# EXAMINING THE MEASUREMENT OF RACE AND ETHNICITY TO INFORM A MODEL OF SOCIOCULTURAL STRESS AND ADAPTIVE COPING

by

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“The Ink of the Scholar is worth more than the Blood of the Martyr"
-Prophet Muhammad
(Peace Be Unto Him)

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## DEDICATION

This dissertation is dedicated to all those who have come before me and all those who will hopefully follow in the pursuit of physical, mental and spiritual freedom. This is a tribute to the countless numbers of individuals who died seemingly in vain, but are not forgotten by those of us who remember their struggle for freedom. I remember the struggles you encountered. I attempt everyday to be mindful in my life of the choice you made to fight for your freedom, in whatever way you could. I offer this humble attempt at trying to make some sense of where our people are now, because of your sacrifices. I appreciate what you were able to persevere and overcome so that I could be here and make my attempt at freedom. I have met others who acknowledge your struggles and who similarly hold deeply a responsibility to attempt to bear the fruit of your labors. I continue to seek refuge with others who intend to work the soil of our people in order to reap what you have sowed for our future. We appreciate you and will maintain the struggle for OUR FREEDOM.

More specifically this dissertation is dedicated to my ANCESTORS. When I say ancestors I mean my family past, present, and future as well as my fictive kin. I have been able to contribute to the struggle for social justice because of what you have given and continue to offer me. Importantly, my Mom and Dad deserve ample credit for allowing me to prosper as I have. Their love, strong will and self determination have served me well in my academic journey and life so far. Mom I appreciate you always making certain I was proud to be Black. Dad I thank you for being firm in my understanding what it means to be West African. I am forever grateful for the both of you. I hope reading this may give you insight into your differences. I love you.

As I Remain in the Struggle,

Rashid Siray Njai

"Until the Lions have their Historians, Tales of the Hunt will always Glorify the Hunter"

West African Proverb

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## ABSTRACT

**EXAMINING THE MEASUREMENT OF RACE AND ETHNICITY TO INFORM A MODEL OF SOCIOCULTURAL STRESS AND ADAPTIVE COPING**

by

Rashid S. Njai

Chair: Harold W. Neighbors

This study examines how measurement of race and ethnicity helps to inform a sociocultural model of stress and coping among Black Americans. First, this study attempts to establish a deeper appreciation for the precise measurement of Black Americans' interpretations of their racial and ethnic identity through a self identified conceptualization of social identity. Additionally, the current study aims to further understanding about the complexities of Black Americans' experience with racial discrimination and the subsequent mental health consequences; particularly how self identified notions of their race and ethnicity, via the constructs of racial and ethnic identity, relate to adaptive coping with interpersonal experiences of perceived racial discrimination. This study recognizes racial and ethnic identity as unique sociocultural

resources that Black Americans may use to modify detrimental lifetime exposure to racially attributed discrimination, by increasing relevant healthy coping methods and reducing subsequent depressive symptom expression.

The results of a confirmatory factor analysis (CFA) of both racial and ethnic identity constructs indicated significant conceptual differences in the meaning African Americans and African Caribbeans relate to their race and ethnicity. Additionally, a developed conceptual model of racialized stress and coping was tested, showing evidence of racial and ethnic identity's ability to mediate the relationship between discrimination, relevant coping and depressive symptoms. Increased racial centrality, lower public regard, and positive intraracial ethnic attitudes were related to coping strategies that lower depressive symptoms for African Americans. Importantly the results indicate acceptance of racial discrimination as the most adaptive (healthy) relevant coping strategy for African Americans in the context of depressive symptoms.

Utilizing structural equation modeling, the findings from this study's tests of a theoretically informed model of racialized stress and coping show that: racial centrality, public regard and intraracial ethnic group attitudes offer psychological benefits that mitigate the negative impact of discrimination on mental health outcomes; point to the need for more self determined conceptual measurement of race and ethnicity within public health research, applied translational interventions and policy solutions pertinent to improving the health of Black Americans and other racial and ethnic disparaged groups in the U.S.; and help to further understand the distinct contributions race and ethnicity can offer to inform health disparities research literature, specifically conceptual models of sociocultural stress and adaptive coping.

# CHAPTER I

# INTRODUCTION

## Overview

Current trends show that over 2.8 million immigrants from the Caribbean countries reside in the U.S., many in the east coast metropolitan areas, such as New York City and Miami (Waters, 1999; Williams, GonzÃlez et al., 2007). Qualitative and quantitative studies of racial and ethnic differences in health outcomes have revealed somewhat paradoxical findings among English-speaking Black Caribbean[1] immigrants in the U.S. compared to their African American counterparts (Waters, 1994, 1999; Williams, GonzÃlez et al., 2007; Williams & Rucker, 1996). Notably findings have shown Caribbean immigrants to have better physical and mental health than their African American counterparts despite controlling for socioeconomic indicators. This health advantage has been posited to disappear in subsequent generations as Caribbeans seemingly become more African American and exposed to more racially noxious environments (Williams, GonzÃlez et al., 2007).

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[1] When discussing native Black (African-) American and Black Caribbean adults of African Descent as a combined group, they will be referred to synonymously as 'Black;' in order to acknowledge how they are viewed by a color-conscious society. Additionally, because the English-speaking Caribbeans are of African descent, henceforth they will be referred to as 'African Caribbeans' and the former 'African American.'

This study examines how the distinct measurement of race and ethnicity informs a sociocultural model of stress and coping among Black Americans. First, this study attempts to gain a deeper appreciation for the precise measurement of how Black Americans relate to a self determined conceptualization of their minority group identity. Additionally, the current study aims to generate a deeper understanding about the complexities of Black Americans' experience with racial discrimination and the subsequent mental health consequences; particularly how self determined notions of their race and ethnicity, via the constructs of racial identity and ethnic identity, may relate to adaptive coping with interpersonal experiences of perceived racial discrimination. Racial identity and ethnic identity have both been found to be independent protective factors for mental health in the context of racial discrimination (Phinney, 1990; Sellers, Smith, Shelton, Rowley, & Chavous, 1998; Waters, 1999). Furthermore, adaptive coping has both been hypothesized to have mediating effects on the relationship between discrimination and mental health outcomes (Jackson, McCullough, Gurin, & Broman, 1991). This study pursues the hypothesis that racial and ethnic identity are unique sociocultural resources that Black Americans use to modify detrimental lifetime exposure to racially and ethnically attributed discrimination, by increasing relevant adaptive coping methods and reducing subsequent depressive symptoms.

