on workplace stress related disorders in nursing assistants and inconsistent research on the impact of race on stress in other helping professions, there were few theoretically indicated exclusionary criteria.

The maintenance of confidentiality and anonymity were strengths of the study's methodology. No identifying information was included on study documentation and completed

survey packets were returned in sealed envelopes. Additionally, the researcher had no pre-existing relationship with participants. However, it is important to consider the possible impacts of response bias and response editing in survey research (McHorney & Fleishman, 2006). As per the social cognitive theory of survey response, completing a survey qualifies as a social encounter that is governed by social norms such as social desirability (Ross & Mirowsky, 1984; Warnecke, Johnson, & Chavez, 1997). Therefore, participants may have been reluctant to endorse items perceived as negative in an effort to portray strength and increase social desirability.

Chapter Two

Literature Review

Professional Quality of Life

Stress. Stress is an ambiguous term that has garnered attention and produced a vast body of literature from a variety of disciplines, yet its definition remains elusive and without scientific consensus. However, there is uniform agreement that stress impacts the physical and psychological systems. Walter Canon (1932), who first introduced the terms stress and fight or flight response, observed the body reacted similarly to extremely physically and emotionally arousing stimuli. Since, Cannon's work, the definition of stress has varied. The literature has operationalized stress as a stimulus or antecedent, a response or consequence, and as an interaction or process.

Hans Selye's (1976) general adaptation syndrome (GAS) was a significant contribution to the stress literature. In the GAS model, stress is a general and predictable response of the body triggered by a demand. The three stage model proposes severe and chronic stress responses can result in a physical breakdown. The first stage, alarm attention, like Cannon's fight or flight response, is a defensive response marked by a cascade of epinephrine, cortisol and other hormones. Although the first stage may vary in intensity according to the degree of threat perceived by the individual, if resolved does not produce illness (Selye, 1976). Perception of continued threat beyond the initial fight/flight response, results in resistance, the second stage. During the second stage, the body attempts to accommodate the prolonged physiological arousal with consequences including irritability and increased vulnerability to infection. Chronic exposure to perceived threat results in physical exhaustion and the final stage is defined by the depletion of energy reserves and subsequent increased susceptibility to disease. Research of the

GAS model illustrated links between duration of stress and the cumulative impacts on health and illness (Szanton, Gill, & Allen, 2005). Hypocortisolism, the proposed biological hallmark of the third stage, has been linked with Alzheimer's disease, major depressive disorder, anorexia nervosa, and autoimmune disorders (Kiecolt-Glaser, McGuire, Robles, & Glaser, 2002; Kiecolt-Glaser and Glaser, 1995; Sapolsky; 1996).

The theory of allostasis describes the cumulative impact of stress on the body and the resultant biological markers. Allostasis is the body's ability to adapt to stressors and the biological risk incurred from ineffective adaptation (McEwan & Stellar, 1993). The stress response system introduces an extensive and complex surge of stress hormones into the body initiating behaviors that are essential for survival. A key tenet of allostasis is the evidence that healthy functioning requires physiological systems to endure constant fluctuations in response to primary stressors such as hunger, fatigue, danger and infection (McEwen, 1998). The allostatic systems, as per McEwen (1998) can be activated by a myriad of stressors including environmental, psychosocial and diurnal disruptions.

In accordance with Selye (1976), negative biological consequences occur when the body is overexposed to stress hormones. Allostatic load is the physiological residue of stressors and the altered reactivity of the allostatic system. More simply stated, allostatic load can be conceptualized as the cumulative wear and tear of stressors on the body's systems including metabolic, immune and cardiovascular (Seplaki, Goldman, Weinstein, & Lin, 2004). Further, high allostatic load contributes to the development, course and prognosis of chronic conditions, acute infectious disease and wound healing (McEwen, 1998; McEwen & Seeman, 1999; Seeman, Singer, Rowe, Horwitz, & McEwen, 1997). Blood-pressure reactivity, cortisol levels, glycated hemoglobin levels and sympathetic nerve activity are effective biological markers of

allostatic load, with higher measures indicating increased allostatic load (Cohen, Doyle, & Skoner, 1999; Geronimus, et. al, 2006, Steptoe et al., 2003).

Allostatic load as a marker of differential exposure to stressors has been empirically investigated as a partial explanation for health disparities. Research on the impact of aging on health illustrates biological measures of allostatic load increase across the life-span (Crimminus, Johnston, Hayward, & Seeman, 2003; Geronimus et al., 2006). Empirical evidence of between group differences indicates minorities have higher allostatic load than their White counterparts, and that the group differences increase with age (Geronimus et al., 2006). Studies illustrating the significant link between racial discrimination and maladaptive patterns of physiological reactivity, utilized biological markers indicative of high allostatic load (Clark, 2000; Fang & Myers, 2001; Tull, Sheu, Butler, & Cornelious, 2005). Research examining the impact of discrimination and the process of assimilation found recent Mexican immigrants had the lowest allostatic load scores when compared with U.S. born Mexican Americans, non-Hispanic whites, and non-Hispanic Blacks (Kaestner, Pearson, Keene, & Geronimus, 2009). Furthermore, in immigrated Mexican participants, the data illustrated a significant positive relationship between increased allostatic load scores and time living within the U.S.

Stress theory was significantly altered with the introduction of the importance of conscious appraisal in the stress response reaction (Mason, 1975). Adapted stress models and research included psychological variables as both stressors and elements of the response. As cited in Resick (2004), Lazarus and Folkman (1984) defined stress as ‘a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being (p19).’ The transactional model conceptualizes stress as the interaction between the appraisals of external demands and the

appraisals of accessible resources, whereby the resources utilized are deemed coping strategies (Lazarus, 1993). Therefore, as per the transactional model, the physiological arousal associated with the stress response is activated when the coping strategies are perceived as inadequate in ameliorating the impact of the demand. With the advent of the transactional model, stress was no longer an automatic physiological response, but a cognitive process whereby the individual had significant control. Current, research utilizes a stress process format, whereby risk and protective factors are identified.

A multitude of theories and a diverse body of literature has attempted to apportion the factors that contribute and buffer stress. Higher levels of self-efficacy, self-esteem, intrinsic motivation and optimism are all personality elements that are associated with lower levels of stress and stress related illness (Ackerman, Kogos, Youngstrom, Schoff, and Izard, 1999; Carver, Smith, Antoni, & Petronis, 2005; Masten, 2001; Peterson, Crowson, Saldana, & Holdridge, 1999). Furthermore, two personality types, hardiness and resilience, were discovered as effective in bolstering coping and buffering stress (Kobasa, Maddi, & Kahn, 1982; Kobasa, Maddi, Puccetti, & Zola, 1985; Florian, Mikulincer, & Taubman, 1995). Yet critics of stress buffering personality styles and resilience attribute positive health outcomes to adaptive coping styles or external resources such as social support. These researchers of high risk children possessing 'hardy' personality styles and exhibiting resilience attribute positive outcomes to external resources such as consistent supportive relationships and connection with the community (Garnezy, 1993; Masten, 2001).

The research illustrates that social support can be defined as companionship that conveys emotional concern, material assistance or honest feedback (Cohen & Willis, 1985). Research supports perceived social support may reduce stress and bolster coping, leading to faster

recovery and fewer medical complications, lower mortality rates and less reported distress in the face of terminal illness (Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993; Holahan, Holahan, Moos, & Breannan, 1997; Rosengren, Wilhelmsen, & Orth-Gomer, 2004; Varni, Setoguchi, Rappaport, & Talbot, 1992). However, the role of social support in buffering stress is specific and can be impacted by the types of social support available (Abraido-Lanza, 2004). Instrumental social support, which provides material assistance, is found to more effective in ameliorating stress reactions in response to controllable stressors (Lieberman, 1992). Conversely research found stress produced from uncontrollable demands, such as death of a loved one, is better buffered by emotional support (Shumaker & Hill, 1991). Furthermore, empirical evidence illustrates that culture impacts the perception and utilization of social support. In a study of the impact of social embeddedness on psychological well-being, Black men were significantly more socially embedded when compared to their White counterparts (Snowden, 2001). Social embeddedness describes the myriad of social interactions including time spent with friends and participations in group and community organizations. Furthermore, the results indicated a significant relationship between social embeddedness and positive mental health outcomes and well-being.

The inconclusive results, multitude of overlapping definitions and theoretical conflicts that contribute to the murky waters of the stress research can be integrated through a culturally specific adapted stress process model. The stress process model simply examines stressors and resources, therefore the theoretical template can be applied to differing theories and their respective differing definitions. A further strength of the stress process model is its comprehensive definition of sources of stress including the historical context of a cohort, the individual's life stage and his/her location within the structural aspects of society (Perlin et al.,

1990). Thus, an adapted stress process model is especially appropriate when examining the stressors and resources of racial and ethnic minorities.

Stress and caregiving. Caregiver burden is significant topic that aims to examine risk and protective factors associated with the development of stress and subsequent impact of caregiving. Caregiving is defined as the responsibilities associated with providing support and assistance to relatives who are unable to provide for themselves (Etters, Goodall, & Harrison, 2008). Although a variety of responsibilities may fall within the caregiving definition, some of them more cumbersome and time consuming than others, the definition does not carry a difficult connotation. Also, the reaction and psychological state of the caregiver is absent in the definition of caregiving. Caregiver burden is defined as ‘a multidimensional response to physical, psychological, emotional, social and financial stressors associated with the caregiving experience (Kasya, Polgar-Bailey, & Takeuchi, 2000).’ Caregiver burden clearly connotes and denotes the severity of the responsibility and its impact on the caregiver. Empirical evidence has illustrated that caregiver burden is associated with decreased quality of life, illness and depression for the caregivers and earlier assistive living placement and poor quality of life for the cared for (Gaugler, Kane, & Newcomer, 2005; Schulze & Rossler, 2005; Yaffe et al., 2002). The body of literature has examined the preponderance of caregiver burden in a variety of disease states including dementia, traumatic brain injury, cancer and HIV.

Demographic variables such as gender, age, ethnicity, employment status, and relationship with the cared for as well as disease state/injury related variables and stress have yielded conflicting and inconclusive results (Adams, Aranda, Kemp, & Takagi, 2002; Chumbler, Grimm, Cody, & Beck, 2003; Coen, O'Boyle, Coakley, & Lawlor, 2002; De Vugt et al., 2005; Etters, Goodall, & Harrison, 2008; Janevic & Connell, 2001). Scholars have hypothesized

research methodology and foggy theoretical formulations have caused much of the discrepant research (Weitzner, Haley, & Chen, 2001). Therefore, in line with trends in stress research, stress process models have been employed to elucidate the significant risk and protective factors in caregiver burden and well-being (Haley, Levine, Brown, & Bartolucci, 1987; Perlin, Mullan, Semple, & Skaff, 1990). Some of the factors included in the stress process models included risk factors such as primary caregiving stressors such as diaper changing and transportation to medical appointments as well as stressors outside of caregiving such as poor peer relationships, and workplace difficulties (Haley, LaMonde, Han, Burton, & Schonwetter, 2003). Protective factors utilized included personality traits, coping styles, appraisal of caregiving, social networks and social supports. For example, utilizing a stress process model to examine the stress related to caregiving for individuals with dementia, Haley et al., (1996) found that appraisal, coping efforts and social supported mediated the effects of caregiving on well-being. The culmination of the stress process research to date has found that caregivers endorsing higher rates of burden and symptoms of depression had lower self-efficacy, lower satisfaction from caregiver role, derived little meaning in caregiving, and appraised caregiving tasks as stressful (Folkman & Moskowitz, 2000; Haley et al., 2003; Oberst, Gass, & Ward, 1989). Whereas, those who endorsed less distress reported increased participation in social activities, had larger social networks, and perceived satisfaction with their social support (Northouse, 1988; Schulze & Rossler, 2005; Weitzner et al., 2001).

Empirical research on caregiving in a multicultural population is comparatively scant, as much of the caregiving studies were limited to white, American families (Haley et al., 2004). Like, the inconclusive findings of aforementioned caregiving research, multicultural research yields similar results. However, studies have found consistent demographic differences between

African-American and Caucasian caregivers. African-American caregivers are less likely to consider institutionalization and more likely to be an extended relative, younger, unmarried and of lower socioeconomic status (Dilworth-Anderson, Williams, and Gibson, 2002; Haley et al., 2004). In a study comparing Japanese, White, African, and Mexican American caregivers on depression, psychological symptomology, social and coping resources Mexican-Americans showed the highest levels of depression, perceived the lowest social support, and conceptualized their circumstances with high pessimism (Adams, Aranda, Kemp, & Takagi, 2002).

Interestingly, the authors report a significant trend illustrating Blacks had lower rates of depression and psychological symptomology when compared with their Japanese and White counterparts. Consistent with the aforementioned study Black caregivers report lower distress appraisals, greater positive affect and greater attendance of religious services (Foley, Tung, & Mutran, 2002; Haley et al., 1996; Haley et al., 2004). Furthermore, White caregivers report lower life satisfaction, and longitudinal research has found that with time Caucasian caregivers report significant decline over time, whereby Blacks remain stable (Haley et al., 1996; (Roth, Haley, Owen, Clay, & Goode, 2001). Although empirical research yields consistent results of cross cultural comparisons of caregiver burden, the underlying theories of stress and measures of distress may not accurately reflect and measure their unique multicultural experiences. The most salient theoretical issue of the aforementioned studies is the omission of Afrocentric theory and race-related stress. The need to combine both perspectives when conceptualizing the mental health of Blacks is eloquently addressed by Jones (2003). A multitude of studies have illustrated the protective factor of individuals who utilize Afrocentric cultural values as coping resources (Brosky, 2000; Constantine, Alleyne, Wallace, & Franklin-Jackson, 2006; Utsey, Adams, & Bolden, 2000; Utsey, Bolden, Lanier, & Williams, 2007). However, the Afrocentric approach

fails to adequately address the impact of racial oppression on the individual living in a White Supremacist society (Jones, 2003). Similarly, the race-related stress approach highlights the deleterious impact of racism on identity and development but underestimates the resilience, strength and adaptability derived from Afrocentric cultural values (Speight, Blackmon, Odugu, & Steele, 2009).

Workplace Stress in Helping Professions. Stress within the workplace can be adequately conceptualized utilizing a stress process model, wherein the unique context specific, work related risk and protective factors are included. Traditional work related stressors consistently supported within the literature include role conflict, role ambiguity, job dissatisfaction, punitive management styles and organizational discord (Barsky et al., 2004; Spector et al., 2000; Walsh, & Walsh, 2001). As previously discussed, the stress literature is convoluted by inconsistent nomenclature and conflicting theory, and the workplace literature does not pose an exception. In fact, much of the workplace stress literature is too narrow, focusing solely on the contextual elements introduced by the workplace and omitting the remaining elements within the individual's life.

A significant segment of the workplace stress literature is devoted to understanding stress in helping professionals (Appleby, 1998; Cherniss, 1980; Einstat & Felner, 1983; Gellis and Kim, 2004). The sources of stress unique to many helping professionals include exposure to infectious agents, frequently managing crises alone, difficult patient behaviors, contact with the severely infirmed, and continued exposure to death (Aiken, Clark, & Sloan, 2002; Prosser et al., 1997; Walsh & Walsh, 2001). Conversely, unique protective factors derived from helping professions include compassion satisfaction, deep emotional attachment with patients and increased workplace social interaction (McGilton, 2004, Williams, Kemper & Hummert, 2003). Empirical

evidences indicates that helping professionals who report chronic workplace stress suffer negative outcomes including anxiety, increased vulnerability to illness, irritability, and increased somatic complaints (Gellis & Kim, 2004; Lloyd, King, and Chenoweth, 2002). Furthermore, high levels of work stress in helping professionals is associated with negative occupational outcomes including decreased job efficacy, turnover, absenteeism and decreased productivity (Walsh, & Walsh, 2001). Of particular concern, is the evidence illustrating the deleterious impact on those being helped, including poorer surgical recovery rates, higher mortality rates and lower satisfaction of care rates (Gellis, & Kim, 2004; Lloyd, King, & Chenoweth, 2002).

A body of literature examines the stress responses of helping professionals including physicians, psychologists, social workers, teachers and nurses. Nursing assistants have the most frequent and intimate contact with hospitalized and residential patients, providing over 90% of their received care (McGilton, 2004; Williams, Kemper, & Hummert, 2003). However, scant literature studies their unique workplace interactions. Two studies examining the impact of communication on the patient/care provider relationship supported theoretical assertions that the development and maintenance of interpersonal relationships are predicated on effective communication (Burgio et al., 2002; Carpiac-Claver & Levy-Storms, 2007). Results indicate that instrumental communication is more frequently utilized than affective communication and positive relationships are predicted by the increased usage of affective communication. Thus, it may be concluded that nursing assistants may face strained patient/provider relationships that could be a source of workplace stress. In conjunction with high physically and emotionally demanding occupation demands, the elevated rates of injury and illness, and the low pay and poor fringe benefits, the proposed study hypothesizes that nursing assistants are at an increased

rate of experiencing workplace stress (Bureau of Labor Statistics, 2008; Parsons et al., 2003; Paraprofessionals Healthcare Institute, 2011).