This study 'conceives African American culture as a template for organizing, interpreting, and understanding social experience and making sense of the world' (p.187, Sellers et al., 1998). To this end, ethnic identity and Black American racial identity are used as direct and related proxies of these ideals (Phinney, 1990; Sellers, Smith et al., 1998). Specifically, racial identity is conceptualized as a more externally driven social

identity, while ethnic identity is conceptualized as a more internally driven social identity. Furthermore, by including African Caribbeans, this study adds to the current literature on stress and coping by distinguishing heterogeneity of the impact of race and ethnicity via racial and ethnic identity within the Black American racial label. The study will explore the development of a distinctively informed sociocultural model of stress and coping.

## Review of Literature

### Race and Mental Health

Depression is a serious mental illness that has the potential of developing into a chronic incapacitating disorder affecting increasing numbers of Americans (Williams, GonzÃlez et al., 2007) (WHO, 2004). According to worldwide mental health estimates depression is the fourth most common cause of disability globally (Üstün, Ayuso-Mateos, Chatterji, Mathers, & Murray, 2004). More relevantly, in the U.S., researchers report that depression is the chief cause of disability for Americans aged 15-44 affecting close to 10% of the population (Kessler, Berglund, Demler, Jin, & Walters, 2005; Kessler, Chiu, Demler, & Walters, 2005; Kessler, Demier et al., 2005; WHO, 2004). The financial burden that the disease places on the U.S. health system totals nearly 83 billion dollars annually (Greenberg et al., 2003).

Depression is undoubtedly a major health concern for the nation's population as a whole. However, it is debatable as to whether depression falls under the broadening health umbrella that characterizes traditional Black-White racial health disparities research (Williams, GonzÃlez et al., 2007; Williams, Neighbors, Stein, Kupfer, & Schatzberg, 2006). National mental health summary reports have typically shown Whites

have higher rates of depression than Blacks (Blazer, Kessler, McGonagle, & Swartz, 1994; Kessler et al., 2003; Williams, GonzÃlez et al., 2007). However, a number of researchers have conjectured that depression may not be sufficiently assessed in Blacks, hypothesizing that underutilization of culturally appropriate diagnostic and inpatient treatment services, clinician bias leading to mis- or under-diagnosis as well as lower access to highly efficient and quality care is driving the seemingly contradictory mental health conundrum (Baker, 2001; DHHS, 2001; Neighbors, Jackson, Campbell, & Williams, 1989). In fact, in a national study Williams and colleagues (2007) discovered that although Whites had higher prevalence rates for depression when compared to Blacks, Blacks exhibited more severe and persistent cases of depression that were more likely to remain inadequately treated. Depressive symptom expression and development over the lifecourse is another way researchers have attempted to clarify this paradox. This research has provided evidence that Black do exhibit greater stress growth and depressive symptom expression over time than Whites (George & Lynch, 2003) . These findings demonstrate the need to look more closely at the epidemiology of depression and the genesis of depression within diverse racial and ethnic groups. Socioculturally specific investigation should yield better evidence to support efforts in understanding the most effective means of preventing, intervening and treating the psychological yoke that depression places on countless vulnerable Americans.

### RACE AND ETHNICITY: A BRIEF DISCUSSION

In the U.S. the concept of race has most notoriously been used to support the subjugation of indigenous North Americans and enslaved Africans brought to the U.S. (Cooper & David, 1986). In recent years, public health and other social justice academic

arenas have attempted to understand race in a more sophisticated manner. Simply stated race can be defined as a sociopolitical construct based on phenotypic differences in skin color and other physical features, not based on true genotypic variation but rather used to denote social rank (Smedley & Smedley, 2005). 'Race is typically used in a mechanical and uncritical manner as a proxy for unmeasured biological, socioeconomic, and/or socio-cultural factors,' as well as varying psychosocial exposures (Williams, 1997).

Kawachi and colleagues have summarized the use of three competing causal interpretations of racial disparities in health: 1) race as a biological construct, 2) race as a proxy for class, and 3) race as neither biologically informed nor a synonym for class, but a distinct societal (and political) label, analogous to caste (Kawachi, Daniels, & Robinson, 2005). These interpretations have profound implications for the illumination of determinants of racial and ethnic health disparities.

Race is more accurately used as an exclusively connected measure with ethnicity; current racial groupings reflect an important historical component of inequality and injustice in the U.S. (LaVeist, 2005b). In the context of health disparities race and ethnicity have typically been used synonymously. Unfortunately, although they have some overlap race often overrules ethnicity by comparison, with a notable exception being Hispanic ethnicity designation (DHHS, 2001). For instance, research by Laviest reviewed and detailed how racial and ethnic labels were determined in the case of individuals with African heritage. This research found that the Center for Health Statistics prior to 1989 would assign a Black racial label as long as either the mother or father was Black, although the White racial designation required both parents to be White (LaVeist, 1994). Presently, under revised Directive Number 15, multiple racial self

designations are permitted with two alternative distinctions for Spanish/Hispanic/Latino heritage, although the measurement and specific assignment of race and ethnicity has not been uniformly agreed upon and operationalized, even within major government organizations (i.e. Census Bureau and Social Security Administration) as well as among health disparities researchers (Ford & Kelly, 2005). The call for precise scientific inquiry on race and health is exacerbated by the need for research to explore distinct racial and ethnic phenomena, being that "ethnicity is a neglected dimension of the heterogeneity of the Black population" (p. 305)(Williams, GonzÃlez et al., 2007).

Ethnicity is traditionally used to refer to *cultural commonality*, but this commonality is typically bested by the concept of race as a phenotypically based social construction in the U.S. to refer to people of African descent (Stephan & Stephan, 2000). Culture is not a concept as readily available to perception in an unfamiliar, mundane social encounter. Thus, although race is not mutually exclusive of ethnicity, there is a danger in using race and ethnicity as interchangeable terms and concepts (LaVeist, 2005b).

Race persists as being more socially remarkable to the out-group and as a cause of an ensuing post hoc connection from similar treatment, whereas ethnicity may be more enduring to within-group social cohesion and realized cultural ties. The danger in confounding the use of race and ethnicity lies in this conceptual dissimilarity of the concepts that may not adequately be accounted for when race and ethnicity are brought into play as simple dummy variables or poorly conceptualized in terms of the anticipated effects of group belonging, especially as it relates to models of psychological exposures, processes and consequences. In fact, racial identity and ethnic identity may be useful

concepts to disentangle the conceptual overlap by providing understanding of peoples' group identification and personal social identity in relation to the separate but related concepts of race and ethnicity in a psychologically applicable way. These ideas are useful for consideration in the following discussion of racial and ethnic identities and their implications for research on disparities in health.