Burnout. Freudenberger (1974), first utilized the term burnout within the work related literature, he utilized it to describe a response pattern observed in the employees he worked with at a health care center. The staff members displayed a marked change in behavior that was characterized by apathy and exhaustion (Maslach, & Schaufeli, 1995). Despite, Freudenberger's astute observations and his repeated publications, burnout did not garner significant attention until Maslach conducted formal research on burnout in helping occupations (Maslach, & Jackson, 1981). Through the extensive observations, interview and surveys Maslach and her colleagues formulated a maladaptive syndrome defined as burnout.

Burnout can be conceptualized as a workplace stress related disorder that is comprised of three distinct components: emotional exhaustion, depersonalization or cynicism towards one's job, and a decreased workplace self-efficacy (Maslach, et al., 1981; 2001). As per Maslach's original model of burnout, emotional exhaustion was both the hallmark and the initiation of the syndrome, whereby the "lack of energy and a feeling that one's emotional resources are used up" lead to the subsequent dimensions (Maslach & Jackson, 1981). Depersonalization, the second element of the burnout process, is characterized by a pervasive sense of detachment and cynicism in reference to work duties. Lastly, a significant decline in professional self-efficacy and expectations are illustrative of reduced personal accomplishment. More recent formulations of burnout conceptualize the development of each of the distinct dimensions as simultaneous (Ackerley, Burnell, Holder, & Kurdek, 1988; Lackritz, 2004; Mather et al., 2004). Considerable portions of the burnout literature have aimed to elucidate a structural model through which it

develops, the personal and professional outcomes associated with burnout, and the significant personal and professional protective and risk factors.

The stress process models have been utilized to construct models of the interactions that contribute to the development of burnout. Like, other stress process models, Hobfoll's (1988) conservation of resources (COR) model conceptualizes the stress process as an interaction between losses or stressors and resources or gains. Two important tenets of COR serve to distinguish it from other models and are illustrative of its initial formulation founded in war and natural disaster response (Hobfoll & Lieberman, 1987). The first principle defines resource loss as more salient than resource gain, whereby resource loss produces a more significant physiological, emotional, cognitive and behavioral response. As per Hobfoll & Shirom, (2000) because job demands require the investment of resources, they are categorized as losses. Previously identified job demands associated with the development of burnout are role conflicts, role confusion and role overload (Brookings, Bolton, Brown, & McEvoy, 1985; Cordes, Dougherty, 1993). According to Van Yperen and colleagues (1992), role overload includes work demands that are high in both qualitative and quantitative intensity. Quantitative intensity refers to a large amount of work or case load and high qualitative intensity refers to the "interpersonal distance" of the relationships within the work environment (Cordes, Dougherty, 1993). Teachers who displayed role overload with evidence of high qualitative and quantitative intensity, as evidenced by lack of professional, social recognition, little leverage within their bureaucratic system and large class size (Kokkinos, 2007). Role conflict and ambiguity are a direct result of the discord between employee expectations and actual experience within the job, leading to burnout via emotional exhaustion and depersonalization (Brookings, Bolton, Brown, & McEvoy, 1985).

According to the COR model, theoretically, burnout is more likely to occur when job demands exceed the available resources. Secondly, resources investment is essential as it protects against future resource loss, and facilitates resource recovery. However, the hallmark of COR is the emphasis on the environmental context as a significant contributor to the appraisal process. Unlike other stress process models, in COR, both the objective and socially constructed environment interact to create the resource appraisals. The primary importance of the environment is illustrated in the emphasis of social support as a 'conditioned resource' whereby it serves as a gateway to other resources (Hobfoll, & Shirom, 2000).

Research testing the COR model of burnout concluded that prolonged exposure to job demands that are in excess of the available resources will result in the complete depletion of investment resources despite attempts to minimize the net resource losses (Hobfoll, & Freedy, 1993; Freedy, & Hobfoll, 1994; Lee, & Ashford, 1996; Taris, Schreurs, & Van-Iersel, 2001). Furthermore, Freedy & Hobfoll (1994) explained that due to the typical rate through which work demands require the investment of resources, the effort to replenish them results in emotional exhaustion, initiating both burnout and a spiral of losses. As embedded in the contextual element of the COR theory and previous research results, evidence supported the preventative impact of social support in the development of burnout (Lee, & Ashford, 1996). Cordes and Dougherty (1993) reviewed the research examining the relationship between social support and burnout and found that increased social support lead to decreased burnout via two avenues. Social support can serve as a buffer to stress by increasing the individual's self-efficacy and by restructuring the appraisal of the stressor (Cordes & Dougherty, 1993). The efficacy of social support decreasing burnout was reaffirmed in a meta-analysis of burnout by Gilbody et al. (2006). Their review examined treatment methods of burnout and found that strategies that effectively enhanced social

support, effectively decreased burnout symptoms. Major criticisms of the COR research include the homogenous workplace settings, and the poorly defined resources/protective factors.

The demographic variables gender and age received attention within the burnout research. Maslach and Jackson (1981, 1985) illustrated gender differences in the development of burnout. However Ackerly et al., (1988) found no gender differences when controlling for other demographic variables. Yet, Lackritz' (2004) study of university professors, yielded gender differences among the three dimensions of burnout, including a higher rate of emotional exhaustion in women and a higher rate of depersonalization in male faculty. Lackritz' results also confirmed previous research citing a negative correlation between age and burnout (Vredenburgh, Carlozzi, & Stein, 1999). The protective role of advancing age had been found and discussed as maturation facilitating the development of more appropriate work related coping skills (Vredenburgh, Carlozzi, Stein, 1999). However a functional MRI study by Mather et al. (2004) examining activation of the amygdala during the presentation of negative, neutral and positive stimuli, offers a different explanation. As per the authors', older participants may experience reduced levels of burnout due to a higher desire for emotional regulation and stability, whereby the desire for emotional stability may modify the appraisal of the stressor (Mather et al., 2004). The empirical examination of the relationship between race and burnout is limited and is largely flawed theoretically.

Salyers, & Bond (2001) studied a sample of 79 case managers, 51% of whom were White, 46% were Black, and 3% were Asian. The purpose of the study was to examine race and burnout utilizing one measure of burnout and one measure of workplace environment, which included both stressors and resources. Demographic information was also attained including highest level of education, current case load, and years in current job position. The results

indicated that Black participants endorsed lower levels of emotional exhaustion and depersonalization, causing the authors to conclude that job role factors including case load racial congruence and supportive management staff accounted for the between group differences. A myriad of methodological and theoretical flaws introduce severe limitations. The sample was problematic as the work environment, case load and age were largely disparate creating unequal groups. Also, despite the repeated measures design, a substantial subset of the sample did not complete the measures at all three time points. Lastly, the study seemed atheoretical in nature as no race-specific theory or measures were utilized.

Empirical evidence has linked an extensive array of negative professional and personal outcomes to burnout. Furthermore, if burnout remains untreated or is unresolved research has illustrated outcomes may increase in severity or initiate greater psychological disturbance, such as depression (Bakker et al., 2000). Other mental health outcomes such as increased depressive and anxious symptomology and decreased self-esteem (Cordes & Dougherty, 1993; Lee & Ashforth, 1990; Maslach, Schaufeli, & Leiter, 2001). Professional consequences of burnout supported within the literature include poor job performance, turnover ideation, absenteeism, quitting and interpersonal dysfunction (Kahill, 1988; Maslach, Schaufeli, & Leiter, 2001). A deterioration of social functioning is seen both personally and professionally and is marked by the advent of the emotional detachment dimension of burnout (Cordes & Dougherty, 1993; Maslach, Schaufeli, & Leiter, 2001). Burnout has been associated with physical symptoms often seen in acute stress response reactions such as gastrointestinal disturbances and chest pains, as well more chronic somatic complaints including headaches and chronic fatigue (Bakker et al., 2000; Cordes, & Dougherty, 1993; Maslach, Schaufeli, & Leiter, 2001).

Burnout in Nursing. Burnout has been examined in nursing staff and the results have yielded some unique elements that bare attention in light of the target population of the present study. Work-setting appears to be a significant risk factor in the development of burnout in nursing staff. In a study Prosser et al. (1996) results illustrated burnout was more prevalent in nurses working in walk-in community clinics when compared to those working in inpatient, day-care and outpatient facilities. Unfortunately, the study which attempted to control for numerous confounding variables, by utilizing a matched sample design, did not include nursing staff working in residential facilities. Comparing the results of studies examining burnout in varied residential settings, the conclusion may be made that nurses working in acute geriatric wards within hospitals may display more burnout (Cocco, Gatti, Lima, & Camus, 2003). In conjunction with the greater burnout literature, nurses suffering from burnout, display poor job performance (Aiken et al., 2002; Halm et al., 2005). Unfortunately, the residual consequences of poor nursing job performance are poor patient outcomes including increased mortality rates and failure to rescue (Aiken et al., 2002; Halm et al., 2005). Furthermore Vahey, Aiken, Sloane, Clarke, and Vargas (2004) demonstrated that burnout and patient satisfaction were negatively correlated. Significant job role characteristics associated with nurse burnout include high case loads, longer shift length, diminished administrative support, poorer nurse-physician relationships, and lack of adequate support services (Hoffman & Scott, 2003; Johnson et al., 1995).

Compassion Fatigue. Compassion fatigue often coined 'the cost of caring' (Figley, 1995), is the normal, expected, preventable and treatable reaction to working with suffering individuals. The term was first used by Joinson (1992) when describing burnout in nurses, and they remain inexorably linked. However, immediate distinctions are evident in the terminology

utilized to describe the development and courses of both compassion fatigue and burnout, whereby burnout is maladaptive, gradual in onset and requires intervention (Maslach, 1984). As per Stamm (1999) compassion fatigue is 'the natural, predictable, treatable and preventable unwanted consequence of working with suffering people.' Any clarity gained in from delineating compassion fatigue and burnout is lost within the dense existing literature in which compassion fatigue, vicarious trauma, and secondary traumatic stress are used interchangeably (Adams, Boscarino, & Figley, 2006; Bride, Radney, & Figley, 2007; Figley, 1995). Similarities of the definitions include the involvement of interpersonal interactions; the context of care and their development are viewed as natural consequences of continued empathic engagement (Sabo, 2006). A significant distinction among the definitions of compassion fatigue is the inclusion the knowledge of trauma, whereby as per Figley (1995), compassion fatigue results from the stress of helping or wanting to help a traumatized or suffering individual. Also, in varying degrees, empathy and compassion are integral components underlying all of the identified concepts. Recently, compassion fatigue emerged in the literature as a more general term describing the overall experience of emotional and physical fatigue that social service professionals experience due to the chronic use of empathy when treating patients who are suffering in some way (Figley, 2002; Rothschild and Rand, 2006).

The research examining the symptoms, risk factors and impact of compassion fatigue is inconclusive and has likely been hampered by the lack of conceptual clarity. Symptoms of compassion fatigue mimic those of post-traumatic stress and burnout and can include irritability, increased negative arousal, hypervigilance, intrusive thoughts, feelings and recollections, depressive symptoms and decrease in self-efficacy (Gentry, Baranowsky, & Dunning, 2002; Figley, 2002). Individual risk factors associated with the development of compassion fatigue

include personal stressors, a lack of adequate support systems, and personal trauma history (Newell & MacNeil, 2010). In conjunction with a stress process model, contributing protective and risk factors have been investigated, and at macro level, several organizational features are linked to compassion fatigue. These factors include organizational setting and bureaucratic constraints, inadequate supervision, lack of availability of client resources, and lack of support from professional colleagues (Dunkley & Whelan, 2006; Farrell & Turpin, 2003; Catherall, 1999, 1995). Furthermore, no literature exists examining the impact of race or ethnicity on the development of compassion fatigue. The need to explore the impact of race and more specifically race-related stress is imperative. Particularly, in light of research that illustrates that previous exposure to trauma is a contributing factor to the development of compassion fatigue (Figley, 2002). Furthermore, the protective role of culture-specific coping needs to be elucidated in diverse multicultural populations.

Currently, a three factor interactional model of the work related elements that comprise compassion fatigue prevails (Stamm, 2009). Within this model the empathic response, that stems from the genuine desire to support and help individuals in need, results in compassion stress (Figley, 2002). An embedded protective factor that is theorized to buffer the development of stress is satisfaction in their work efforts (Figley, 2002). The inability to disengage from the empathic response is an embedded risk factor that instigates the development of compassion fatigue.

Compassion Fatigue in Nurses. The target population of the present study is nursing assistants; unfortunately, previous literature did not explore compassion fatigue in occupational nursing assistants. However, elucidating the factors unique to nurses has garnered some attention within the literature. As per Figley (1995) and Maytum, Heiman, and Garwick (2004)

personal variables related to compassion fatigue in nurses include previous trauma, extreme emotional sensitivity, dissatisfaction with work and significant external stressors, interestingly mid-life (between 40 and 60 years of age) was an associated protective factor. In regards to previous trauma, in a study by Sherman (2004), the most common and significant trauma history predictive of compassion fatigue was unresolved grief over the loss of a patient. Results with both emergency room nurses and oncology nurses supported the aforementioned findings (Dominguez-Gomez, & Rutledge, 2009; Schwam, 1998).

Hooper et al. (2007) examined compassion fatigue and burnout utilizing a survey in a sample of 109 nurses working in different departments (emergency department, intensive care, nephrology and oncology). The scholars hypothesized their results would support the findings that nurses working in departments associated with high mortality rates, emergency rooms and oncology departments, would demonstrate higher levels of compassion fatigue when compared to nurses in other departments. The majority of the respondents were White, women, who worked the day shift and achieved an associate's level degree in nursing. Compassion fatigue was displayed at an elevated level; however, no distinctions between the workplace departments were evident. The authors concluded the results were illustrative of the issues surrounding the health care system, particularly the nursing profession which is struggling with understaffing due to high turnover rates. However, the theoretical underpinning of the study was minimal, as no other measures of risk or protective factors were obtained. Furthermore, an unequal distribution of participants between the departments reduced the power of the study and introduced error.

Black Psychology

The definition of Black Psychology and its underlying theories have undergone a historical shift. The origins of Black Psychology were reactionary and served to illuminate the

oppressive and inaccurate nature of utilizing traditional psychological theories to conceptualize people of African descent. The united purpose of early Black Psychology scholars created the space for the current rich and diverse body of Black Psychology theory and research to flourish. Although, current theories differ on their emphases of two factors, the collectivistic Africentric worldview and the impact of racial oppression by the majority culture, the intersection of both are inherent in the major theories of Black Psychology (Nobles, 2004; Coleman & Johnson, 2009; Utsey, Belvet, & Fischer, 2009).

The foundations of the Traditional School of thought of psychology are rooted in a Eurocentric orientation where developmental models, diagnostic labels and classifications of functionality are based on Eurocentric conceptions of normality (Kambon, 1992; Parham, White, & Ajamu, 1999, Parham, 2009). The anti-Black zeitgeist in conjunction with culturally encapsulated theory produced deficit models of psychology and behavior that conceptualized Blacks as deviant. Furthermore, the constructs, measures and subsequent research rooted in deficit theory and derived from Eurocentric norms were inherently flawed and inaccurate and serve to further pathologize Blacks (Parham, 2009). Early Black Psychology scholars, who were active in the Civil Rights movement and hoped to promote social change through the social sciences, initiated a movement to incorporate Africentric ideology into theories and research conceptualizing people of African descent (Coleman & Johnson, 2009). However, it is important to note, that Du Bois' seminal work 'The Souls of Black Folks' and other important historical texts, eloquently illustrate the numerous psychological struggles of people of African descent, specifically their struggles with identity development (Parham, 2009). To adequately address the culturally encapsulated lens of Eurocentric psychological theory, numerous early Black Psychology theorists touted the need to integrate core elements of African culture into Black

psychological theories. These core elements which are rooted in the African worldview include: the interconnectedness of the universe, the universal presence of the spirit, the collective as the only element of existence and the use of self-knowledge as the way to understanding and health (Obasi & Smith, 2009; Parham, White, and Ajamu, 1999; Parham, 2002; Parham, 2009).

The interconnectivity and collectivistic perspective that remain hallmarks of Black Psychology are inherent in the African worldview (Obasi & Smith, 2009). Consubstantiation, a fundamental tenet of African worldview, is the belief that all elements of the universe are comprised of one shared substance (Utsey, Belvet, & Fischer, 2009; Nobles, 2004). This belief is traced to ancient African culture and remains evident in modern cultures across the Diaspora (Grills & Ajei, 2002; Parham et al., 1999).

According to Ancient Kemetic spirituality and cultural traditions, the foundation of the individual did not lay within his/her personality, but rather the degree of alignment between his/her lifestyle and the greater social order. Social order was conceptualized as interlocking spheres of reality including a higher power, the cosmos, the organization of the state, and the individual (Parham, 2009). Of particular importance to the understanding of the reality of the each individual is that the family was an inherent element in the individual sphere, whereby the individual was not defined outside of the family. Similarly, in Akan (Ghana, West Africa) the definitions of the universe, God and the individual all include the interconnectedness of the higher power, deities, ancestral spirits, and the physical world including all humans and animals.

Elements of ancient Kemetic consubstantiation and the respective social spheres of reality that are essential constructs of current Black psychological theory include metaphysical interconnectedness, communal order and self-knowledge, and spirit (Utsey et al., 2009). The spirit, which is the life force of the Creator, exists in all animate and inanimate things and

therefore serves to connect all things in the present world (Parham et al., 1999). As per Grills (2002), communal order and self-knowledge holds that identity, knowledge and order of both the individual and the group is only attained through the reciprocal relationship between the self and the group. Metaphysical interconnectedness is the use of ritual as a representation of the knowledge that individuals are intrinsically linked with divine forces (Utsey et al., 2009). Within the current Black Psychology research, the aforementioned constructs can be seen in the coping literature and resilience research that identify connection with family, ancestors and the spiritual world as salient cultural beliefs (Coleman and Johnson, 2009; Obasi and Smith, 2009, Utsey et al., 2009).

The theoretical addition of the Afrocentric worldview to Black Psychology did not mark the end of its evolution. Black Psychology could not be devoid of the issues of racism and the impact of generations of oppression in mainstream society. Although Du Bois' seminal work in the early 1900's, 'The Souls of Black Folks' eloquently illustrated the numerous psychological struggles of people of African descent, psychological theory remained deficient (Parham, 2009). Furthermore, empirical literature describing the psychological functioning of people of African descent was not indicative of their normal functioning, but rather an adapted response to horrific oppression (Coleman & Johnson, 2009). However, in response to the reactionary movement of Black Psychology, scholars created personality and identity models inclusive of the impact of oppression.

Seminal theoretical formulations of racial identity and Black personality reflect the interaction of Afrocentric connectivity and the impact of oppression. Thomas' (1970) racial identity/rejection model of Negromachy, describes 5 stages that mark the transition from racial rejection to racial acceptance, whereby the initial stages are marked by the internalization of pain

associated with racism and the latter stages of acceptance are achieved only through connection the greater Black experience. Similarly, both Cross' (1995) Psychological Nigrescence Stage Model and Jackson's (1976) Black Identity Development emphasize the need to connect with one's sense of Blackness as a method to integrate racial identity into self-concept. Although, critics of the aforementioned models disagree that early stages of Black identity are marked by internalized negative beliefs, all theories acknowledge the deleterious impact of marginalization on developing a positive identity (Coleman & Johnson, 2009). According to each of the 4 major theories of Black personality development the definition of the self cannot be extricated from that of the greater group. In Wade Noble's Extended-Self model (2005), self-concept is interdependent on the collective consciousness. Similarly, in William's WEUSI model (1981), the self-concept and core of the personality is marked by the qualities of Blackness, Collectiveness and Naturalness. Emphasis on the fluidity of the spirits or rhythms between the individual and the collective group are hallmarks of both Akbar's Divine Core Model (2003) and Kambon's African Self-Consciousness Theory (1992).

The evolution of Black Psychology has resulted in its current definition which is inclusive of:

'theory development, research, and practice that recognize the importance of the Black cultural experience and seeks to ameliorate the mental health state of Black people...including the axiology, concepts of self, time orientations, human goals and epistemology grounded in the sociohistorical context of people of African descent...address the mental health recognizing the influence of racism and oppression and how experiences with these ills have shaped the psychology of Blacks throughout the Diaspora (Coleman & Johnson, 2009, p. 27).'

In conjunction with its evolution, current trends in practice, training and research of Black psychology emphasize the positive aspects of the Afrocentric roots and the deleterious impact of

marginalization. The recent impact of the positive psychology movement bolstered strength based aims to foster resilience and emotional vitality in the practice and training in Black Psychology. Conversely, the health psychology movement has procured empirical literature focused on parceling out the relevant antecedents of health disparities examines the links between oppression and physical and mental health outcomes.

Racism

The impact multifaceted impact of racism on human development can be understood utilizing Spencer's (2006) Phenomenological Variant of Ecological Systems Theory (PVEST), which incorporates theories of cognitive development with Bronfenbrenner's (1989) contextually based ecological systems theory. PVEST is a cyclic model of life course identity development that emphasizes the role of contextual factors in cognition through 5 dimensions that are linked bi-directionally (Swanson, Cunningham, Youngblood, & Spencer, 2009). The foundation of PVEST is the inextricable link between the environment and the development of social-cognitive abilities that are the framework for interpreting external and internal stimuli. The components of the model include: Net Vulnerability Risks and Protective Factors, Net Stress Level, Coping Outcomes, Emergent Identities and Reactive Coping Strategies. At each dimension of the model social-cognitive development is the product of an interaction between the environmental risks and protective factors facing the individual. Therefore, the PVEST model of development is comprehensive, whereby it addresses the impact of race on human development. Research supporting the use of PVEST as a multicultural model of human development also serves to support the theoretical underpinnings of race-related stress and culture-specific coping. In Spencer, Noll, Stoltzfus, and Harpalani's (2001) study examining the achievement outcomes, goals, and Afrocentric identity of children 11 through 16 years old found children high in

Afrocentricity demonstrated higher self-esteem and achievement outcomes than their Eurocentric peers.

Racism and health. In 1965 the United Nations defined racism as ‘any distinction, exclusion, restriction or preference based on race color, descent, or national or ethnic origin.’ Despite the eradication of legal enslavement over 150 years ago, the 1964 Civil Rights Act ending legal segregation and the nearly half-century since the U.N. convened to eradicate racism, the definition remains a salient reality for racial minorities. Scholars across disciplines have implicated the struggle to achieve and maintain power as the underlying goal of racism (Thompson & Neville, 1999). The foundation of racism is structural and rooted in the labor system, whereby, through the job market, society systematically creates and maintains a racially hierarchical society (Neville & Pieterse, 2009). Within the labor system, Whites benefit from unearned privileges and non-racially dominant groups are exploited and disadvantaged. Although current definitions cannot exclude the economic underpinnings of racism, the inclusion of other societal expressions of the racial hierarchy are necessary to provide a more comprehensive picture of the construct.

The most frequently utilized and cited definition of racism in psychological research is Jones’ (1997) tripartite model of racism which distinguishes three basic types of racism. The most overt form of racism, individual racism, is the actions that intentionally injure, denigrate, exclude or deny individuals from inferior groups. Both institutional and cultural racism serve to perpetuate the racial hierarchy and are less readily identifiable. In institutional racism, the incidental norms and policies serve to restrict opportunities to racial minorities, whereas, cultural racism is the use of symbols or practices that serve to reinforce the superiority of whites (Jones, 1997).

The post-Civil Rights movement touted color-blind racial beliefs and the eradication of structural racism, whereby inequitable distribution of resources and social disadvantage were no longer recognized as issues of race, and instead became social class issues (Neville & Pieterse, 2009). However, evidence of current residential segregation and its ramifications on health were indicated with an epidemiological study which found that across socioeconomic status, minorities living in segregated communities had higher rates of mortality than their peers living in integrated communities (LaVeist, 2003). Multidiscipline research has illustrated that the racial hierarchy continues to exist and can be indicated empirically. The use of varied research paradigms and theoretical constructs have yielded a diverse body of literature that is cumbersome to synthesize and can appear conflicting.

Epidemiological studies utilizing data from large national databases are invaluable in their ability to illuminate systemic racial disparities such as health outcomes. The body of literature exposing the systemic issues illustrates that racism extends well beyond the labor system and has a profound deleterious impact on its targets. Empirical evidence indicates that Blacks living in the United States experience poorer health and mental health outcomes (Brondolo et al., 2009; Landrine, Klonoff, Corral, Fernandex, & Roesch, 2006; Myers, 2009; Paradies, 2006, Williams et al., 2007). Health disparities exist among diverse ethnic groups whereby Blacks have higher morbidity and mortality rates than other racial groups (Myers, 2009). Higher rates of hypertension, cancer, cardiovascular disease, diabetes, HIV/AIDS and low birth weight are seen in Blacks when compared to their White counterparts (American Heart Association, 2008; National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), 2004; U.S. Department of Health And Human Services, 2000). Epidemiological scholars interested in understanding the origins of negative health outcomes examined the

efficacy of utilizing stress response models. Geronimus et al. (2006) predicted allostatic load scores for Black and White Americans across socioeconomic status from a variety of variables collected from the National Health and Nutrition Examination Survey. Their results indicated Black individuals had increased probability of a higher allostatic load score. The authors concluded that their research provided a conceptual framework through which to understand health disparities, whereby due to elevated allostatic load, Black individuals were more vulnerable to infection and quicker disease progression. Similarly, a wide-scale epidemiological study utilizing data collected by the National Survey of American Life illustrated racial differences in prevalence, severity and impairment of Major Depressive Disorder (Williams et al., 2007). The results indicated that although Blacks had a lower lifetime prevalence of Major Depressive Disorder, the disorder's course was more persistent, disabling and severe than Whites' depression (Williams et al., 2007). The authors concluded that differences in health behaviors were significant in explaining the disparity in the disability and severity of the depression in Black participants, as Blacks were found to access mental health care at lower rates than their White counterparts. Epidemiological research has illustrated other discrepant health behaviors with Black individuals engaging in higher rates of health risky behaviors (Borrell et al., 2007), utilizing preventative diagnostics and medicine at a decreased rate (Hausmann, Jeong, Bost, & Ibrahim, 2008) and displaying decreased adherence to prescribed medical regimens (Landrine, Klonoff, Corral, Fernandex, & Roesch, 2006). Although significant in recognizing large between groups differences, the aforementioned studies do not provide a theoretical framework through which to understand the differences.

Race-related stress. Racism is a highly prevalent phenomenon with racial minority groups reporting incidences of maltreatment on a weekly basis (Brondolo et al., 2009). This

maltreatment or racial discrimination involves actions perpetrated by the majority that results in the unequal treatment and/or distribution of resources to the minority group. The psychological impact of racism, prejudice and discrimination has been identified within the literature as a unique life stressor known as race-related stress (Utsey & Ponterotto, 1996). Utilizing a transactional stress model, Harrell (2000) indicated 5 broad risk/protective factors that contribute to the development of racism related stress from racial interactions that are perceived as threatening or taxing to the available personal or accessible resources. Due to the established empirical evidence linking exposure to chronic stress and a myriad of poor health, and the established negative health disparities seen in racial minorities, research focused on illustrating their relationship.

A portion of the literature linked race-related stress and health by measuring perceived racism and physiological responses previously linked to psychosocial stress such as blood pressure, hypertension, glucose level, and abdominal obesity (Krieger, 1990; Tull et al., 1999; Tull, Sheu, Bulter, & Cornelious, 2005). In Tull et al. (1999) research of 133 Afro-Caribbean women, the relationship between insulin resistance syndrome (as measured by: body mass index, waist circumference, waist hip ratio, blood pressure) and psychosocial stress (as measured by: internalized racism, depression, and anxiety) was explored. The results indicated that each of the psychosocial stressor measures was significantly correlated with waist circumference and waist hip ratio. Furthermore, regression analysis relating internalized racism to the obesity, abdominal obesity (waist hip ratio) and hypertension, illustrated that women endorsing high internalized racism were at 2.3 times greater risk of abdominal obesity. According to the authors these results contribute to the research linking race related stress to negative health outcomes in Blacks.

The generalization of the aforementioned study is tedious, as the measure of internalized racism was categorized as a psychosocial stressor, whereby higher scores on internalized racism were indicative of higher stress. Although, the use of an empirically validated race-related stress scale could have strengthened the study, race-related stress can be inferred from internalized racism. Internalized racism is theoretically rooted in racial identity theory, and the Nadanolitization Scale displays construct validity with racial identity stages and other racial identity measures (Cokley, 2005). Although the Nadanolitization Scale has not been tested with measures of race-related stress or psychosocial stress, high levels of internalized racism has been linked with early and middle stages of racial identity models, which are linked to poorer mental and physical health (Cokley, 2002). Furthermore, despite a variety of risk factors measured, no protective factors were included and as per the transactional stress process models without the inclusion of protective factors stress is inadequately understood.

Other methodological approaches, such as laboratory in vivo presentations of racist stimuli, have contributed to the literature examining the link between race-related stress and negative health outcomes, however have yielded inconclusive results (Clark, 2000; Cruz, 2010; Fang & Myers, 2001; Gyll, Matthews, & Bromberger, 2001). Increased cardiovascular reactivity was associated with previous exposure to race-related stress, illustrating increases in autonomic activation in two of the studies (Clark, 2000; Gyll, Matthews, & Bromberger, 2001). These studies allow for a variety of race and stress theories to be examined. First, the immediate physiological impact of racist stimuli was examined (blood pressure, heart rate and salivary cortisol respectively). As, in theory, by presenting in vivo racist stimuli, affective or coping responses are elicited, consequently affecting physiological aspects of the stress response. Furthermore, by utilizing measures of race-related stress during the presentation of both neutral

and racist stimuli, these studies test, 2 of which support, the hypothesis that previous exposure to stressors may increase the future reactivity to similar stressors (Clark, 2000; Gyll, Matthews, & Bromberger, 2001). The utilization of in vivo overt racism is a limitation of the studies that could contribute to the inconclusive results. Although, overt discrimination is a significant way racism is communicated, as indicated by the tripartite definition, both institutional and cultural racism are expressed covertly (Jones, 1997). Furthermore, the nature and expression of the racism may enact different cognitive appraisals and coping resources and elicit different autonomic correlates.

Research examining race-related stress and mental health functioning illustrate a significant positive relationship between high levels of stress and obsessive-compulsive behaviors, depression and somatization (Klonoff, Landrine, & Ullman, 1999), anxiety and hypervigilance (Kessler, Mickelson, & Williams, 1999), decreased job satisfaction (Holder & Vaux, 1998), poorer evaluations of overall life satisfaction (Danoff-Burg, Prelow, & Swenson, 2004), happiness (Williams, Neighbors, & Jackson, 2003), lower levels of mastery (Broman, Mavaddat, & Hsu, 2000) and lower self-esteem (Simpson & Yinger, 1985). Although these studies illustrated the links between race-related stress and health and mental health disparities, the models and underlying theory were inadequate. Despite the categorization of racism as a stressor stress process models that included a variety of both protective and risk factors were not utilized. Therefore to better understand and capture the complex relationship between race and health more integrative theoretical perspectives should be utilized. Furthermore, the validity of the mental health outcome studies is strongly questioned as they often utilized measures and diagnostic criteria based on Eurocentric theories of psychology. The mental health of an individual is context dependent and cannot be adequately understood without consideration the

interactions of the individual within their greater environment (Speight et al., 2009). Thus, theories of mental health developed from a Euro-Western perspective are rooted in their particular cultural context and cannot be presumed universally applicable. Furthermore, comprehensive models of Black mental health must include both the oppressive social context and the resilient culture specific values that comprise their unique cultural context.

Coping

Theoretical formulations aimed at understanding the behaviors and emotions employed in reaction to both internal and external stressors are found in the literature of psychology. Essential to Freud's drive theory are the intrapsychic struggles and postulations aimed at modifying the innate and unbridled aggressive drive. Although, the term coping had not emerged within the literature the defenses of ego psychologists yielded more extensive theoretical formulations of coping activities. The writings of Erikson's stages of psychosocial development and Hartmann's model of adaptation and differentiation of the psychic structures ignited a body of literature in the 1960's which created a hierarchical spectrum of defenses, whereby those that were deemed healthy and adaptive were termed coping (Parker, & Endler, 1996).

The definition of coping within the greater stress literature is the behavioral or cognitive efforts to manage events that are perceived as stressful (Folkman & Moskowitz, 2000). Depending on the overarching model of stress, coping resources are conceptualized as both protective factors that prevent distress and reactive resources that counteract the negative experience of distress (Lazarus, 1993; Hobfoll, 2001; Utsey, Giesbrecht, Hook, & Stanard, 2008). As per Lazarus and Folkman's (1984) transactional model, coping responses are interactions between the environment and the individual that aim to regulate his/her internal

experience and mediate the development or progression of negative health and mental health outcomes. Coping efforts are contextual responses that are initiated and maintained by continued appraisals of the stressor and the subsequent affective state. Events that are appraised as possibly harmful or uncontrollable in conjunction with resources that are appraised as insufficient enact the coping process. Due to an essential feedback process, appraisals of the coping effort outcomes and the potential success of rectifying future stressors utilizing similar coping efforts the coping process is dynamic and constantly changing (Park, & Folkman, 1997). Furthermore, according to the transactional model, unlike the defenses of ego psychologists, coping efforts can regulate the negative internal state produced by the stressful event both directly and indirectly (Lazarus, & Folkman, 1984). Directive coping, termed problem-focused coping, the individual focuses their efforts on regulating or ameliorating the stressor, whereas emotion-focused coping efforts are focused on ameliorating or regulating the negative affective response. Strategies of problem focused coping include defining the problem, examining possible solutions, generating alternative solutions, and enacting a plan of action. The utilization of reappraising the stressor positively, seeking emotional support, avoidance and denial are indicative of emotion-focused coping (Carmona, Buunk, Peiro, Rodriguez, & Bravo, 2006). Both theoretical formulation and empirical evidence illustrate that problem focused coping is more beneficial with controllable events and emotion-focused coping is best in uncontrollable situations (Lazarus, & Folkman, 1984, (Shaw et al., 1997).