### Identity Theory

In general identity theory posits that a positive self concept influences how an individual perceives, reacts, and interacts with the environment. Social identity importance is emphasized by a strong sense of group identification, belonging and membership to maintain a positive sense of self (Lewin, 1948). Tajfel (1978) added that group identity plays a uniquely important role for ethnic groups, especially in the face of a negative social identity for one's in group. Ultimately, both Lewin and Tajfel agree that, according to social identity theory, group identification for ethnic minorities could be challenging as individuals maneuver between conflicting or complementing identities (Lewin, 1948; Tajfel, 1978). These identity choices may be maladaptive or adaptive responses to negative social identities. Furthermore, the identity decided upon conforms to an ego-identity that informs the choices and behaviors one makes in relation to life events and stressors as well as subsequent mental health outcomes (Sellers, Rowley, Chavous, Shelton, & Smith, 1997).

The identity one chooses is most often affected by the group to which individuals believe they belong. This sense of belonging is reciprocated by the identity, interactions and acceptance within the group as well as the receipt of other non group members. For Blacks, this group membership is essential in establishing a sense of a shared group

experience that informs values, norms, attitudes, and behaviors. The context of the lived experience among Blacks has a significant impact on the mode of self identification and actualization. As a minority group this sense of belonging is greatly shaped in relation to the White majority (Phinney, Lochner, & Murphy, 1990). Additionally, if Blacks are often in contact with non group members as opposed to same group members, it may have tremendous psychosocial implications not only for the identity decided upon but also the salience or relevance that a Black person places on their sense of self. In other words Blacks who find themselves in majority Black social environments should be expected to place less importance on their Blackness and perhaps place more importance on some other aspect of their individuality. This line of thought would posit ethnically diverse Blacks who emigrate from Caribbean or African countries with greater racial homogeneity may not place as much social importance to their racial identity as their African American counterparts.

Although social identity is complex, it is understandable that scholars have contended racial and ethnic identity to be important aspects of social identity for Blacks in America (Baldwin, Duncan, & Bell, 1987; Cross, 1991; Jackson et al., 1991; Phinney, Kohatsu, Schulenberg, Maggs, & Hurrelmann, 1997; Phinney et al., 1990; Sellers, 1993; Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003; Sellers et al., 2006). That is, for Blacks in America who have been unfairly treated and discriminated against because of their black skin and ipso facto their African heritage, it makes logical sense that their mental health can be preserved or put in jeopardy based on how they relate to the two social components which effect their lives so dramatically, their race and ethnicity. Racial and ethnic identities serve three valuable functions. First, “they provide a sense of group

belonging and affiliation."  Second, they "act as buffers against stress that may arise from prejudice and discrimination." Finally, they "serve as links to a larger social group" (p.212) (Belgrave & Allison, 2006)". Historically racism and systems of oppression in America and the Western world have been used to disconnect African descendents from Africa as well as expose them to denigration based upon the dark color of their skin in contrast to Whites (Stephenson & Chin, 2004). Presumably disconnection from a larger social group may lead one to feel alone and defenseless in bolstering their self concept in the face of explicit or implicit degradation. Dimensions of a minority group identity, specifically racial and ethnic identity, may act in concert to protect against a potential cultural disconnection and undue the deleterious psychological effects that racial and ethnic discrimination imposes on its victims (Branscombe et al., 1999).

THE STRESS PROCESS

In 1981, Leonard Pearlin and colleagues offered a model to explain 'how life events, chronic life strains, self concepts, coping and social supports come together to form a process of stress (Pearlin, Menaghan, Lieberman, & Mullan, 1981). Recent revisions have identified three stress moderating resources that are synonymous with micro-level factors shaping individuals responses to stress: 1) social support, 2) coping repertoires (or responses), and 3) control (or mastery) (Pearlin, 1996). In looking at figure 1, one can visualize the relationships of the important constructs in relation to one another. Subsequent research concluded that elaborations of the model should include explanation of the stress process beyond the scope of social support and coping strategies, creating nuanced models in relation to the social structural factors of SES, sex, and race (Kessler, Price, & Wortman, 1985; Pearlin, 1996). The following brief discussion will

expand upon this model and move into a discussion of race and the stress process and will incorporate racial identity and ethnic identity into the model.

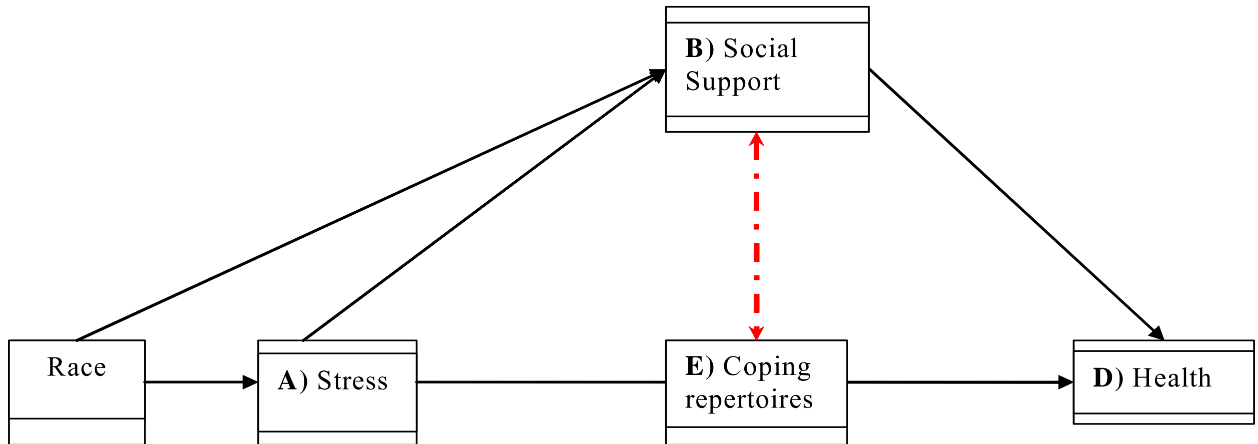


Figure 1.1 Model of the Stress Process with social-structural (i.e. race) effects [informed by (Pearlin, 1996)]

The model presented in figure 1.1 is based on Pearlin's (1996) conceptualization of stress and health outcomes being mediated by coping repertoires, including the direct effects of race on stress exposure. Using Pearlin's theoretical foundation a conceptual model will be developed as informed from various sociocultural models of stress and coping. These sociocultural models will be selected based on whether they were conceptualized specifically with reference to people of African descent, notably models of racial discrimination and coping, culturally resilient coping, and Black minority group identity.