A variety of other theorists, often drawing from the work of Lazarus and Folkman, have demarcated individual dimensions of coping unique to their respective theories creating a body of literature that defines coping resources, coping strategies and coping styles differently (Brondolo et al., 2009; Prati, Pietrantoni, & Cicognani, 2011). Much of the research concedes

upon the distinctions of coping as a fluid and dynamic process that may vary daily, coping styles and strategies are the predispositions to using particular coping behaviors (Carmona, Buunk, Peiro, Rodriguez, & Bravo, 2006). Similar to the transactional model, in Dewe's (1985) classification, direct coping styles are marked with problem solving behaviors and palliative coping styles reflect avoidant and ignoring behaviors.

A body of research aimed to elucidate, categorize and operationalize the varied coping styles utilized factor analytic studies. Finding the two dimensional conceptualizations of coping too simplistic, Billings and Moos (1981) developed a three factor model of coping, whereby the active coping dimension was divided into a behavioral and cognitive dimension. Active cognitive coping strategies include generating alternative solutions and reappraising the stressor positively; and active behavioral strategies include information gathering and seeking external support. The third factor, avoidance coping includes both cognitive and behavioral elements, whereby both aim to distance the individual from the stressor and its subsequent emotions (Moos & Schaefer, 1993).

Research examining coping efforts utilized with chronic and uncontrollable stressors found that although, the active coping strategies were found to be beneficial, an additional distinct dimension emerged, meaning focused-coping, whereby active cognitive efforts are used to manage the meaning of the stressor (Park & Folkman, 1997; Pearlin & Schooler, 1989). When utilizing meaning-making coping the individual's values, beliefs, and goals are applied to the stressor in effort to alter the appraisal of the stressor (Park & Folkman, 1997). Furthermore, causal attributions and purpose in the experience of adversity are ascribed to the stressor in meaning making coping. In a study of caregivers of individuals with dementia, meaning making was the most frequent and effective coping strategy employed (Haley, et al., 2004). Similarly,

research on the coping efforts of recently divorced mothers, supports a four-factor model of coping, whereby women who were surprised and/or resistant to their divorce found meaning-making coping most effective.

The most significant critiques of the coping literature are the inconsistent nomenclature and its theory rooted in Eurocentric conceptualizations. Traditional coping strategies do not reflect the unique history, life experiences and resources of ethnic and racial minorities. Despite the contextual nature of the transtheoretical model, which emphasizes that appraisals are impacted by cultural, political and social structures, it is the individual's appraisal's that guide the response. Communal coping strategies are devoid from the theory, or are considered emotion-focused rather than active problem-focused strategies. For example, as Mellor (2004) discusses, the frequent and beneficial use of spiritual coping methods in Blacks is not accurately represented in traditional coping models. Spiritual-coping can be categorized as problem-focused, as a divinity is often conceptualized as omnipotent. However, divinity is also seen as supportive, therefore spiritual coping can be emotion-focused (Constantine, et al. 2002). Also, the individualistic, Eurocentric view and accompanying research emphasizes the benefits and adaptive functions of problem-focused coping, which entails actively pursuing the eradication of the stressor rather than the more traditional collectivistic view which aims to achieve balance and harmony. Furthermore, the coping instruments borne from traditional coping theory do not adequately assess the characteristic coping strategies of non-White populations (Utsey, Adams, Bolden, 2000).

Culture-specific coping. Recent coping scholarship examines the influence of culture on the stress and coping response. An important theoretical underpinning of the need to establish culture-specific coping models is Hobfoll's (2001) conservation of resources. Within this

ecological model the context of the individual is not seen as impacting the appraisals, but instead, the appraisals are imbedded within the concentric layers of culture. Culture-specific coping is the process of accessing the fund of cultural knowledge when appraising the nature and meaning of a stressor and when determining the available resources to manage the stressor (Slavin, Ranier, McCreary, & Gowda, 1991).

Intrinsic to the historical and current context of Black individuals is the adversity inflicted by racial discrimination and oppression. As previously discussed, research has linked racism to a myriad of negative outcomes including health and mental health outcomes. Conversely, despite the deleterious impact of racism, hope, resilience and success are evidenced throughout the Black culture, whereby resilience is a good outcome in spite of severe threats to development (Utsey, et al., 2007). Due to the poor fit of traditional coping models the appraisal, behavioral and cognitive systems through which individuals facing consistent racism coped were poorly understood (Mellor, 2004). As per Harrell (2000) an adherence to and the employment of cultural worldviews can serve as protective factors and buffers to the development of race-related stress. In support of the aforementioned theory, research links greater cultural resources to positive outcomes including health, mental health, self-esteem and achievement goals (Spencer et. al, 2001, Utsey, et al., 2000).

The culture-specific coping strategies employed by Black individuals are rooted in the Afrocentric concept of consubstantiation, or interconnectivity (Grills, 2002, Mattis, 2004, Neville & Pieterse, 2009). As supported by empirical evidence that indicates that Black individuals prefer group centered and spiritual coping strategies (Daly, 1995; Mattis, 2002). Examples of strategies that although are not exclusive to Black individuals, but empirical evidence illustrates are commonly utilized, include seeking guidance and support from

community members and elders and engaging in prayer, ritual, and customs (Constantine et al., 2002; Greer, 2011, Utsey, Brown, & Bolden, 2004). Despite racial discrimination, within the Black community, external supportive resources are readily available and utilized.

The strong kinship ties, the extended definition of ‘family’ and strong religious/spiritual beliefs are significant strengths and sources of great pride within Black culture (Walsh, 1996). In a study by Sarkisian & Gertsel (2004) comparing Black and White families, Black families provided more instrumental support including child care, transportation and household work. The strength of the kinship bonds is illustrated by research illustrating that during times of distress extended family members, which are inclusive of both relatives and non-relatives, such as neighbors and church members, are willing to provide long term, albeit temporary child care (Boyd-Franklin, 1989). Empirical evidence consistently supports that faith based beliefs and activities (religious service attendance) are central to the coping efforts employed in Black culture (Constantine, et al., 2002; Lewis-Coles, & Constantine, 2006; Utsey, Brown, & Bolden, 2004). It is important to note, that the use of religious coping does differ by gender in Black individuals, with women utilizing more strategies than men (Broman, 1996; Ellison, & Taylor, 1996). Furthermore, the Black Church provides significant support in numerous ways including financial support, political advocacy, community development, educational programs, spiritual guidance and emotional support (Swanson, Crowther, Green, & Armstrong, 2004).

Africultural coping. Africultural coping is a culture-specific coping model comprised of four components: cognitive/emotional debriefing, spiritual coping, collective coping and ritual coping (Utsey, Adams, et al., 2000). Cognitive/emotional coping is the adaptive product of generations of oppression and innumerable racist experiences, whereby the individual regulates his/her emotional response while evaluating the level of risk and adversity of the stressor (Utsey

et al., 2000). Interconnectivity is reflected in spiritual coping, which is the use of beliefs about a divine entity to manage adversity, derive meaning and foster optimism. The preference for employing group centered strategies to regulate the affective response and circumstances of risk and adversity is referred to as collective coping. Ritual coping is the use of rites and rituals to foster connectivity with ancestors and actively express spirituality as methods to manage the stressor and any subsequent feelings. Although, in its infancy, research has examined the utility of the Africultural coping model and its efficacy in elucidating the interactions between stress, coping and outcomes.

Constantine, Donnelly, and Myers (2002) conducted a study examining the relationship between collective self-esteem, and Africultural coping in a sample of 106 Black adolescents living in an affluent, Midwestern suburb, attending a predominantly White high school. Collective self-esteem is defined as the importance and value placed on the individual's cultural or social groups and is measured by the Collective Self-Esteem Scale which is comprised of four subscales (Luhtanen & Crocker, 1992). Results indicated that a higher endorsement of public collective self-esteem, defined as the belief that others hold positive beliefs about their cultural group, was positively related to spiritual-centered coping. Also, higher identity collective self-esteem, or the belief that their culture group is an important part of their identity, was related to the use of collective-centered coping. Despite the significant results and theoretical support of the results, a significant limitation of the study was the homogeneity of the sample. Additionally, the study did not include an assessment of stress, and as previously discussed, the most effective models of stress and coping incorporate risk and protective factors. Utsey, Bolden, Lanier, and Williams (2007) utilized structural equation modeling to derive a representation of the relationship between a series of risk factors, traditional protective factors, cultural protective

factors as predictors of quality of life. The sample consisted of 384 Black adults who resided in high-risk, urban areas and were enrolled in education and job training programs for the economically disadvantaged. Cultural protective factors were the dimensions of Africultural coping and measured using the Africultural Coping Systems Inventory. Traditional protective factors included a test of cognitive ability, and measures of family system functioning and social support. The risk factors included a measure of the frequency and impact of typical daily stressors and two measures of race related stressors. A quality of life scale was utilized as the criterion variable and indicator positive outcomes. The results indicated the sample relied on strength derived from both traditional and culture-specific coping strategies, however the higher endorsements of quality of life were predicted by the use of collective-centered and spiritual-centered coping strategies. Although, convenience sampling procedures and the use of list wise deletion procedures introduced limitations, the results of the study strongly support the effective use of a culture specific stress process model that is inclusive of racism and Africultural coping.

Summary

This chapter aimed to present a critical review of the literature relevant to the understanding of compassion fatigue, burnout, race-related stress and culture-specific coping. It is important to note that throughout the review the theoretical utility and empirical support of utilizing a stress process model when conceptualizing the stress response was supported. The benefits of examining the interaction between protective and risk factors are consistently indicated within the literature. Furthermore, the utilization of a context embedded model, whereby risk and protective factors need to reflect the culture-specific stressors and resources was illustrated. Lastly, the chapter was reflective of the existing body of literature and nearly

devoid of scholarship focused on understanding the unique interactions experienced by individuals working as nursing assistants.

Chapter Three

Methodology

The purpose of this chapter is to provide detailed methodological information for the present study. First, the study design will be presented, including the variables of interest. The population of interest and the recruitment, enrollment and data collection methods will then be discussed. A detailed description of the research instruments and their psychometric properties will be provided. Finally, the chapter will include the data analysis plan, specifically addressing the methods of hypothesis testing and results of the power analyses.

Study Design

The present study utilized a nonexperimental, exploratory, correlational design. The predictor variables (independent variables) included scales of race-related stress and culture-specific coping. The global scores obtained from the Index of Race-Related Stress Brief (IRRS-B; Utsey, 1999) provided an overall measure of race-related stress. Culture-specific coping was measured by the 4 specific subscale scores on the Africultural Coping Systems Inventory (ACSI; Utsey et al., 2000). The criterion variables (dependent variables) were burnout and compassion fatigue as measured by their respective subscale scores on the Professional Quality of Life Scale-Version 5 (ProQOL 5; Stamm, 2010).

Population of interest. The proposed study aimed to examine the racially specific risk and protective factors that contributed to the development of workplace stress-related syndromes in Black nursing assistants. Participants were recruited through the largest training and staffing company of certified nursing assistants in the greater NYC area. As such, potential participants were recruited via advertisement letter disseminated at the beginning of continuing education training days. As per agency-specific requirements, all CNA's 6 months post-certification must

attend four day-long continuing education trainings per year. Training days are run 4 days a week, 52 weeks per year to accommodate the large numbers of CNA's employed by the agency. Four days, based on the convenience of the agency director, were selected for recruitment. On the morning of each day, all CNA's attending continuing education received the IRB approved (approval received from both SHU and agency-specific review board) flier of advertisement. As determined by a power analysis assuming values of $\alpha = 0.05$ and power = 0.80, a sample size of 58 participants was required to obtain a medium effect size of .25 (Faul, Erdfelder, Lang, & Buchner, 2007).

Sample. Fifty eight participants, fifty four women (93.1%) and four men (6.8%) who work as nursing assistants were recruited from the NYC metropolitan area. Age of participants ranged from 21 to 73 with a mean age of 41.39 ($SD=14.32$). All participants self-identified as Black. Additionally, four participants (6.8%) identified their ethnicity as Latino. Countries of origin aggregated into two groups with 48.3% (28) born in the U.S. and 51.7% (30) born in Caribbean countries. Number of years living in the U.S. was variable and ranged from 1 to 73 years with 22.07 years as the average ($SD=17.86$). The majority of participants, 51 (87.9%), attained a high school diploma or its equivalent, with 10.3% (7) of participants having some college coursework. Regarding employment, number of years working as a nursing assistant varied from 1 to 50 with 7.47 as the mean ($SD=10.45$) with an average of 36.16 ($SD=11.38$) hours worked weekly.

Data Collection. The required 58 participants were identified and enrolled over the course of four study sessions. As indicated in the disseminated flier of solicitation, interested participants were invited to attend the study meeting held on-site at the end of the agency training day. Dinner and refreshments, including salad, breadsticks, pizza and assorted waters

and soft drinks were provided by the researcher for all study meetings. Payment for participation included a prepaid \$20 gift card to a local department store. Each meeting was conducted in a large classroom, where participants were sitting at individual desks. At the onset of each session, the researcher provided an explanation of the study for the purposes of informed consent. Although, no written consent was obtained, the disseminated flier of advertisement and the researcher explanation included the purpose of the study, its procedures, the risks and benefits of participation with emphasis on study anonymity and the rights of participation, including the option to withdraw at any time. Specific scale directions were separately. Participants were encouraged to ask questions. Enrolled participants were asked to complete a brief demographic questionnaire, the Index of Race-Related Stress-Brief (IRRS-B; Utsey, 1999), the Africultural Coping Systems Inventory (ACSI; (Utsey et al., 2000) and the Professional Quality of Life Scale-Version 5 (ProQOL 5; Stamm, 2010). The total time to complete the questionnaires did not exceed one hour. Participants completed the measures independently and upon their determination of completion were placed into a blank envelope and submitted to the researcher. Upon submission of study materials, participants were given one prepaid gift card. The questionnaire and aforementioned measures are attached as appendices.

Research Instruments

Demographic Questionnaire (Appendix A): The demographic questionnaire (Appendix A) is comprised of the following questions: gender, age, race, ethnicity, country of birth, number of years living in the United States, current job title, number of years in the current job position, average number of hours worked weekly, and highest level of education attained.

Professional Quality of Life Scale-Version 5 (ProQOL 5) (Appendix B): The Professional Quality of Life Scale-Version 5 (ProQOL 5; Stamm, 2010) is a 30 item assessment

that measures the impact of working with individuals who have experienced extremely stressful events. Respondents' rate items using a 5 point likert-type scale, where 1 indicates never and 5 indicates always. The current version of the ProQOL is a widely used instrument in the literature examining stress-related disorders of the workplace. The ProQOL has been used to study international populations and is available in 8 different languages (Stamm, 2010). As per the negative aspects of helping work represented by three constructs and measures within three subscales; Compassion Satisfaction, Burnout, and Secondary Traumatic Stress. Within this model, Compassion Fatigue, defined as 'the natural, predictable, treatable, and preventable unwanted consequences of working with suffering people (Figley, 1999, p. 4)' is a construct comprised of Burnout and Secondary Traumatic Stress which are measured by their respective subscales. Compassion Satisfaction, the third subscale, is defined as the positive effects derived from helping work (Conrad & Keller-Guenther, 2006; Musa & Hamid, 2008) and within the overall model of professional quality of life, serves to buffer the development of compassion fatigue.

The psychometric information for the current revision is derived from 1289 participants and is reported to be valid and reliable (Stamm, 2010). The normative data was obtained from a diverse group of jobs requiring interpersonal contact that could yield compassion fatigue, such as school personnel, general health workers, and child and family workers (Stamm, 2005). The construct validity of the measures is supported by a large body of research including over 200 published articles of the three constructs (Stamm, 2010). Theoretical formulations of compassion fatigue, postulate that burnout and secondary traumatic stress are related, yet distinct constructs; whereby both are reflective of distress, however secondary traumatic stress addresses fear. In conjunction with theory, convergent and discriminant validity data illustrate that the

Burnout and Secondary Traumatic Stress subscales measure separate constructs, as interscale correlations illustrate between 21-34% shared variance between the two scales (Stamm, 2010). As such, the discrete subscales do not yield a composite score, furthermore exploratory and confirmatory factor analyses consistently support a three factor model (Conrad & Keller-Guenther, 2006). Internal consistencies of the ProQOL scales are found to be moderately high to high with compassion satisfaction = .88, burnout = .75 (n=976), and secondary traumatic stress = .80 (n=1130) (Stamm, 2010). The ProQOL produces stability of scores over time is illustrated by adequate test-retest reliability and small standard error of the estimate (Stamm, 2005). In the current study, Compassion Satisfaction and Compassion Fatigue subscale internal consistencies were good (Cronbach alpha coefficients of .80 and .87, respectively). The obtained alpha reliability coefficient for the present sample's score on the Burnout subscale was in the poor range (Cronbach alpha coefficient .53). In light of strong reliability in other samples, the poor reliability was likely reflective of unique sample characteristics (Helms, Henze, Sass, & Mifsud, 2007). Thus, as recommended by Helms et.al., (2007), the well-validated burnout subscale data yielding poor internal consistency in the culturally diverse sample, was retained, unaltered for hypothesis testing. Further, subgroup reliability analyses, revealed alphas were .47 and .61 for Caribbean and U.S. born participants, respectively. Thus, to better understand within group sample differences exploratory analyses were conducted.