In the current study it is hypothesized that higher levels of racial centrality and private regard, lower levels of public regard and greater affinity towards intraracial ethnic group members as well as higher levels of ethnic behavior dimensions will positively mediate the relationship between perceptions of racial discrimination and relevant coping as well as mediate lower depressive symptoms for both African American as well as

African Caribbean adults. It is proposed that Black American adults may encounter racial and ethnic stressors that are deleterious to well being and mental health. The ability to cope with these experiences is hypothesized to be dependent on positive, self affirming and realistic appraisals of oneself as a Black person of African descent in America. Therefore, it is anticipated that personal identity characteristics (i.e. racial and ethnic identity) may play a significant role in providing a buffer against racially and ethnically based discrimination associated with lifelong minority status over time. The identification of a distinctively informed model of sociocultural stress and adaptive coping for Black Americans is anticipated.

Upon generation of an additive conceptual model, the goal will be to further specify the psychological processes recognized in the model by examining potential ethnic group variability and comparability. The distinction of the proposed model will be to place the measurement of race and ethnicity more directly, via racial identity and ethnic identity, into the stress process as key personal resources that may help to impact adaptive coping strategies and lead to better mental health outcomes. Race and ethnicity are some of the prime causes of the stressors racially and ethnically attributed discrimination. However once the discriminatory event is perceived, the meaning that race and ethnicity have in one's life should have an impact on the psychological processes that ensue and the intensity of the experience and subsequent outcomes. This application of race and ethnicity will inform more appropriate sociocultural models for application with Black American populations, disparities research and translational interventions as well as impact policy directed at the measurement and handling of race and ethnicity in public health disparities research.

## Methods

DESCRIPTION OF THE SAMPLES: NATIONAL SURVEY OF AMERICAN LIFE (NSAL)

The National Survey of American Life (NSAL), directed by Principal Investigator, Dr. James S. Jackson, was funded by the National Institute of Mental Health and carried out by the Program for Research on Black Americans, within the Institute for Social Research at the University of Michigan. It is the most complete and exhaustive study of mental disorders and the mental health of Americans of African descent to date. For the proposed research agenda, the NSAL adult sample will include African Americans (N=3570) and the first ever national probability sample of blacks of immediate Caribbean descent (African Caribbeans) (N=1623), 18 years of age and over. The response rates for the two groups were as follows: the response rate for African Americans was 70.7% and 77.7% for their African Caribbean counterparts. Self-administered follow-up questionnaire data will also be used in these analyses. Data are from the National Survey of American Life (NSAL) (Jackson, Neighbors, Nesse, Trierweiler, & Torres, 2004).

There are a number of characteristics which make the NSAL pertinent to the proposed research agenda. Notably, the study contains a large, nationally representative sample of African Americans, allowing a more accurate investigation of intra-group differences and life contexts among this segment of the Black American population (Jackson et al., 2004). Of equal importance, the NSAL includes the first nationally representative sample of African Caribbeans. This will adequately allow for the detection of mental health differences among differing vital demographic groups who have been frequently treated as one homogenous group of Black Americans. Also the NSAL

includes multiple, theory guided assessments of socioeconomic status. This will prove useful given the diverging SES conditions between Native African Americans and those from the Caribbean.

Additionally, the NSAL evaluates the prevalence of mental disorders as well as levels of impairment related to these disorders, thus addressing a major limitation of data gathered in previous mental health surveys (Jackson et al., 2004). Lastly, all respondents were selected from the targeted catchment areas in proportion to the African American and African Caribbean population, distinguishing a first national sample of different ethnic groups within Black America who live in the same contexts and geographical area in which Blacks are actually distributed (both high and low density, urban and rural, inner-city and suburban, for example).

RESEARCH PLAN

This study will use a national cross-sectional sample of African American and English-speaking African Caribbean adults (18-65 yrs), from the National Survey of American Life (NSAL) to explore racial and ethnic identity as mediators of the relationship between racially and ethnically attributed stress (perceived interpersonal discrimination) and relevant coping in relation to depressive symptom expression. The proposed study will first attempt to establish conceptual and measurement variance among the concepts of racial identity and ethnic identity within a national sample and reconfirm an informed model on a regional community sample of African American adults. Specifically, confirmatory factor (CFA) and path analysis will be conducted utilizing structural equation modeling (SEM) techniques to test the potential mediating effects of racial identity and ethnic identity in relation to exposure to the non-normative

stress of unfair treatment attributed to race on depressive symptomatology. The effects of racial identity and ethnic identity on the other key psychosocial variable, relevant coping with racial discrimination will be examined through path analysis of the theoretically informed conceptual model. Additionally, demographic variables such as age, socio-economic status, and gender will also be controlled for their direct effects on exposure to racial discrimination during the path analysis.

If evidence is gathered to support conceptual and measurement invariance of the sociocultural variables of racial identity and ethnic identity, multi-group path analysis will be conducted to evaluate model fit differences between the two ethnic group samples of African American and African Caribbean adults (NSAL). In any case, SEM path analyses will ultimately be used to investigate the potential mediating effects of both racial identity and ethnic identity to the (stress and coping) relationship between racial discrimination, relevant coping and mental health.

This dissertation project will be comprised of three theoretically and conceptually related, but distinctly different. **Paper 1**: focuses on the development of a conceptual model that details how defining the role that race and ethnicity play in health disparities research can be aided by distinct measurement of race and ethnicity as well as extending current psychological theories to inform more ecologically consistent models of sociocultural stress and adaptive coping among Americans of African descent; **Paper 2**: focuses on the proximal component of a theoretically informed measurement model for a self determined Black social identity (specifically racial identity and ethnic identity) among African American and African Caribbean adults; **Paper 3**: focuses on the overall sociocultural modeling of ethnicity differences within Blacks in America by examining

independent effects of racial and ethnic identity as well as the combined effects of both racial and ethnic identity on mediation of the stress and coping relationship between racially attributed discrimination and mental health among a national sample of two Black ethnic groups in America (African American and African Caribbean). The following research aims, specific research questions, and relevant hypotheses will guide the analyses strategies:

**Research Aims**

Research Aim (1):

(Chapter 2, Paper #1)

1. To explain the development and conceptualization of a theoretically informed model of sociocultural stress and adaptive coping among Black Americans, wherein race and ethnicity are measured distinctly via self determined conceptualizations of racial identity and ethnic identity as mediators for coping and mental health outcomes.

Research Aim (2):

(Chapter 3, Paper #2)

2. Examine evidence of measurement congruence of racial identity and ethnic identity between Black American ethnic groups (African American and African Caribbean) in order to establish how meaningful comparisons can be made between ethnic groups to inform a sociocultural model of stress and coping.

Research Aim (3):

(Chapter 4, Paper #3)

3. Understand and explore how Black minority group social identity operates as a sociocultural mediating resource of racialized stress and adaptive coping. Specifically, how the mediating effects (independent and combined) of racial and ethnic identity on the relationship between racial discrimination, adaptive coping and depressive symptoms differ among Black ethnic groups (African American and African Caribbean); and how different adaptive coping strategies reduce depressive symptom expression.

## Conclusion

In sum, this dissertation will add to empirical debates of racial and ethnic health disparities research. First by highlighting the need to critically measure race and ethnicity this dissertation will gain deeper appreciation for heterogeneity within racial and ethnic label used in health disparities research, specifically within Black Americans. Next, this dissertation will examine the utility of the critical measurement of race and ethnicity by exploring racial identity and ethnic identity's potential for mediation of the relationship between racial discrimination, adaptive coping and depressive symptoms.

The findings of this dissertation will allow for a deeper understanding of the import of accounting for the self determined meaning racial and ethnic minority groups place on race and ethnicity. This research also adds to the empirical foundations of understanding the deleterious impacts of racial and ethnic discrimination. Furthermore this research will add to understandings of psychological process that disparaged groups may enlist to cope with socially noxious stress. The ultimate goals of this research is to inform policy related to racial and ethnic health disparities and immigrant population health as well as enlighten the development of effective community level interventions aimed at ameliorating the negative effects of undue psychosocial stressors.

## References


Baker, F. M. (2001). Diagnosing depression in African Americans. *Community Mental Health Journal, 37*(1), 31-38.

Baldwin, J. A., Duncan, J. A., & Bell, Y. R. (1987). Assessment of African self-consciousness among Black students from two college environments. *Journal of Black Psychology, 13*(2), 27-41.

Belgrave, F. Z., & Allison, K. W. (Eds.). (2006). *African American Psychology: From Africa to America*. Thousand Oaks, CA: Sage Publications.

Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: The National Comorbidity Survey. *American Journal of Psychiatry, 151*(7), 979-986.

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality & Social Psychology, 77*(1), 135-149.

Cooper, R., & David, R. (1986). The biological concept of race and its application to public health and epidemiology. *Journal of Health Politics, Policy & Law, 11*(1), 97-116.

Cross, W. E. (1991). *Shades of black: Diversity in African-American identity*. Philadelphia, PA, US: Temple University Press.

DHHS. (2001). *Mental health: Culture, Race, and ethnciity- a supplement to mental health: a report of the Surgeon General Executive Summary*. Rockville, MD: US Department of Health and Human Sevice, Office of the Surgeon General.

Ford, M. E., & Kelly, P. A. (2005). Conceptualizing and Categorizing Race and Ethnicity in Health Services Research. *Health Services Research, 40*(5), 1658-1675.

Greenberg, P. E., Kessler, R. C., Birnbaum, H. G., Leong, S. A., Lowe, S. W., Berglund, P. A., et al. (2003). The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry, 64*(12), 1465-1475.

Jackson, J. S., McCullough, W. R., Gurin, G., & Broman, C. L. (1991). Race identity. In *Life in black America* (pp. 238-253). Thousand Oaks, CA, US: Sage Publications, Inc.

Jackson, J. S., Neighbors, H. W., Nesse, R. M., Trierweiler, S. J., & Torres, M. (2004). Methodological innovations in the National Survey of American Life. *International Journal of Methods in Psychiatric Research, 13*(4), 289-298.

Kawachi, I., Daniels, N., & Robinson, D. E. (2005). Health disparities by race and class: why both matter. *Health Affairs, 24*(2), 343-352.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R., et al. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *JAMA: Journal of the American Medical Association, 289*(23), 3095-3105.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 593-602.

Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, Severity, and Comorbidity of 12-Month DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 617-627.

Kessler, R. C., Demier, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., et al. (2005). Prevalence and Treatment of Mental Disorders, 1990 to 2003. *New England Journal of Medicine, 352*(24), 2515-2523.

Kessler, R. C., Price, R. H., & Wortman, C. B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology, 36*, 531-572.

LaVeist, T. A. (1994). Beyond dummy variables and sample selection: what health services researchers ought to know about race as variable. *Health Services Research, v29*(1), 1-16.

LaVeist, T. A. (Ed.). (2005). *Minority populations and health: Introduction to health disparities in the United States* (1st ed.). San Francisco, CA: Jossey-Bass.

Lewin, K. (1948). *Resolving social conflicts*. New York: Harper.

Neighbors, H. W., Jackson, J. S., Campbell, L., & Williams, D. (1989). The influence of racial factors on psychiatric diagnosis: A review and suggestions for research. *Community Mental Health Journal, 25*(4), 301-311.

Pearlin, L. I. (1996). Some Conceptual Perspectives On the Origins and Prevention of Social Stress Unpublished Unpublished conference paper presentation. National Institute of Mental Health.

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health & Social Behavior, 22*(Dec), 337-356.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*(3), 499-514.

Phinney, J. S., Kohatsu, E. L., Schulenberg, J., Maggs, J. L., & Hurrelmann, K. (1997). *Ethnic and racial identity development and mental health*. New York, NY, US: Cambridge University Press.

Phinney, J. S., Lochner, B. T., & Murphy, R. (1990). Ethnic identity development and psychological adjustment in adolescence. In *Ethnic issues in adolescent mental health* (pp. 53-72). Thousand Oaks, CA, US: Sage Publications, Inc.

Sellers, R. M. (1993). A call to arms for researchers studying racial identity. *Journal of Black Psychology, 19*(3), US Sage Publications Inc; 1993, 1327-1332.

Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress among African American Young Adults. *Journal of Health and Social Behavior, 43*(3), 302-317.

Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. H. (2006). Racial Identity Matters: The Relationship between Racial Discrimination and Psychological Functioning in African American Adolescents. *Journal of Research on Adolescence, 16*(2), 187-216.

Sellers, R. M., Rowley, S. J., Chavous, T. M., Shelton, N. J., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and constuct validity. *Journal of Personality & Social Psychology, 73*(4), US American Psychological Assn.; 1997, 1805-1815.