Africultural coping styles inventory (ACSI; Utsey et al., 2000) (Appendix C). The ACSI is a 30-item, self-report, instrument that measures culture-specific coping strategies utilized by Blacks in response to stressful situations. Respondents are asked to recall a stressful situation that has happened within the week and then using a 4-point Likert-type scale (0=did not use, 1=used a little, 2=used a lot, 3=used a great deal) indicate the degree of each of the listed coping

strategies employed. The ACSI can be completed within 20 minutes. The four subscales of the ACSI correspond with four dimensions of coping. The scores on each of the subscales are obtained by adding items across each of the subscales. Higher scores are indicative of greater use of coping strategies. The cognitive/emotional debriefing subscale includes items reflective of coping through cognitive reframing or distraction ('tried to forget about the situation. Hoped things would get better with time.'). Reflective of Africentric theory, spiritual-centered, ritual-centered, and collective strategies reduce distress through connectivity with a greater group ('prayed things would work themselves out, got a group of family or friends together to help with the problem, lit a candle for strength and guidance in dealing with the problem.')

The ACSI was borne out of research illustrating conventional coping instruments did not adequately capture the full extent of coping strategies employed by Blacks (Daly, Jennings, Beckett, & Leashore, 2000; Plummer & Slane, 1996). Correlational studies of the ACSI with other measures of coping revealed strong concurrent validity with subscales of the Ways of Coping Questionnaire (Utsey, Adams, Bolden, 2000), the Setswana COPE (Van der Walt, Potgieter, Wissing, & Temane, 2008) and the Religious Problem Solving Scale (Constantine et al., 2002). ACSI subscale internal consistencies are high in samples of second generation or more U.S. born Blacks, with subscale alphas in the high range (Cronbach's alpha range from .83 to .87) (Constantine et al., 2002; Utsey, Adams, Bolden, 2000). In contrast, examination of the ACSI psychometrics across three groups of ethnically diverse Black Americans (American, African, Caribbean) revealed inconsistent validity and marginal consistency data for the Caribbean sample (Utsey, Brown, Bolden, 2004). Specifically, the four factor structure inadequately fit the data and internal consistency and reliability coefficients were marginal (cognitive/emotional debriefing $\alpha = .61$, spiritual centered $\alpha = .73$, collective centered $\alpha = .60$, ritual

centered $\alpha = .60$). In the current sample, Cronbach's alpha coefficients for the cognitive/emotional debriefing, spiritual and collective coping subscales were .72, .67 and .70, respectively. However, the Ritual Coping subscale alpha coefficient of .43 does not meet acceptable criteria and further analyses were conducted (George & Mallery, 2003). Item deletion analyses did not reveal adequate alphas ranging from .14 to .58. Similarly, sample subgroup consistencies were similarly poor with alpha .33 for U.S. born participants and .50 for Caribbean participants. In light of low internal consistency reliability coefficients and the subsequent reduction of statistical power, the Ritual coping subscale was omitted from the analyses (Wilkinson & Task Force On Statistical Inference APA Board Of Scientific Affairs, 1999).

Index of Race-Related Stress (IRRS)-Brief Version (Utsey, 1999) (Appendix D). The IRRS-B is a 22 item, short version of the Index of Race-Related Stress (Utsey & Ponterotto, 1996) requires 15 minutes to complete and has a Grade 9 reading level. The self-report instrument asks respondents to indicate experience and subsequent emotional impact of racist events. Items are rated utilizing a 5-point Likert-type scale where 0=has never happened to me, 1=event happened but it did not bother me, to 4=event happened to me and I was extremely upset. The IRRS-B yields a global racism score and three subscale scores, cultural, institutional and individual racism with higher scores reflecting greater race-related stress. Cultural racism includes denigrating or discriminating the cultural values, traditions and practices of a racial group. The Institutional Racism subscale includes items indicative of organizational policies that serve to discriminate against a racial group, whereas the Individual Racism subscale items are reflective of instances of personal discrimination due to membership to a racial group.

Psychometrically, IRRS-B demonstrates reliability and validity. The reliability of the IRRS-B is empirically supported by the internal consistency of the global score and three subscales, as well as subscale intercorrelations, with Cronbach's alphas from .69 to .78 (Utsey, 1999). Research supports the convergent and divergent validity of the IRRS-B. Convergent validity of the IRRS-B and Racism and Life Experiences Scale (RaLES) of the subscales and global measure demonstrated by Pearson Product-Moment Correlation coefficients range from .33 to .59. Descriptive data revealed good internal consistency on the global score and subscales of the IRRS-B with current sample of Black nursing assistants. The global score Cronbach alpha coefficient was .93, with coefficients of .87 for Cultural Racism, .75 for Institutional Racism, and .83 for Individual Racism.

Several studies have supported the convergent validity of the subscale scores with other measures of individual and group racism, yielding Cronbach's alpha coefficients ranging from .79 to .81 (Utsey et al., 2008). Divergent validity established that the IRRS-B does capture the unique experience of racism on the Black population by testing group differences using a sample of Whites, whereby the IRRS-B effectively discriminated between the samples.

Hypothesis Testing

Hypothesis 1: It was hypothesized that Black nursing assistants experience compassion fatigue and burnout. This hypothesis was tested with converted T-scores of 57 or above on the Burnout and Compassion Fatigue ProQOL subscales.

Hypothesis 2: It was hypothesized that Black nursing assistants would demonstrate race related stress. Race-related stress was determined by comparing the sample's mean IRRS-B global score with a previously utilized sample of White participants ($N = 25$, $M = -0.32$, $SD = 2.67$). This sample was utilized in Utsey's (1999) validation studies of the IRRS-B, the mean

White subsample global score was significantly lower than the mean score of the Black sample ($M = 0.35$, $SD = 2.42$). Therefore, to test this hypothesis a t-test for single sample compared the sample mean with the predetermined mean. To determine the sample size needed a G*Power (Faul et al., 2007) analysis with assumed values of $\alpha = 0.05$, power = 0.80, and a medium effect size of .50 was performed. The results of the analysis indicate that a sample size of 27 was needed.

Hypothesis 3: It was hypothesized that race-related stress and work related stress reactions would be related in Black nursing assistants. A canonical correlation was conducted between the two sets of variables. Subscale scores of the IRRS-B comprised the first set of variables and ProQOL burnout and compassion fatigue scores the second set. Using G*Power (Faul et al., 2007) analysis with assumed values of $\alpha = 0.05$, power = 0.80, and a medium effect size of .25 the required sample size of each of the analysis was 48.

Hypothesis 4: It was hypothesized that culture-specific coping would be related with work related stress reactions in Black nursing assistants. Canonical correlation between ACSI subscales (Cognitive/Emotional Debriefing, Spiritual, and Collective coping) and ProQOL Burnout and Compassion Fatigue was conducted. Using G*Power (Faul et al., 2007) analysis with assumed values of $\alpha = 0.05$, power = 0.80, and a medium effect size of .25 the required sample size of each of the analysis was 53.

Hypothesis 5: It was hypothesized that higher levels of culture-specific coping strategies would moderate the relationship between race-related stress and compassion fatigue. This hypothesis was tested with a hierarchical regression analysis. In the first step of the hierarchical regression analysis, global score on the IRRS-B scale was the predictor variable and score on the Secondary Traumatic Stress subscale of the ProQOL was the criterion variable. The second step

of the hierarchical regression analysis added the ACSI subscale scores (Cognitive/Emotional Debriefing, Spiritual-Centered Coping, Collective-Centered Coping, and Ritual-Centered Coping) as a block of predictor variables. The final step entered the derived interaction variable, which was the cross-product of the centered predictors used in the previous steps (race-related stress X culture-specific coping strategies). Using G*Power (Faul et al., 2007) analysis with assumed values of $\alpha = 0.05$, power = 0.80, and a medium effect size of .25 the required sample size of each of the hierarchical regression analysis was 58.

Hypothesis 6: It was hypothesized that higher levels of culture-specific coping strategies would moderate the relationship between race-related stress and burnout. Similarly, this hypothesis was tested utilizing a hierarchical regression. The first step of the analysis entered the IRRS-B global score as the predictor variable and score on the Burnout subscale of the ProQOL as the criterion variable. The second step of the hierarchical regression analysis added the ACSI subscale scores (Cognitive/Emotional Debriefing, Spiritual-Centered Coping, Collective-Centered Coping, and Ritual-Centered Coping) as a block of predictor variables. The final step entered the derived interaction variable, which was the cross-product of the centered predictors used in the previous steps (race-related stress X culture-specific coping strategies). Using G*Power (Faul et al., 2007) analysis with assumed values of $\alpha = 0.05$, power = 0.80, and a medium effect size of .25 the required sample size of each of the hierarchical regression analysis was 58.

Chapter Four

Results

This chapter provides detailed information regarding the study results. Descriptive statistics, exploratory analyses, results of hypothesis testing, supplemental analyses and summary of the study findings are provided. All analyses were conducted using the Statistical package for the Social Sciences (SPSS Version 20 for Windows).

Sample: Fifty eight participants, fifty four women (93.1%) and four men (6.8%) who work as nursing assistants were recruited from the NYC metropolitan area. Age of participants ranged from 21 to 73 with a mean age of 41.39 ($SD=14.32$). All participants self-identified as Black. Additionally, four participants (6.8%) identified their ethnicity as Latino. Countries of origin aggregated into two groups with 48.3% (28) born in the U.S. and 51.7% (30) born in Caribbean countries. Sample data are discussed in the previous chapter and are presented in Table 1.

Measures: The means, standard deviations, ranges and Cronbach's alphas for the subscales of the Professional Quality of Life Scale (ProQOL), Index of Race-Related Stress-Brief (IRRS-B), and Africultural Coping Systems Inventory (ACSI) are discussed in the previous chapter.

Descriptive Analyses

Prior to analysis, all variables were examined through various SPSS programs for accuracy of data entry, missing values, and fit between their distributions and assumptions of multivariate analysis. Missing values were replaced by the mean for all cases as no variables had more than 5% of cases missing. To improve pairwise linearity and to reduce skewness and kurtosis, the ProQOL scales Burnout and Compassion Fatigue were logarithmically transformed.

The negatively skewed Compassion Satisfaction subscale was transformed with reflection and logarithm. Additionally, a univariate outlier for Compassion Fatigue was deleted. No multivariate outliers with $p < .001$ were identified through Mahalanobis distance.

Separate MANOVAs investigated demographic group differences on the ProQOL, IRRS-B and ACSI. The following demographic variables were included in the analyses: education, country of birth, age, years living in the U.S., years in the current position, and average hours worked weekly. Using Visual Binning in SPSS, cut-off points were identified and the continuous variables age, years living in the U.S., years in the current position and average hours worked weekly were collapsed into groups, with roughly equal percentage of cases across groups (See Table 2.).

Profession Quality of Life. A between-groups multivariate analysis of variance was performed to investigate demographic differences in professional quality of life as measured by the ProQOL subscales Compassion Satisfaction, Compassion Fatigue and Burnout. Preliminary assumption testing indicated no serious violations of assumptions. Results revealed the combined ProQOL scales were significantly affected by both a significant number of years in current position ($\Lambda = .11$; $F(6,22) = 7.26$, $p < .05$; *partial* $\eta^2 = .66$) and average number of hours worked ($\Lambda = .28$; $F(6,22) = 3.31$, $p < .01$; *partial* $\eta^2 = .47$). To investigate the impact of both number of years in current position and average number of hours worked on the individual ProQOL scales univariate analyses with Bonferonni adjustments and alpha set at .017 were conducted. ANOVA results revealed years working as a nursing assistant had a significant impact Compassion Fatigue ($F(2,13) = 11.47$, $p < .01$), with number of years in the current job making a large impact (*partial* $\eta^2 = .64$). Post-hoc comparisons presented in Tables 3-4, revealed those with the shortest careers as nursing assistants (≥ 2 years) endorsed significantly lower levels

of compassion fatigue than those in the working on average 5 years, and those working for over a decade. Additionally, ANOVA results showed the average number of hours worked had a significant impact on both Burnout $F(2,13) = 4.54, p < .01$; *partial* $\eta^2 = .41$) and Compassion Fatigue $F(2,13) = 6.33, p < .01$; *partial* $\eta^2 = .49$). Follow-up pairwise comparisons revealed significantly lower levels of burnout and compassion fatigue in those working full-time compared to those working 41+ hours. In summary, the results revealed that number of hours worked weekly and years working as a nursing assistant significantly impacted subjective ratings of professional quality of life. Specifically, higher levels of burnout and compassion fatigue were moderately associated with working more than 40 hours weekly. Additionally, nursing assistants with the fewest years in their current position had significantly lower levels of compassion fatigue compared with their more seasoned counterparts.

Race-related stress. A between-groups multivariate analysis of variance was performed to investigate demographic differences in race-related stress as measured by the Cultural, Institutional, Individual and Global subscales of the Index of Race-Related Stress-Brief. Results revealed the combined IRRS-B measures were significantly affected by the country of birth ($\Lambda = .24$; $F(3,11) = 11.50, p < .01$; *partial* $\eta^2 = .76$, power .93), age ($\Lambda = .26$; $F(6,22) = 3.60, p < .05$; *partial* $\eta^2 = .49$, power .69), number of years in current position ($\Lambda = .21$; $F(6,22) = 4.28, p < .01$; *partial* $\eta^2 = .79$) and years living in the U.S. ($\Lambda = .16$; $F(6,22) = 5.49, p < .01$; *partial* $\eta^2 = .60$). With a Bonferroni adjusted alpha level of .013, univariate analyses investigated the impact of age and number of years in current position on the separate IRRS-B scales (Tables 5-6). Results revealed age significantly impacted cultural race-related stress ($F(2,13) = 5.14, p < .05$; *partial* $\eta^2 = .44$), institutional race-related stress ($F(2,13) = 4.64, p < .05$; *partial* $\eta^2 = .42$), and global race-related stress ratings ($F(2,13) = 4.26, p < .05$; *partial* $\eta^2 = .40$), with 33-49 year olds endorsing

higher levels than the 50 years old and above. Regarding number of years working as a nursing assistant, ANOVA results revealed a significant impact on ratings of cultural race-related stress $F(2,13) = 6.33, p < .01$; *partial* $\eta^2 = .49$), examination of mean scores revealed a trend whereby, those with less time in their current job endorsing lower levels than their more experienced counterparts. Although the multivariate results reflected modest to strong associations between the combined race-related stress measures and country of birth, and years living in the U.S., main effect analyses were not significant at the Bonferonni adjusted alpha level.

Overall, these results revealed country of birth, age, number of years working as a nursing assistant and years living in the U.S. significantly affected subjective ratings across the race-related stress scales. Age made a specific impact with those aged 50 years and above endorsing lower levels of cultural, institutional and global race-related stress than their 33 to 49 year old counterparts. Additionally, number of years working as a nursing assistant impacted cultural race-related stress ratings, with those newer to the field endorsing lower levels than those working as a nursing assistant for a decade or more.

Culture-specific coping. Between-groups multivariate analysis of variance was performed to investigate demographic differences in the use of culture-specific coping strategies, with the subscales of the ACSI as the combined dependent variable. Results revealed the combined scales of the ACSI were significantly affected by age ($\Lambda = .36$; $F(6,22) = 2.67, p < .05$; *partial* $\eta^2 = .45$) and number of years living in the U.S. ($\Lambda = .06$; $F(6,8) = 4.36, p < .05$; *partial* $\eta^2 = .77$). Univariate analyses with alpha values set at .017 were conducted and revealed age significantly impacted cognitive emotional coping ($F(2,13) = 5.96, p < .05$; *partial* $\eta^2 = .48$), spiritual coping ($F(2,13) = 4.91, p < .05$; *partial* $\eta^2 = .86$) and collective coping ($F(2,13) = 8.2, p < .05$; *partial* $\eta^2 = .56$). Follow-up pairwise comparisons revealed those 33 to 49 years old

endorsed the highest levels of culture specific coping strategies, with significantly higher cognitive emotional, spiritual, and collective coping than their younger and older counterparts (Tables 7-8).

Bivariate correlations. To investigate bivariate relationships among all of the variables of interest correlation coefficients were computed. The variables entered into the analyses included: number of years living in the U.S., number of years in current position, average number of hours worked weekly, ProQOL compassion satisfaction, burnout, compassion fatigue subscale scores, IRRS-B cultural, institutional, individual subscale scores, and ACSI cognitive emotional, spiritual and collective coping subscale scores. Significant correlation coefficients of interest are presented here. Individual subscales within the IRRS-B, ACSI and ProQOL were significantly positively correlated with each other, except spiritual coping and cognitive emotional coping ($r = .22, p = .10$). Further, compassion satisfaction was negatively correlated with burnout, $r = -.41, p < .01$, and compassion fatigue, $r = -.27, p = .04$, and positively correlated with spiritual coping, $r = .35, p < .01$. Time working as a nursing assistant was inversely correlated with cognitive emotional coping $r = -.30, p < .05$ and positively correlated with compassion fatigue $r = .29, p < .01$.