Sellers, R. M., Smith, M., Shelton, N., Rowley, S., & Chavous, T. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality & Social Psychology Review, 2*(1), 18-39.
Smedley, A., & Smedley, B. D. (2005). Race as Biology Is Fiction, Racism as a Social Problem Is Real: Anthropological and Historical Perspectives on the Social Construction of Race. *American Psychologist, 60*(1), 16-26.
Stephan, C. W., & Stephan, W. G. (2000). The measurement of racial and ethnic identity. *International Journal of Intercultural Relations, 24*(5), 541-552.
Stephenson, E., & Chin, J. L. (2004). *The African Diaspora and culture-based coping strategies*. Westport, CT, US: Praeger Publishers/Greenwood Publishing Group.
Tajfel, H. (1978). *The social psychology of minorities* New York: Minority Rights Group.
Üstün, T. B., Ayuso-Mateos, J. L., Chatterji, S., Mathers, C., & Murray, C. J. L. (2004). Global burden of depressive disorders in the year 2000. *British Journal of Psychiatry, 184*(5), 386-392.
Waters, M. C. (1994). Ethnic and racial identities of second-generation Black immigrants in New York City. *International Migration Review, 28*(4), 795-820.
Waters, M. C. (1999). *Black identities: West Indian immigrant dreams and American realities*. New York, NY: Russell Sage Foundation.
WHO. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys (from World Mental Health Survey Consortium). *JAMA, 29*, 2581-2590.
Williams, D. R. (1997). Race and health: basic questions, emerging directions.[see comment]. *Annals of Epidemiology, 7*(5), 322-333.
Williams, D. R., GonzÃlez, H., Neighbors, H., Nesse, R., Abelson, J. M., Sweetman, J., et al. (2007). Prevalence and distribution of major depressive disorder in African Americans, Caribbean Blacks, and Non-Hispanic Whites: Results from the National Survey of American Life. *Archives of General Psychiatry, 64*(3), 305-315.
Williams, D. R., Neighbors, H. W., Stein, D. J., Kupfer, D. J., & Schatzberg, A. F. (2006). *Social Perspectives on Mood Disorders*. Washington, DC, US: American Psychiatric Publishing, Inc.
Williams, D. R., & Rucker, T. (1996). Socioeconomic status and the health of racial minority populations. In *Handbook of diversity issues in health psychology* (pp. 407-423 The Plenum series in culture and health.). New York, NY, US: Plenum Press.

# CHAPTER II

# IN SEARCH OF MEANING WITHIN RACIAL AND ETHNIC HEALTH DISPARITIES: MEASURING AND EXTENDING THEORY TO INFORM A MODEL OF SOCIOCULTURAL STRESS AND ADAPTIVE COPING AMONG AMERICANS OF AFRICAN DESCENT

## Introduction

This chapter offers a reasonable extension of models of sociocultural stress and coping. Integrating models of social identity as well as models of adaptive coping with stress in the context of racial discrimination among Americans of African descent, this chapter further explicates a self determined and comprehensive cultural affirming identity model for racialized stress and coping in relation to the genesis of depression.

## Review of Literature

### BLACK AMERICAN MENTAL HEALTH: HOW RACE AND ETHNICITY MATTER TO A SOCIOCULTURAL MODEL

The discourse on racial and ethnic disparities in mental health continues to debate the causal relationship between race and better outcomes. Specifically, Black-White differences in the prevalence of depression differs from racial disparities in physical health; African Americans have lower rates than Whites, after controlling for socioeconomic variables (Breslau et al., 2006; Dunlop, Song, Lyons, Manheim, & Chang, 2003). Ironically, African Americans are more likely than Whites to exhibit greater depressive symptomatology (George & Lynch, 2003). Sociocultural differences have

been posited as one of the driving forces that relate to these differing mental health pathologies, presentations, diagnoses and outcomes (Neighbors et al., 1989). Qualitative and quantitative studies of racial and ethnic differences in health outcomes have revealed somewhat paradoxical findings among English-speaking Black Caribbean[2] immigrants in the U.S. compared to their African American counterparts (Waters, 1994, 1999; Williams, GonzÃlez et al., 2007; Williams & Rucker, 1996). Notably findings have shown African Caribbean immigrants have better physical and mental health than their African American counterparts despite controlling for socioeconomic indicators. This health advantage has been posited to disappear in subsequent generations as African Caribbeans seem to become more African American in their health profile as they are exposed to more racially noxious environments (Williams, GonzÃlez et al., 2007).

The slippery slope of the empirical analysis of culture has left some to ponder 'cultural deficit models' on one hand, and 'cultural resiliency' models on the other (Geronimus & Thompson, 2004; McLoyd, 2004). The proposed research agenda aims at engaging the latter. The ultimate goal of this research agenda is to provide evidence of the dangers of misinterpretation when employing race and ethnicity as proxies for social and cultural variations within and across ethnic groups of Blacks in America. Furthermore, the aim is to establish some understanding of how racial identity may act independently and/or in concert with ethnic identity to offer Blacks in America the greatest opportunity of enlisting culturally rooted adaptive coping responses as well as

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[2] When discussing native Black (African-) American and Black Caribbean adults of African Descent as a combined group, they will be referred to synonymously as 'Black;' in order to acknowledge how they are viewed by a color-conscious society. Additionally, because the English-speaking Caribbeans are of African descent, henceforth they will be referred to as 'African Caribbeans' and the former 'African American.'

bolstering self affirming cultural pride in the face of racial discrimination. Additionally, this discourse aspires to caution against the under-measurement and conflation of race and ethnicity, as well as the related concepts of racial identity and ethnic identity, in mental health disparities research and intervention within Black American population groups.

Findings from the subsequent empirical analyses will investigate the role of racial identity and ethnic identity that is not sufficiently captured by the literature. Specifically, this research tests the idea that racial identity and ethnic identity offer psychological benefits that mitigate the negative impact of minority status stressors on the genesis of depressive symptoms. This work will provide a deeper understanding of the distinct contributions race and ethnicity can offer to a sociocultural model of stress and adaptive coping. In doing so, the aim is to demonstrate the need for more culturally-specific measurement of race and ethnicity within public health research, applied translational interventions, and policy solutions pertinent to improving the health of Black Americans.

### Race and Ethnicity: A Brief Discussion

Due to the focus of race in U.S. studies of social group health variations as well as the importance of this concept to the overarching purpose of the paper, a brief overview of race will follow. Historically, in the U.S. the concept of race has been used as a biological concept to categorize human phenotypic expression by racists in attempts to compliment their newfound ideals of ethnic group identity (with White Anglo-Saxon protestants being foremost), as well as to propagate a social hierarchy toward supporting the subjugation of indigenous North Americans, enslaved Africans brought to the U.S. and other minority ethnic groups (Cooper & David, 1986). In recent years, public health

and other academic arenas have attempted to understand race in a more sophisticated manner (Agyemang, Bhopal, & Bruijnzeels, 2005; Bhopal, 2004; LaVeist, 1994). Simply stated race can be defined as a socio-political construct based on phenotypic differences in skin color and other physical features, not based on true genotypic variation but rather used to denote social rank (Smedley & Smedley, 2005). Yet, 'race is typically used in a mechanical and uncritical manner as a proxy for unmeasured biological, socioeconomic, and/or socio-cultural factors,' as well as varying psychosocial exposures (Williams, 1997).

Kawachi and colleagues have summarized the use of three competing causal interpretations of racial disparities in health: 1) race as a biological construct, 2) race as a proxy for class, and 3) race as neither biologically informed nor a synonym for class, but a distinct societal label, analogous to caste (Kawachi et al., 2005). These interpretations have profound implications for the illumination of determinants of racial and ethnic health disparities.

Race may be more accurately used as a related concept to ethnicity, although it should not be overlooked that current racial groupings reflect an important component of inequality and injustice in the U.S. (LaVeist, 2005b). In the context of health disparities research race and ethnicity have typically been used synonymously and unspecifically (Agyemang et al., 2005; Bhopal, 2004). Unfortunately, although they have some overlap, race often overrules ethnicity by comparison (particularly for Blacks), with a notable exception being Hispanic ethnicity designation (DHHS, 2001). Thus as the 'one drop rule' generally holds true for Blacks, meaning any hint of African ancestry supersedes a designation of White in all cases (except when the Father is Asian) and determines one to

be labeled Black (LaVeist, 1994). Whereas for Hispanics ethnicity takes precedent in categorization and is used to initially categorize one in American society using conventional standard. Thus Hispanics of African descent are categorized as Hispanic, although they hold a lower rung on the social order compared to non-African descended Hispanics. Accordingly, ethnicity is used as the defining characteristic, as though there is no reason to argue inclusion into the Black racial categorization (regardless of observed differences in treatment due to ancestry). The call for precise scientific inquiry on race and health is exacerbated by the need for research to explore distinct racial and ethnic phenomena, being that 'ethnicity is a neglected dimension of the heterogeneity of the Black population' (p. 305) (Williams, GonzÃlez et al., 2007).

Ethnicity is traditionally used to refer to *cultural commonality*, but this commonality is typically presupposed by the concept of race as a phenotypically based social construction. Due to this cultural commonality component of ethnicity, it may be confused circumstantially with nationality (Agyemang et al., 2005; Bhopal, 2004; LaVeist, 1994). Although ethnic groups often share close physical and social proximity, the concept of nationality is typically only correlated with ethnicity out of coincidence. Thus many different ethnicities may exist within a given nation (i.e., United States) and some nations may have the same ethnicities coexisting between them (i.e., United States England ad South Africa). Whereas, place assigns nationality and skin color relegates race, culture similarly consigns ethnicity (Agyemang et al., 2005; Bhopal, 2004; LaVeist, 1994). Place and skin color can be easier to identify and misconstrue a connection with ethnicity. But, culture is not a concept as readily available to perception in an unfamiliar, mundane social encounter. Thus, although race is not mutually exclusive of ethnicity,

there is a danger in using race and ethnicity as interchangeable terms and concepts (LaVeist, 2005b). In fact, racial identity and ethnic identity may be useful concepts to disentangle the conceptual overlap by providing clearer understanding of peoples' group identification and personal identity in relation to the separate but related concepts of race and ethnicity (Helms, 1994; Phinney, 1990, 1992; Sellers, Smith et al., 1998). These ideas are useful for consideration in the following discussion of racial and ethnic identities and their implications for research on disparities in health.

### MEASUREMENT OF RACE AND ETHNICITY: THEORETICAL APPLICATIONS OF RACIAL AND ETHNIC IDENTITY

The role that culture plays in human behavior and subsequent health outcome differentials has long been recognized, however ethnocentric applications of Anglo American cultural values and beliefs have often dominated discussions of culture (Agyemang et al., 2005; Bhopal, 2004; LaVeist, 1994). This led some to posit haves and have-nots in terms of culture or cultural superiority leading to the development of acculturation theories (Landrine & Klonoff, 1996). Some of these theories project dominant Anglo-American majority culture as an optimal one that implicitly places other cultural frameworks in a subordinate position in relation to becoming successfully integrated into the American social order, gaining access to social mobility and inevitably realizing the 'American Dream'.

The realization of the "American Dream," based on equal opportunity and justice for all are some of the supposed American values upon which the country was founded. Yet race and ethnicity have historically been used to group and categorize the American population resulting in unequal access to the financial and social benefits of upward mobility (LaVeist, 1994; Williams, 1997, 2005; Williams, Spencer, & Jackson, 1999).

Thus, race and ethnicity have been propagated in America as the most appropriate way to understand the dominant cultural hegemony and U.S. sociocultural hierarchy. This hierarchy has been confused and is confounded by SES, such as income and education, also with SEP such as social capital and wealth distributions below the poverty level (LaVeist, 1994; Williams, 1997, 2005; Williams et al., 1999). Yet the persistent use of race and ethnicity in academic literature represents an attempt to pay attention to underlying cultural expressions, exposures and pathologies (Bhopal, 2007).

The measurement of race and ethnicity is typically done in a matter of fact way that uses a respondent's answer to an unsophisticated race and/or ethnic group category that is constrained and limited to dominant social understandings of the basic nature of race and ethnicity (LaVeist, 1994). Simply asking respondents to identify a (researcher) defined group they belong to, without understanding the true meaning and salience that this group belonging has to the individual is problematic. Most notably this issue has been confronted by the Surgeon General, the Institute of Medicine, and Census Bureau (Office of Management and Budget directive #15) and has received plenty vigilant interest, concern and skepticism from racial and ethnic health disparities researchers (DHHS, 2001; Hahn & Stroup, 1994; Williams & Jackson, 2000).

It is understandable that the large scale of the census inhibits the federal government from accounting for race and ethnicity in a more sophisticated way. So although there may be opponents to the census changes in measurement, there appear to be strategies to overcome some of the census survey methodology shortcomings (Ford & Kelly, 2005; LaVeist, 1994; Williams & Jackson, 2000). These strategies include, but are not restricted to: better survey sampling strategies that account more accurately for the

interethnic and intraracial variations that may occur among American population groups; developing better and more accurate measures of race and ethnicity as well as their sociocultural correlates; applying more scrupulous data analysis techniques that take into account statistical advancements such as the ability to analyze multiple levels (i.e. policy level, structural, psychosocial, individual, biomechanical) of race and ethnicity effects on health (i.e. HLM) as well as those that take into account measurement error and offer conceptual clarity (i.e. SEM) (Gregorich, 2006; Helms, Jernigan, & Mascher, 2005; LaVeist, 1994). As race and ethnicity become more daunting to measure their complexities and how people comprehensively relate to these social categories, more sophisticated ways of measuring race and ethnicity are a necessary requirement.