In light of the multivariate analyses revealing significant group differences within the demographic group variables country of birth, age, hours worked weekly and number of years in current position, additional bivariate correlations were conducted. By utilizing the categories established for the MANOVA analyses, the data was filtered and relationships were examined at each level. With regard to country of birth, additional relationships emerged. In U.S. born nursing assistants, spiritual coping was positively correlated with both number of years in position $r = .47, p < .05$ and age $r = .37, p < .05$. Also age was inversely associated with ratings of

institutional racism $r = -.45, p < .05$. In the Caribbean born sample, positive correlations were revealed between spiritual coping and all of the race-related stress measures (cultural $r = .41, p = .02$; institutional $r = .45, p = .01$; individual $r = .44, p = .02$; global $r = .45, p < .02$) as well as cognitive emotional coping ($r = .44, p < .02$). Spiritual coping was positively correlated with both number of years working as a nursing assistant $r = .47, p < .05$ and age $r = .37, p < .05$. Additionally, in nursing assistants born in the Caribbean education was positively correlated with age $r = .41, p < .05$ and number of years living in the U.S. $r = .47, p < .05$.

The relationships unique to the three established age categories were explored. Results of bivariate correlations in those 32 years and younger revealed a significant positive relationship between age and compassion satisfaction ($r = .48, p = .03$). In those aged 33-49 years, number of years in the U.S. was positively correlated with burnout ($r = .46, p < .05$) and collective coping ($r = .50, p < .05$). Additionally, in 33-49 year olds higher levels of individual racism were positively associated with more hours worked weekly ($r = .46, p < .05$).

Significant relationships in those newest to the field revealed unique correlations with spiritual coping, including an inverse relationship between compassion fatigue ($r = -.47, p < .01$). Additionally, there was a positive correlation between number of years living in the U.S. and collective coping ($r = .48, p < .05$). Cognitive emotional coping was positively related to individual race-related stress ($r = .56, p < .05$), global race-related stress ($r = .50, p < .05$) and spiritual coping $r = .57, p < .05$. Additionally, strong negative correlations emerged between years living in the U.S. and cultural racism ($r = -.55, p < .05$) and burnout ($r = -.50, p < .05$) in those with the most years working as a nursing assistant. Lastly, in this group there was an inverse correlation between compassion satisfaction and global racism ($r = -.50, p < .05$). With regard to hours worked weekly, in those working full-time, burnout and collective coping were

positively correlated ($r = .54, p < .05$). Also, unique significant relationships emerged in the group working 41+ hours, whereby burnout was positively correlated to years living in the U.S. and inversely related to number of years working as a nursing assistant.

Overall, the strong correlations served to support the multivariate findings. Additionally, compassion fatigue increased and cognitive emotional coping decreased with longer careers. Higher levels of compassion satisfaction were associated with spiritual coping. Further, older age was associated with lower ratings of race-related stress and decreased use of culture specific coping strategies in those born in the U.S. Higher ratings of race-related stress were associated with lower ratings of compassion satisfaction and increased use cognitive emotional coping and collective coping.

Hypothesis 1

It was anticipated that Black nursing assistants would have high levels, defined as T scores of 57 or higher, of compassion fatigue and burnout, . As such, Black nursing assistants were found to have high levels of compassion fatigue, as indicated by scores on the compassion fatigue subscale of the ProQOL ($M = 21.80, T = 64, 90^{\text{th}}$ ile). Additionally, compassion satisfaction was high ($M = 43.83, T = 59, 80^{\text{th}}$ ile). On the ProQOL burnout subscale, Black nursing assistants scored in the average range ($M = 22.96, T = 53, 67^{\text{th}}$ ile).

Further comparisons were made in light of a primary aim of the research to provide preliminary data of an understudied population through descriptive and exploratory analyses. Both U.S. ($M = 24.82, T = 68, 95^{\text{th}}$ ile) and Caribbean ($M = 18.98, T = 60, 84^{\text{th}}$ ile) born nursing assistants had high levels of compassion fatigue. Further, independent samples t-test compared results indicated compassion fatigue levels were significantly different between nursing assistants born in the U.S. and those born in the Caribbean ($t(56) = 2.96, p < .01$), with

comparison of the mean scores revealing those born in the U.S. endorsing higher levels. Regarding burnout, both U.S. born ($M = 24.93$, $T = 56$, 73rd %ile) and Caribbean born ($M = 21.13$, $T = 52$, 50th %ile) were in the average range. It is important to note that U.S. born participants endorsed burnout levels at the highest end of average and Caribbean born participants were at the lowest end of average. Significant independent t-test comparison ($t(56) = 3.12$, $p < .01$) indicated U.S. born nursing assistants experienced significantly greater levels of burnout when compared with their Caribbean born counterparts. Compassion satisfaction did not significantly differ between the groups ($t(56) = .24$, $p = .81$; U.S. $M = 43.95$, $SD = 4.60$; Caribbean $M = 43.71$, $SD = 2.76$).

In support of the proposed hypothesis, the sample of Black nursing assistants endorsed high levels of compassion fatigue as measured by the ProQOL compassion fatigue scale. However, the results did not indicate high levels of burnout. Exploratory between group comparisons by country of birth revealed U.S. born nursing assistants had significantly higher levels of compassion fatigue and burnout than those born in Caribbean countries. Lastly, Black nursing assistants endorsed high levels of compassion satisfaction, with no significant differences between the U.S. born and Caribbean born nursing assistants.

Hypothesis 2

The second hypothesis proposed Black nursing assistants would demonstrate race-related stress as indicated by scores on the IRRS-B scale. The hypothesis was tested with a series of single sample t-tests, whereby the sample mean scores on the total score/global racism, cultural racism, institutional racism, and individual racism scales were compared to the IRRS-B validation samples scores. The subscale scores were derived by summing the scores on relevant individual items. The three index scores were then converted into standardized scores and

summed to derive the global IRRS-B. A single sample t-test comparing the global score of Black nursing assistants against the predetermined global score of the validation sample found no significant differences. Comparisons on all of the IRRS-B subscales, revealed Black nursing assistants demonstrated significantly higher levels of race-related stress. Specifically, Black nursing assistants scored higher on cultural racism ($M=22.22$, $SD=9.87$) compared to the Utsey's sample ($M=13.35$, $SD=10.66$), $t(57) = 6.90$, $p < .00$ with a large effect $\eta^2 = 0.83$. Similarly, Black nursing assistants scored significantly higher on the Institutional racism scale ($M=9.12$, $SD=6.11$) compared to Utsey's sample ($M=6$, $SD=6.24$), $t(57) = 3.92$, $p < .001$ with a medium effect $\eta^2 = 0.50$, and on the Individual racism scale ($M=11.11$, $SD=6.97$) compared to Utsey's sample ($M=5.87$, $SD=5.13$), $t(57) = 5.78$, $p < .001$ with a large effect $\eta^2 = 0.75$.

Overall, the findings support the hypothesis that Black nursing assistants experienced race-related stress. The magnitude of the differences in race-related stress between Black nursing assistants and the validation sample ranged from medium to large. Specifically, results revealed 50% of the variance in Institutional racism, 75% of the variance in Individual racism and 83% of the variance in Cultural racism were explained by significant sample differences.

Hypothesis 3

It was hypothesized that race-related stress would be associated with compassion fatigue and burnout in Black nursing assistants. Canonical correlation investigated the relationship between the set of race-related stress variables and work place stress variable. The race-related stress set included the cultural racism, institutional racism and individual racism subscales of the IRRS-B. The workplace stress included the ProQOL subscales of burnout and compassion fatigue. To improve linearity of relationships between variables and normality of their distributions, logarithmic transformations were applied to burnout and compassion fatigue.

Assumptions of multicollinearity and multivariate outliers were met. Results revealed no significant relationships between the two sets of variables. As such, the first canonical correlation was not significant, Wilks $\Lambda = .91$, $F(6,106) = .85$, $p = .53$, nor was the remaining canonical correlation Wilks $\Lambda = .10$, $F(2,54) = .03$, $p = .97$.

In light of significant bivariate correlations and in conjunction with a primary research aim, additional exploratory analyses were conducted. To explore the relationship between the race-related stress variables and the combined workplace quality of life variables, a MANOVA was conducted. MANOVA provides the best method to assess moderately correlated dependent variables, like the subscales of the ProQOL. The independent variables were the IRRS-B scales which were transformed via a quartile ranking procedure through Visual Binning in SPSS, establishing 4 categories corresponding with the lowest 25%, 26 to 50%, 51 to 75% and the highest 76%. Preliminary analyses were conducted to ensure no violations of the assumptions of normality, linearity, multicollinearity and homogeneity of variance.

Results revealed the combined scales of the ProQOL were significantly impacted by scores on Global race-related stress ($\Lambda = .50$; $F(6,60) = 4.09$, $p < .01$; *partial* $\eta^2 = .29$; observed power = .96), representing a modest association between levels of the Global score and the combined DVs. To investigate the impact of global race-related stress main effect on each of the professional quality of life scales, univariate analyses were examined. To reduce type I error, a Bonferonni method was employed, with individual alpha levels set at $\alpha = .013$, to account for each of the dependent variables. ANOVA results revealed Global race-related stress had a significant impact on each of the professional quality of life subscales; Burnout $F(3,32) = 5.13$, $p < .01$; *partial* $\eta^2 = .33$; observed power = .77), Compassion Fatigue $F(3,32) = 2.99$, $p < .05$; *partial* $\eta^2 = .22$; observed power = .47), and Compassion Satisfaction $F(3,32) = 5.96$, $p < .01$; *partial* $\eta^2 =$

.36; observed power= .84). Significant pairwise comparisons revealed lower Global IRRS-B scorers endorsed significantly lower levels of burnout and compassion fatigue and higher levels of compassion satisfaction (Tables 9-10).

The canonical correlation results did not support the hypothesis, revealing no relationship between the IRRS-B scales as a predictor set and the ProQOL Compassion Fatigue and Burnout scales as the criterion set. However, results of the exploratory MANOVA revealed the composite score of race-related stress had a significant impact on subjective ratings of quality of life. Specifically, lower levels of race-related stress are related to lower levels of burnout and compassion fatigue and higher levels of compassion satisfaction

Hypothesis 4

It was hypothesized that higher levels of culture-specific coping strategies would be associated with lower levels of compassion fatigue and burnout. Canonical correlation investigated the relationship between a set of culture-specific coping variables and a set of workplace stress variables. Coping variables included the cultural racism, institutional racism and individual racism subscales of the IRRS-B. The work related stress variables included the ProQOL subscales of burnout and compassion fatigue. To improve linearity of relationships between variables and normality of their distributions, logarithmic transformations were applied to the ACSI scales cognitive emotional coping, spiritual coping, and collective coping as well as the ProQOL burnout and compassion fatigue scales. Assumptions of multicollinearity and multivariate outliers were met. Results revealed no significant relationships between the two sets of variables. As such, the first canonical correlation was not significant, Wilks Λ =.93, $F(6,106)$ = .69, p = .66, nor was the remaining canonical correlation Wilks Λ = .98, $F(2,54)$ = .67, p = .52.

Canonical correlation requires two sets of moderately correlated variables. In light of the

weak correlation found between spiritual and cognitive/emotional coping, the results are not unexpected. However, because bivariate correlations did reveal significant correlations among culture specific coping strategies and professional quality of life, exploratory analyses were conducted. MANOVA with ACSI subscales transformed into categorical independent variables, revealed no significant impact on the combined professional quality of life measures.

Hypothesis 5

Hierarchical regression analysis was conducted to examine the moderating influence of culture-specific coping strategies on the relationship between race-related stress and compassion fatigue. Culture-specific coping variables were centered by subtracting the variable sample mean from the value of each variable (Frazier, Tix, and Baron, 2004). Because the global IRRS-B score is a converted z-score and therefore has a variable mean of 0 it was not centered. Additionally, compassion fatigue was logarithmically transformed to reduce skewness and kurtosis. With the use of a $p < .001$ criterion for Mahalanobis distance, no outliers among the cases were identified. No missing cases were identified. Using the created centered variables, interaction terms were created for the interaction between the global IRRS-B score and the respective ACSI subscales. The analysis involved three steps with race-related stress and culture-specific coping as predictor variables and compassion fatigue as the criterion variable. In the first step global IRRS-B score was entered. The centered ACSI cognitive emotional, spiritual, individual and institutional subscale scores were entered as a block in step 2. Step 3 entered the 4 interaction terms comprised of global IRRS-B score x centered ACSI cognitive emotional debriefing score, global IRRS-B score x centered ACSI spiritual coping score and global IRRS-B score x centered ACSI collective coping score.

Results for step 1 indicated that global IRRS-B score was not a significant individual predictor of ProQOL compassion fatigue score ($F(1,56) = .00, R^2 = .00, p = .96$). Similarly, the inclusion of culture specific coping strategies in step 2 ($F(4, 53) = .49, R^2 = .04, p = .74$), was not a significant predictor of compassion fatigue, nor was there a significant R^2 ($F(3,53) = .66, p = .58$). However, after the entry of the interaction variables at step 3 ($F(7,50) = 2.41, R^2 = .25, p = .03$), the R^2 change from .04 to .25 was significant ($F(3,50) = 4.827, p < .01$) indicating that the spiritual coping and collective coping strategies moderated the relationship between race-related stress and compassion fatigue. Specifically, as collective coping increased the relationship between race-related stress and compassion fatigue strengthened ($B = .01, p = .012$). Yet, as the use of spiritual coping strategies increased, the relationship between race-related stress and compassion fatigue reversed ($B = -.004, p < .01$).

Overall, the results reveal that levels of race related stress and the utilization of culture specific coping strategies did not individually contribute to compassion fatigue. Culture-specific coping strategies were found to influence the relationship between race-related stress and compassion fatigue. Whereby, the impact of race-related stress on compassion fatigue varied across the utilization of different culture-specific coping strategies. Those who coped by connecting to a higher power, race-related stress was less of a contributing factor to compassion fatigue. In contrast, coping by connecting with other Black people, exacerbated the impacts of race-related stress on compassion fatigue.

Hypothesis 6

Hierarchical regression analysis was conducted to examine the moderating influence of culture-specific coping strategies on the relationship between race-related stress and burnout. Culture-specific coping variables were centered by subtracting the variable sample mean from

the value of each variable (Frazier, Tix, and Baron, 2004). Additionally, burnout was logarithmically transformed to reduce skewness and kurtosis. With the use of a $p < .001$ criterion for Mahalanobis distance, no outliers among the cases were identified. No missing cases were identified. Using the created centered variables, interaction terms were created for the interaction between the global IRRS-B score and the respective ACSI subscales. The analysis involved three steps with race-related stress and culture-specific coping as predictor variables and burnout as the criterion variable. In the first step global IRRS-B score was entered. The centered ACSI cognitive emotional, spiritual, individual and institutional subscale scores were entered as a block in step 2. Step 3 entered the 4 interaction terms comprised of global IRRS-B score x centered ACSI cognitive emotional debriefing score, global IRRS-B score x centered ACSI spiritual coping score and global IRRS-B score x centered ACSI collective coping score.

Results for step 1 indicated that global IRRS-B score was not a significant individual predictor of ProQOL burnout score ($F(1,56) = .06, R^2 = .00, p = .82$). Similarly, the inclusion of culture specific coping strategies in step 2 ($F(4, 53) = .79, R^2 = .06, p = .54$), was not a significant predictor of burnout, nor was there a significant change in R^2 change ($F(3,53) = 1.03, p = .39$). Lastly, the inclusion of the interaction variables did not significantly contribute to the prediction of burnout ($F(7,57) = 1.37, R^2 = .16, p = .24$) and the R^2 change was not significant ($F(3,50) = 2.09, p = .11$) indicating that the culture specific coping strategies did not moderate the relationship between race-related stress and burnout.

Overall, these results revealed none of the predictors significantly impacted burnout. Specifically, race-related stress and culture-specific coping strategies did not significantly explain the variance in burnout. Additionally, culture-specific coping did not moderate the relationship between race-related stress and burnout.

Results Summary

Exploratory analyses of the sample indicated the significant impacts of demographic variables on the constructs. Further, results suggested the impacts of differing sociopolitical cohorts and generations across the constructs, whereby, even within a seemingly restrictive sample of Black, nursing assistants, recruited from the same agency in a large East Coast, U.S. city, significant differences emerged. Specifically, race-related stress and the employment of culture-specific coping strategies were significantly impacted by age, country of birth and years lived in the U.S.

The hypotheses findings suggest partial support for the proposed hypotheses. Overall, it was concluded that Black nursing assistants experienced significant levels of compassion fatigue, compassion satisfaction and race-related stress. When burnout was examined by country of birth, there was an observed trend towards burnout in the U.S. born subset of the sample. Further, although the hypothesized canonical correlation did not yield significant results, exploratory multivariate analyses revealed a significant relationship between race-related stress and professional quality of life. Additionally, results suggested that Black nursing assistants utilize and rely on coping strategies hypothesized to be specific to Black culture. As such the hypothesized moderating effect of culture specific coping strategies on the relationship of race-related stress and compassion fatigue was supported. Interestingly, the direction of moderation differed according to the specific coping strategy employed, with the more avoidant, collective coping strengthening the relationship and the more active meaning focused, spiritual coping, weakening the relationship. Overall, the hypotheses results further support understanding professional quality of life through a stress-process conceptualization of the individual embedded within the greater context. Detailed discussion of the individual research questions, the

implications of the study results, study limitations and future directions are addressed in the following chapter.

Chapter Five

Discussion

The results of the current study contribute to the existing bodies of literature including professional quality of among helping professions, race-related stress, and culture-specific coping strategies. Specifically, the research provides initial data on the relationships between racism, and the professional quality of life among helping professionals, and the moderating role of culture-specific coping. Additionally, the results provide exploratory and preliminary data regarding the professional life of nursing assistants inclusive of relevant demographics, stressors and coping strategies. These exploratory data are particularly timely in light of population and labor predictions citing increased need for nursing assistants. There is additional relevance to the scholarships and clinical work with caregiver burden and Caribbean-born, Black women.

Discussion of research questions

Do Black nursing assistants experience compassion fatigue, burnout and compassion satisfaction? In the current study Black nursing assistants endorsed clinically significant levels of compassion fatigue with symptoms including irritability, increased negative arousal, hypervigilance, intrusive thoughts, feelings and recollections, depressive symptoms and decrease in self-efficacy (Gentry, Baranowsky, & Dunning, 2002; Figley, 2002). The burnout endorsements were indicative of a significant trend, but overall burnout levels were at threshold. However, it was found that the burnout subscale had weaker reliability in the current sample than in previous research. Thus, burnout in the current sample and in other Black nursing assistants should not be ruled out. Consistent with previously identified risk factors, nursing assistants who worked more than 40 hours per week and those who had been at their job longer had higher levels of compassion fatigue and burnout (Hobfoll & Freedy, 1993; Van Yperen, Buunk, &

Schaufeli, 1992). Lastly, the presence of compassion fatigue and elevated levels of burnout in US born nursing assistants, compassion satisfaction remained high.

These data provide striking preliminary evidence of workplace stress related disorders with associated negative impacts in an essential helping professional population. Further, in consideration of previous research with nursing assistants and other helping professionals these results suggest the consequences of compassion fatigue and burnout may extend to patients and the greater health care system (Aiken et al., 2002; Halm et al., 2005; Hooper et. al, 2007; Vahey, Aiken, Sloane, Clarke, and Vargas, 2004). Specifically, burnout has been related to decreased quality in patient care, poorer patient recovery, increased mortality rates, and increased incidence of elder abuse (Shinan-Altman & Cohen, 2009; Goergen, 2001; Goodridge, Johnston, & Thompson, 1996). Consistent with other helping professionals, compassion fatigue and burnout likely result in higher rates of absenteeism, tardiness and requested workers' compensation.

Empirical investigations identified a myriad of shared organizational, work role specific and personal risk factors to the development of negative work related stress disorders including role conflict, role ambiguity a, work overload and low perceived control (Gieger-Brown, Muntaner, Lipscomb, & Trinkoff, 2004). Although, there is overlap, compassion fatigue and burnout evidence distinctions in the symptomology, etiology and identified risk factors (Figley, 2002; Rothschild & Rand, 2006). In the current study, measures of role overload were indicative of higher incidence of burnout and compassion fatigue. As per Van Yperen and colleagues (1992), role overload includes work demands that are high in both qualitative and quantitative intensity. Quantitative intensity refers to the overall breadth and volume of work, inclusive of weekly hours and career length, whereas qualitative intensity refers to the "interpersonal distance" of the relationships within the work environment (Brookings, Bolton,

Brown, & McEvoy, 1985; Cordes, Dougherty, 1993; Newell & MacNeil, 2010). Variables of quantitative intensity contributing to workplace distress in the current sample were number of hours worked weekly and years working as a nursing assistant.

Personal loss and grief have been identified as unique risk factors of compassion fatigue (Collins & Longa, 2003; Gentry, Baranowsky & Dunning, 2002; Newell & MacNeil, 2010; Sherman, 2004). Grief surrounding the loss of a patient was found to be uniquely predictive of compassion fatigue in emergency room nurses and oncology nurses (Dominguez-Gomez, & Rutledge, 2009; Schwam, 1998). The current study results may serve to support death with associated grief as a risk factor of compassion fatigue, particularly in light of the predictive significance of more years within the field.

In the current study compassion satisfaction remained high and consistent across all levels of the demographic variables. Compassion satisfaction is defined as the caregiver's feelings of inspiration and invigoration resulting from the ability to assist connect with the patient, and ameliorate their suffering (Coetzee & Klopper, 2010). Further previous research has conceptualized compassion satisfaction as a buffer against the development of compassion fatigue and burnout. However, both compassion satisfaction and compassion fatigue were found in Black nursing assistants. The current study results can be understood in the context of the Afrocentric values of connectivity and current research on caregiver burden in Black families (Edge & MacKian, 2010). Cross cultural scholarship demonstrates that Black families are more likely to provide elder care, endorse lower levels of caregiving burden and higher levels of caregiving satisfaction and pride when compared to their European counterparts (McAdoo & Younge, 2009). These intergenerational families serve to provide positive emotional support, share child and elder caregiving responsibilities and bolster social capital. In response, family

members endorse benefits including feeling more supported, higher quality of life satisfaction and pride in their roles within their family (McAdoo & Younge, 2009). Thus, because of the strong value placed on caregiving within Black culture, Black nursing assistants may continue to feel pride in their professional role while simultaneously being burdened by the grief and loss of those they care for.

Do Black nursing assistants experience race-related stress? Overall, the results supported the proposed hypothesis that Black nursing assistants experienced cultural, institutional and individual racism. As expected, Black nursing assistants experienced distress from overt interpersonal discrimination and embedded organizational discrimination such. Also, in support of previous research and theory, Black nursing assistants varied in their experiences of distress in response to the insidious and ambiguous pervasive denigration of black culture by the Eurocentric majority (Utsey, 1999). Current study findings reflected large effect sizes of the observed differences between groups on the cultural racism scale, with those working the fewest years in their current position endorsing the lowest ratings of cultural racism. This variability may be partially explained by a pattern of association between dimensions of racism and SES. Specifically, those with higher SES may be more sensitive to the insidious nature of cultural racism, because of their experiences negotiating environments where discrimination is less overt (Clark, Andersen, Clark, & Williams, 1999).

The current study results are consistent with findings across medical and psychological disciplines including health psychology, behavioral medicine, evidencing the continued presence and associated deleterious impacts of race-related stress. Specifically, race-related stress has been previously linked to poorer physical health outcomes including hypertension, insulin resistance syndrome, and abdominal obesity, (Krieger, 1990; Tull et al., 1999; Tull, Sheu, Bulter,

& Cornelious, 2005). Similarly, investigations of mental health outcomes have indicated relationships between race-related stress and obsessive-compulsive behaviors, depression and somatization (Klonoff, Landrine, & Ullman, 1999), anxiety and hypervigilance (Kessler, Mickelson, & Williams, 1999), decreased job satisfaction (Holder & Vaux, 1998), poorer evaluations of overall life satisfaction (Danoff-Burg, Prelow, & Swenson, 2004), happiness (Williams, Neighbors, & Jackson, 2003), lower levels of mastery (Broman, Mavaddat, & Hsu, 2000) and lower self-esteem (Simpson & Yinger, 1985).

Is there a relationship between race-related stress, compassion fatigue, and burnout in Black nursing assistants? As discussed in Tabachnick and Fidell (2007), canonical correlation is particularly sophisticated and adequate interpretation is often eluded. It is suggested that when interpretability of canonical correlations is questioned, MANOVA analyses be considered alternatively (Tabachnick & Fidell, 2007). The results of the canonical correlations investigating the relationships between the vector of race-related stress on burnout and compassion fatigue, yielded not significant results. Yet, descriptive analyses suggested relationships between the variables, particularly with subsets of the sample. As such, exploratory analyses yielded results in support of the hypotheses, whereby lower scores on the global race-related measure significantly impacted burnout and compassion fatigue. The role of compassion satisfaction was additionally considered and results supported race-related stress was significantly impactful. The Global IRRS-B score represented the cumulative psychological impact of perceptions of cultural, institutional and individual racism. Individual consideration of the three dimensions of professional quality of life revealed lower perceptions of racist experiences were related to positive attributions and feelings of work, including increased self-efficacy, social, professional and workplace connectivity, and adequate emotional resources.

Additional analyses of the hypotheses indicated that within the sample of Black nursing assistants, those with endorsements of racism in the 50th percentile or lower endorsed significantly higher levels of professional quality of life.

Theories postulate the pervasive, systematic and uncontrollable nature of race-related stress yields a multitude of stress responses. As such, the impacts are regarded as cumulative over time with acute and chronic consequences. Further, Utsey, Giesbrecht, Hook and Standard (2007) proposed and evidenced quality of life is more accurately predicted by race related stress than stressful life events. Thus, the impacts of race-related stress on professional quality of life can be understood through the model of allostasis,, whereby race-related stress is a chronic stressor that yields higher allostatic load. Allostatic load is a theoretical measure of the cumulative wear and tear on the body's regulatory systems resulting from chronic exposure to stress. Previous research has illustrated racial minorities who experience racism have higher allostatic load than those who do not report racism. Black nursing assistants, who experience racism, may similarly have burdened stress response systems, rendering them vulnerable to developing occupational stress.

What is the relationship between culture-specific coping strategies, compassion fatigue, and burnout in Black nursing assistants? A linear relationship between the utilization of a combination of culture-specific coping strategies and work related stress reactions was investigated. Canonical correlation between variables of culture specific coping and variables of work place stress reactions did not reveal significant linear relationships. As per Tabachnick & Fidell (2007), canonical analysis is sensitive to the correlations among variables within and between sets. In light, of weak correlation between the use of cognitive/emotional debriefing

and spiritual coping, an exploratory MANOVA was conducted. Similarly, these exploratory analyses additionally yielded non-significant results.

First, the non-significant results may reflect unique sample characteristics and resultant poor reliability in the burnout scale and the omitted ACSI ritual coping scale. Although, the remaining ACSI scales evidenced adequate reliability in the current sample, psychometric investigations across three samples of African descendants indicated limited utility with foreign-born Blacks. Additionally, the Caribbean born sample size was cited as marginally adequate (Utsey, Brown, & Bolden, 2004).

Second results may also reflect the utilization of coping strategies not measured by the ACSI, as indicated by the presence of compassion satisfaction. A compendium of empirical study results support a three factor conceptualization of professional quality of life, with positive and negative consequences including burnout, compassion fatigue and compassion satisfaction. Burnout is a well-studied and validated workplace distress reaction inclusive of emotional exhaustion, with associated depersonalization and reduced self-efficacy. Whereas, the compassion fatigue scholarship is muddled amidst struggles within and between social science disciplines to parcel out unique definitions of interrelated constructs'. Compassion fatigue involves an autonomic hyperarousal that mimics that of PTSD in response to the responsibility of providing for care to those suffering. Compassion satisfaction is the positive consequences associated with caring for another and performing job duties well.

Black caregivers report higher levels of caregiver satisfaction (Lawton et al, 1992) and greater perceived rewards (Foley et al., 2002). Black family values and extended kinship ties bolster restorative factors including previous experience caregiving, expectations of and cultural support for caregiving. Whereby, previous caregiving experiences facilitate increased self-

efficacy and expectations and availability of social and structural supports buffer against emotional exhaustion and depersonalization.

Across caregiver burden scholarship, the cumulative findings revealed Black caregivers were more likely to be an extended relative, endorse religious coping, benign appraisals of burdensome behaviors such as memory loss and behavioral disinhibition (Aranda & Knight, 1997; Haley, et al., 2004; Williams & Gibson, 2002). Further, Black caregivers were less likely to endorse appraisals of burden, depression, and stress, with physical impairment being the sole predictor of depressive symptomology (Drentea & Goldner, 2006). The results of a large-scale study of caregivers utilizing a stress process model, further elucidated the results of the current study, whereby negative health and mental health outcomes were unrelated to appraisals of caregiver burden and available resources (Drentea & Goldner, 2011). Consequently, the current study results may be more reflective of healthy quality of life, rather than the absence of the impacts of culturally relevant coping strategies.

What impacts do culture-specific coping strategies have on the relationships between race-related stress and professional quality of life in Black nursing assistants? The employment of culture-specific coping strategies was hypothesized to moderate the relationship between race-related stress and professional quality of life. The results of the hypothesis testing indicated that spiritual coping and collective coping strategies moderated the relationship between race-related stress and compassion fatigue. The impact of race-related stress on compassion fatigue varied across the utilization of different culture-specific coping strategies. For those who frequently employed coping emphasizing the connection to a higher power, race-related stress was less impactful on compassion fatigue. Coping by connecting with the intergenerational strengths of Black cultural history, strengthened the relationship between race-related stress and compassion

fatigue. Additionally, it was hypothesized that culture-specific coping moderated the relationship between race-related stress and burnout. Results were not significant.

It was expected that reliance on coping through a higher power would parcel out the impacts of race-related stress and compassion fatigue. There are consistent empirical results supporting the buffering roles of spirituality and religion in the development of workplace stress disorders and overall professional quality of life. The current study findings moderating effects of collective coping on the relationship between race-related stress and work-related stress disorders is both supported and refuted by the current scholarship. The employment of collective coping has been consistently linked to social-embeddedness in the Black community, high levels of racial pride and increased experiences of racism and discrimination (Beaudoin, 2009; Collins and Longa, 2003; Utsey, Stanard, & Giebrecht, 2008). It has been hypothesized that to achieve racial pride and positive self-representations, Black individuals must confront and process systemic inequities, whereby attuning them to continued discrimination awareness. Further, the relationship has been understood as those frequently face discrimination seek collective support in response develop racial pride. Finally, it is possible increased discriminatory experiences do not co-occur in individuals with high racial identity and positive self-representations; rather discrimination occurs in response to these markers of self-esteem and self-worth (Utsey, Stanard, & Giebrecht, 2008).

Limitations of the study

The selection of a nonexperimental, correlational research design significantly limited internal control. As such, causality between the variables could not be concluded and impacting variables may have went unmeasured. The use of nonprobability convenience sampling introduced the threat of selection bias. As such, the experience of Black nursing assistants who

elected to not participate might not have been captured. Further, by deriving the study variables from self-report survey response, answering bias and response editing could have impacted the results. Consistent with previous research indicating Blacks are less likely than other ethnic groups to endorse items reflective of distress and difficulty, participants may have restricted their endorsements of negative items (Hobfoll & Lieberman, 1987; Ross & Mirowsky, 1984; Warnecke, Johnson, & Chaves, 1997). Additionally, the independence of observations may have been compromised by presenting the study procedures in group format. Lastly, as per Russell and Bobko (1992), the use of coarse Likert scale data as moderator variables causes significant reduction in the probability of true interaction effects detection. Internal validity was addressed through the conscientious data screening with particular attention to assumptions requirements, and the application of statistical adjustments when conducting post hoc and exploratory analyses. Nevertheless, the results must be interpreted within the greater context of the limitations.

Implications and Future Directions

The current study results provide initial data indicating nursing assistants are experiencing compassion fatigue and possibly burnout. Further, the results are consistent with the health disparity literature indicating the deleterious psychological impacts of chronic discrimination. Finally, the data adds to the limited research examining the interface of racism, workplace distress, and coping in minority, health care workers. The results have significant implications to nursing assistants, those they care for and the greater healthcare system. Additionally, results not only indicate the need for continued empirical investigation, but suggest the need to create culturally competent training, continuing education and treatment programs specifically addressing compassion fatigue and burnout in nursing assistants.

At this time, over 3 million direct care workers provide essential daily assistance to those with disabilities and the impaired aging. However by 2016, employment projections indicate one million additional direct care workers will be required to accommodate the growing number of individuals 65 years and older (Bureau of Labor Statistics, 2011). Further, projections indicate across the next decade, personal home health care aides and facility based nursing assistants will be the nation's second and third fastest growing occupations. As such, it is imperative that the stressors and resources embedded within the occupation and those drawn to it are researched and understood.

Currently, the professional profile of nursing assistants is that of a working-poor woman of color. Unfortunately, despite valued, respectable and essential employment, nursing assistants are chronically undercompensated and underinsured, resulting in additional stress and restricting resources (Paraprofessional Healthcare Institute, 2011). Due to the complex interactions of multiple minority statuses, these women of color with low socioeconomic status, face significant cultural, institutional and individual stressors. Thus, may be vulnerable to occupational stress like burnout and compassion fatigue. As such, these results strongly argue the need for institutionalized support networks that focus on collegial relationships and self-care. Increasing collegial connectivity may be particularly beneficial and culturally relevant in consideration of the fictive kin and flexible boundaries associated with Black families.

Of critical significance to the field of Counseling Psychology is the continued need for culturally relevant and adapted theories. Particular to the current study, the application of intersectionality theory is most appropriate. Intersectionality examines the confluence of oppression arising from multiple minority identities including gender, race, sexuality and class as a matrix of forces creating oppression (Cole, 2009). As indicated by the research and evidenced

in the current sample, many nursing assistants are working-poor, Black, immigrant, women with reduced social capital. Specifically, Black women are overrepresented in populations of poverty, victims of domestic violence, and sufferers of stress-related negative health outcomes (Geronimus, 2006; Cruz, 2010). Thus, their experiences of distress are multifaceted and explicated by their multiple minority statuses.

It is essential that appropriate theory undergirds any future investigations and all constructs and associated measures are culturally relevant and appropriately adapted. Constructs borne of Eurocentric theories of quality of life and mental health are deficient, however as are the more recent gendered and racialized cultural adaptations (Cole, 2009; Viruell-Fuentes, Miranda, & Abdulrahim, 2012). Thus, the conceptualization of professional quality of life and the constructs burnout, compassion fatigue and compassion satisfaction must be inclusive of the Afrocentric perspective. Similarly, a comprehensive exploration of the historical cohorts and their uniquely adapted protective factors are necessary for a better understanding of coping resources. In light of the acculturative stress research, culture-specific coping scholars are wise to consider the impacts of both evaluative and nonevaluative contexts on coping strategies (Peeter & Oerlemans, 2009). Lastly, existing measures and future measures must be validated across the heterogeneous populations of Blacks living in the U.S.

Future studies utilizing an ecological stress process model may aim to investigate the impacts of relationship status, individual annual income, household income, current housing, number of dependents, family members living in the home, and health insurance status as stressors and resources. Additionally, a more complete stress process model would include health status variables including current medications and medical diagnoses, diet and exercise.

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Tables

	N	%	Mean	Std Deviation
Age	58		41.39	14.32
Gender	58			
Male	4	6.9		
Female	54	93.1		
Country of birth	58			
USA	19	32.8		
Caribbean	39	67.2		
years in USA	58		22.07	17.86
years in current position	58		7.47	10.45
hours worked weekly	58		36.16	11.38
highest level of edu	58			
HS diploma/GED	51	87.9		
Some college	6	10.3		
College	1	1.7		

Table 1. Demographic characteristics of participants. All participants identified as Black and were currently employed as a nursing assistant.

Variable/Bin	N	Range
Age	58	
1	20	≤ 32 years old
2	21	33-49 years old
3	17	≥ 50 years old
Years in current position	58	
1	25	≤ 2 years
2	17	3-9 years
3	16	≥ 10 years
Years in USA	58	
1	14	≤ 5 years
2	28	6-24 years
3	16	≥ 25 years
Hours worked weekly	58	
1	23	≤ 29 hours
2	17	30-40 hours
3	18	≥ 41 hours

Table 2. Binned categories of continuous demographic variables binned for descriptive MANOVA's

DV	Group	Group	Mean Difference	Std. Err	Sig.	95% Confidence Interval Lower	Upper
<i>Compassion Fatigue</i>							
	Yrs working						
	≤2 years	3-9 years	-.09	.02	.002	-.14	-.04
		≥10 years	-.08	.02	.004	-.13	-.03
	Hours weekly						
	30-40 hours	<29 hours	-.06	.02	.04	-.11	-.00
		≥41 hours	-.07	.03	.01	-.13	-.02
<i>Burnout</i>							
	Hours weekly						
	30-40 hours	≥41 hours	-.05	.02	.04	-.11	-.00

Table 3. PROQOL demographic post-hoc comparisons

DV/IV	Mean	Std. Err	95% Confidence Interval	
			Lower	Upper
<i>Compassion Fatigue</i>				
Yrs working				
≤2 years	1.29	.02	1.25	1.32
≥10 years	1.37	.02	1.33	1.41
3-9 years	1.38	.02	1.34	1.43
Hours weekly				
30-40 hours	1.28	.02	1.23	1.32
≥41 hours	1.36	.02	1.32	1.40
≤29 hours	1.37	.02	1.33	1.41
<i>Burnout</i>				
Hours weekly				
30-40 hours	1.34	.02	1.31	1.38
≤29 hours	1.39	.01	1.36	1.42
≥41 hours	1.40	.01	1.36	1.43

Table 4. PROQOL demographic post-hoc group data

DV	Group	Group	Mean	Std. Err	Sig.	95% Confidence Interval Lower	Upper
<i>Cultural</i>							
	Age						
	33-49 years	≥50 years	6.12	1.91	.02	-.50	12.73
<i>Institutional</i>							
	Age						
	33-49 hours	≥50 years	5.35	1.76	.03	-.75	11.45
<i>Global</i>							
	Age						
	33-49 years	≥50 years	2.26	.78	.04	-.43	4.95

Table 5. IRRSB by age post-hoc comparisons

DV/IV	Mean	Std. Err	95% Confidence Interval	
			Lower	Upper
<i>Cultural</i>				
Age				
≥50 years	17.57	1.43	13.44	21.71
≤32 years	20.94	1.32	17.11	24.78
33-49	23.69	1.27	20.02	27.35
Yrs working				
3-9 years	19.45	1.39	15.43	23.48
≤2 years	19.48	1.20	16.03	22.93
≥10 years	24.38	1.47	20.13	28.62
<i>Institutional</i>				
Age				
≥50 years	5.45	1.32	1.64	9.27
≤32 years	8.69	1.22	5.15	12.23
33-49 years	10.80	1.17	7.42	14.18
<i>Global</i>				
Age				
≥50 years	-1.53	.58	-3.21	.15
≤32 years	-.40	.54	-1.96	1.16
33-49 years	.73	.51	-.76	2.22

Table 6. Race-related stress by age and years in current position post-hoc group data

DV	Group	Group	Mean	Std. Err	Sig.	95% Confidence Interval	Interval
						Lower	Upper
<i>Cognitive Emotional</i>							
	Age						
	33-49 years	≥50 years	6.64	2.17	.02	.92	12.37
<i>Spiritual</i>							
	Age						
	33-49 hours	≤32 years	6.08	1.06	.00	3.78	8.37
		≥50 years	3.04	1.20	.03	.45	5.64
<i>Collective</i>							
	Age						
	33-49 years	≤32 years	2.48	1.03	.03	.26	4.71
		≥50 years	4.18	1.16	.00	1.67	6.69

Table 7. Pairwise ACSI demographic comparisons

DV/IV	Mean	Std. Err	95% Confidence Interval	
			Lower	Upper
<i>Cognitive Emotional</i>				
Age				
≥50 years	12.77	1.75	9.13	16.40
≤32 years	18.37	1.56	15.13	21.62
33-49 years	19.27	1.41	16.34	22.20
<i>Spiritual</i>				
Age				
≤32 years	12.34	1.12	10.00	14.67
≥50 years	14.48	1.26	11.87	17.10
33-49 years	18.39	1.01	16.29	20.50
<i>Collective</i>				
Age				
≥50 years	10.68	1.15	8.30	13.07
≤32 years	12.60	1.02	10.47	14.73
33-49 years	14.29	.93	12.36	16.21

Table 8. Coping by age post-hoc group data

DV	Group	Group	Mean	Std. Err	Sig.	95% Confidence Interval	
			Diff			Lower	Upper
<i>Burnout</i>							
	Quartiles						
	3 rd	2 nd (26-50%ile)	.05	.02	.04	-.01	.11
		1 st ($\leq 25\%$ ile)	.06	.02	.01	.00	.12
		4 th ($\geq 76\%$ ile)	.06	.02	.03	-.01	.12
<i>Compassion fatigue</i>							
	Quartiles						
	3 rd	1 st ($\leq 25\%$ ile)	.10	.04	.04	-.01	.21
		2 nd (26-50%ile)	.12	.04	.01	.01	.23
		4 th ($\geq 76\%$ ile)	.13	.05	.01	.02	.25
<i>Compassion satisfaction</i>							
	Quartiles						
	2 nd	1 st ($\leq 25\%$ ile)	.03	.01	.03	-.00	.05
		3 rd (51-75%ile)	.04	.01	.00	.01	.06
		4 th ($\geq 76\%$ ile)	.04	.01	.01	.01	.06

Table 9. Pairwise comparisons Logarithmically transformed PROQOL subscales by IRRSB global score quartiles

DV/IV	Mean	Std. Err	95% Confidence Interval	
			Lower	Upper
<i>Burnout</i>				
Quartiles				
2 nd (26-50%ile)	1.34	.02	1.29	1.39
1 st (\leq 25%ile)	1.35	.02	1.29	1.41
4 th (\geq 76%ile)	1.40	.03	1.32	1.47
3 rd (51-75%ile)	1.44	.02	1.39	1.49
<i>Compassion fatigue</i>				
Quartiles				
2 nd (26-50%ile)	1.30	.04	1.20	1.40
1 st (\leq 25%ile)	1.31	.04	1.20	1.42
4 th (\geq 76%ile)	1.36	.05	1.23	1.50
3 rd (51-75%ile)	1.44	.04	1.35	1.53
<i>Compassion satisfaction</i>				
4 th (\geq 76%ile)	1.60	.01	1.57	1.64
3 rd (51-75%ile)	1.63	.01	1.61	1.65
1 st (\leq 25%ile)	1.64	.01	1.61	1.66
2 nd (26-50%ile)	1.67	.01	1.64	1.69

Table 10 Logarithmically transformed PROQOL subscale scores by IRRSB global quartiles

APPENDIX A

Demographic Questionnaire

1. Gender: _____
2. Age: _____
3. Are you of Hispanic, Latino or Spanish origin?
☐ No
☐ Yes, Mexican, Mexican American, Chicano
☐ Yes, Puerto Rican
☐ Yes, Cuban
☐ Yes, another Hispanic, Latino or Spanish origin (please print origin below, for example Dominican, Argentinean and so on) _____
4. Race:
☐ Black/African American
☐ White/Caucasian
☐ American Indian and Alaska Native
☐ Asian
☐ Multi-racial (please provide a brief description) _____

5. Country of Birth: _____
6. Number of years living in the United States _____
7. Current Job Title: _____
8. Number of Years in Current Position: _____

9. Average number of hours worked weekly _____

10. Highest Level of Education Attained:

_____ High School Diploma/GED

_____ Bachelor's degree

_____ Master's degree

_____ Doctoral degree

_____ Other (specify): _____

APPENDIX B

Professional Quality of Life Scale (ProQOL)

Compassion Satisfaction and Compassion Fatigue

(ProQOL) Version 5 (2009)

When you help people you have direct contact with their lives. As you may have found, your compassion for those you help can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a helper. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often

1. I am happy.
2. I am preoccupied with more than one person I help.
3. I get satisfaction from being able to help people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I help.
7. I find it difficult to separate my personal life from my life as a helper.
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.
9. I think that I might have been affected by the traumatic stress of those I help.
10. I feel trapped by my job as a helper.
11. Because of my helping, I have felt "on edge" about various things.

12. I like my work as a helper.
13. I feel depressed because of the traumatic experiences of the people I help.
14. I feel as though I am experiencing the trauma of someone I have helped.
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with helping techniques and protocols.
17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a helper.
20. I have happy thoughts and feelings about those I help and how I could help them.
21. I feel overwhelmed because my work load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences
of the people I help.
24. I am proud of what I can do to help.
25. As a result of my helping, I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a helper.
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

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APPENDIX C

Africultural Coping Systems Inventory (ACSI)

Instructions: Now, consider the strategies you utilize in coping with stressful, day-to-day situations. Recall a stressful situation that occurred within the past month. Rate each coping strategy by indicating whether you used it to cope with the stressful situation.

0 = *Did not use,* 1 = *Used a little,* 2 = *Used a lot,* 3 = *Used a great deal.*

- _____ 1. I prayed that things would work themselves out.
- _____ 2. I got a group of family or friends together to help with the problem.
- _____ 3. I shared my feelings with a friend or family member.
- _____ 4. I remembered what a parent (or other relative) once said about dealing with these kinds of situations.
- _____ 5. I tried to forget about the situation.
- _____ 6. I went to church (or other religious meeting) to get help or support from the group.
- _____ 7. I thought of all the struggles Black people have had to endure and it gave me strength to deal with the situation.
- _____ 8. To keep from dealing with the situation, I found other things to keep me busy.
- _____ 9. I sought advice about how to handle the situation from an older person in my family or community.
- _____ 10. I read a scripture from the bible (or similar book) for comfort and/or guidance.
- _____ 11. I asked for suggestions on how to deal with the situation during a meeting of my organization or club.

- _____ 12. I tried to convince myself that it was not that bad.
- _____ 13. I asked someone to pray for me.
- _____ 14. I spent more time than usual doing group activities.
- _____ 15. I hoped that things would get better with time.
- _____ 16. I read a passage from a daily meditation book.
- _____ 17. I spent more time than usual doing more things with friends and family.
- _____ 18. I tried to remove myself from the situation.
- _____ 19. I sought out people I thought would make me laugh.
- _____ 20. I got dressed up in my best clothing.
- _____ 21. I asked for blessings from a spiritual or religious person.
- _____ 22. I helped others with their problems.
- _____ 23. I lit a candle for strength or guidance in dealing with the problem.
- _____ 24. I sought emotional support from family and friends.
- _____ 25. I burned incense for strength or guidance in dealing with the problem.
- _____ 26. I attended a social event (dance, party, movie) to reduce stress caused by the situation.
- _____ 27. I sung a song to myself to help reduce the stress.
- _____ 28. I used a cross or other object for its special powers in dealing with the problem.
- _____ 29. I found myself watching more comedy shows on television.
- _____ 30. I left matter in God's hands.

(Utsey, Adams, & Bolden. 2000. Africultural Coping Systems Inventory (ACSI).

APPENDIX D

The Index of Race-Related Stress-Brief Version

Instructions: This survey questionnaire is intended to sample some of the experiences that Black people have in this country because of their 'blackness.' There are many experiences that a Black person can have in this country because of his/her race. Some events happen just once, some more often, while others may happen frequently. Below you will find listed some of these experiences, for which you are to indicate those that have happened to you or someone very close to you (i.e., a family member or loved one). It is important to note that a person can be affected by those events that happen to people close to them; this is why you are asked to consider such events as applying to your experiences when you complete this questionnaire. Please indicate the number on the scale (0 to 4) that indicates the reaction you had to the event at the time it happened. Do not leave any items blank. If an event has happened more than once, refer to the first time it happened. If an event did not happen, indicate 0 and go on to the next item.

0 = This never happened to me.

1 = This event happened but did not bother me

2 = This event happened and I was slightly upset.

3 = This event happened and I was upset.

4 = This event happened and I was extremely upset.

1. You notice that crimes committed by White people tend to be romanticized, whereas the same crime committed by a Black person is portrayed as savagery, and the Black person who committed it, as an animal.
2. Sales people/clerks did not say thank you or show other forms of courtesy and respect (e.g. put your things in a bag) when you shopped at some White/non-Black owned businesses.
3. You notice that when Black people are killed by the police, the media informs the public of the victim's criminal record or negative information in their background, suggesting they got what they deserved.
4. You have been threatened by physical violence by an individual or group of Whites/non-Blacks.
5. You have observed that White kids who commit violent crimes are portrayed as 'boys being boys,' while Black kids who commit similar crimes are wild animals.
6. You seldom hear or read anything positive about Black people on the radio, TV, in newspapers, or history books.
7. While shopping at a store the sales clerk assumed that you couldn't afford certain items (e.g., you were directed toward the items on sale).
8. You were the victim of a crime and the police treated you as if you should just accept it as part of being Black.
9. You were treated with less respect and courtesy than Whites and other non-Blacks while in a store, restaurant, or other business establishment.
10. You were passed over for an important project although you were more qualified and competent than the White/non-Black person given the task.

11. Whites/non-Blacks have stared at you as if you didn't belong in the same place with them; whether it was a restaurant, theater, or other place of business.
12. You have observed the police treat White/non-Blacks with more respect and dignity than they do Blacks.
13. You have been subjected to racist jokes by Whites/non-Blacks in positions of authority and you did not protest for fear they might have held it against you.
14. While shopping at a store, or when attempting to make a purchase, you were ignored as if you were not a serious customer or didn't have any money.
15. You have observed situations where other Blacks were treated harshly or unfairly by Whites/non-Blacks due to their race.
16. You have heard reports of White people/non-Blacks who have committed crimes, and in an effort to cover up their deeds falsely reported that a Black man was responsible for the crime.
17. You notice that the media plays up those stories that cast Blacks in negative ways (child abusers, rapists, muggers, etc.), usually accompanied by a large picture of a Black person looking angry or disturbed.
18. You have heard racist remarks or comments about Black people spoken with impunity by White public officials or other influential White people.
19. You have been given more work, or the most undesirable jobs at your place of employment while the White/non-Blacks of equal or less seniority and credentials is given less work, and more desirable tasks.
20. You have heard or seen other Black people express a desire to be White or to have White physical characteristics because they disliked being Black or thought it was ugly.
21. White people or other non-Blacks have treated you as if you were unintelligent and needed things explained to you slowly or numerous times.
22. You were refused an apartment or other housing; you suspect it was because you're Black.

(Utsey, 1999. The Index of Race-Related Stress-Brief)