RACE AND RACIAL IDENTITY

Helms (1990) has argued that because race is the single most vital component of one's social place in America that racial identity is in fact the most critical strategy in psychologically overcoming the stress imposed socially due to blackness in America. The salience of race, or the importance that one places on their race, in a given social context or situation should have a significant impact on the stress and coping response one is able to engage when confronted with an apparent racially noxious event. An instance of discrimination that is attributed to race, an uncontrollable, biologically predicated, yet socially designating label (i.e. blackness), would undoubtedly be difficult to control externally and would require the person to employ other means of psychological defenses. Racial identity and the related construct of ethnic identity are two such potential personal defense mechanisms psychologists have explicated in assisting minority group members in buffering experiences of racial discrimination (Phinney, 1990; Phinney et al.,

1997; Sellers et al., 2003; Sellers et al., 2006; Sellers & Shelton, 2003). Racial identity refers to one's understanding of their racial categorization by the dominant society, the in-group and the individual. It has also been proposed that racial identity is a reactive identity that is a dependent byproduct of historical racism (Cross, 1995b). This may be in part true, but it should be acknowledged that the darkness of one's skin and other phenotypic expressions denoting African ancestry, a qualifying stipulation of race, can be revered and embraced to promote one's belonging in a particular social environment while independently equivalent race can be something that exerts a feeling of difference and exclusion in another social environment (Broman, Jackson, & Neighbors, 1989). Thus a model of racial identity that allows for situational and dimensional incongruence (or variation) should serve most beneficial in understanding the true and complex nature of racial identity.

Along this line, the Multidimensional Model of Racial Identity (MMRI) integrates racial identity into a multifaceted conceptualization of the self. This conceptualization is distinct from mental health, thus providing no *good* or *bad* identity in a context specific manner independent of the mental health outcome. The theory used in its development is the concept that racial identity was more than simply a reaction against racism (Sellers, Smith et al., 1998). The MMRI addresses two questions: What significance does the individual place on race in defining him/herself? How does the individual define what it means to be Black? This approach is valued due to the focus on individual conceptualizations and definitions of self rather than the identities society ascribes to a group of belonging. In this way the MMRI expounds Black identity across four dimensions: salience, centrality, regard, ideology (Sellers, Smith et al., 1998; Shelton &

Sellers, 2000). Consistent with MMRI conceptualization the most statistically significant aspect has been found to be centrality (both a normative definition in terms of self concept as well as cross-situationally consistent) or 'how you normally define yourself with respect to race' (Sellers, Smith et al., 1998; Shelton & Sellers, 2000).

The dimensionality component of the MMRI conceptualization allows for the measurement of a more complex understanding of how being Black shapes an individual's understanding of their social identity in the context of themselves and the world around them. Centrality or the overall importance of race in a Black persons life accounts for more a global understanding of how blackness shapes reality for the individual. Likewise, the dimension of regard (public and private) allow for the measurement of personal and perceived public impressions and implications of blackness. The dimensions of regard apply deeper meaning to what blackness may be to the individual in a psychological way that goes beyond simple understanding of being parceled into the social category of Black simply due to the biological and phenotypical expression of one's genetic link to Africa, darkened skin most importantly.

### ETHNICITY AND ETHNIC IDENTITY

Whereas racial identity is a measure of how one relates to their racial (group) categorization by the dominant social order, correspondingly, ethnic identity speaks to how a common sense of self derived from their ethnic group belonging (Phinney & Ong, 2007). What is more, ethnic identity relates to how a common cultural background with linked social group members whom share values, social roles, behaviors and customs contributes to their conceptualization of themselves. Simply stated racial identity is more socio-politically prescribed (due to biological and phenotypical expression in the

individual), while ethnic identity is more culturally prescribed (Belgrave & Allison, 2006). Other related constructs to racial and ethnic identity in the literature are acculturation and Africentric values (Belgrave & Allison, 2006).

Although ethnicity and ethnic identity share the same root word they are uniquely different. Ethnicity has been defined as the national country of origin or in a sense ethnic origin defined by nationality (Williams & Jackson, 2000). Whereas, ethnic identity may be a little harder to clearly define (Phinney, 1990). At the least a working definition of ethnic identity is comprised of some aspect of culture or cultural attachment that ethnicity does not specify. In fact, Phinney's review of ethnic identity literature found a remarkable incongruence between conceptual and operational definitions of ethnic identity that seemed plausible but arbitrary or vague in their emphasis on how to define ethnic identity (Phinney, 1990). Phinney, who is credited for being a vanguard in the conceptualization and measurement of ethnic identity, discovered a majority of the research on ethnic identity has mistakenly employed the construct as a proxy for acculturation. Ethnic identity may be at best a component of acculturation in that it relays how an individual 'relates to their own group as a subgroup of the larger society' (Phinney, 1990, p. 501).

Furthermore, Phinney's (1990) review revealed two divergent models of inquiry concerning the disentanglement of ethnic identity from acculturation: one linear (bipolar), the other two-dimensional. The conceptualization of ethnic identity, from the linear perspective posits identity as a continuum with strong ethnic ties in opposition to strong mainstream ties (Andujo, 1988; Makabe, 1979; Simic, 1987; Ullah, 1987; Waters, 1994, 1999). The linear model also assumes that the two poles of ethnic ties versus mainstream

ties work in a “give-and–take” fashion such that a person exhibiting robust ethnic identification would simultaneously show a lower mainstream identification. This conceptualization of ethnic identity implicitly connects ethnic identity with culture, cultural processes and/or cultural behaviors by relating ethnic salience to acculturation. The opposing perspective of dimensionality, or dynamic fluid changes in identity based on context, posits ethnic identity to be a dimension of a social identity that may become more or less salient depending on the context and environment the individual is exposed to (Phinney, 1996; Phinney, Arnett, & Tanner, 2006). This view relates more to a shared group identity based on unique group experiences and shared cultural practices and norms. The bipolar perspective would lend itself to a characterization of ethnic identity based on external concurrent interaction with one’s own group and an implicitly dominant or majority group, as opposed to an internally driven identity based on positive group membership, belongingness and feelings about one’s group.

Phinney (1990) asserts that it is important to measure and understand commonalities among ethnic groups as a determining factor for the creation of a scale to measure the concept of ethnic identity. This point of view is important in understanding commonalities; however it arguably negates the uniqueness of each ethnic group experience as it relates to treatment by the mainstream society. These unique group experiences play a role in the amount of psychosocial stress group members experience as individuals (Williams & Jackson, 2000). Thus it is important to account for the way these individuals interact and employ their own ethno-cultural behaviors as attempts to bolster and uphold a positive sense of self in the face of potential unfair treatment.

The components of ethnic identity as explained by Phinney (1992) and operationalized by the widely accepted and used Multi-group Ethnic Identity Measure (MEIM) are as follows: 1) self identification and ethnicity; 2) ethnic behaviors and practices; 3) affirmation and belonging; 4) ethnic identity achievement; 5) attitudes towards other groups (is not an operationalized component but rather a recognized effect modifier of social identity and the at large society) (Phinney, 1992). As such it is conceivable that using the MEIM on minority group members may ultimately do little to account for the ethnic attitudes and behaviors that are seemingly in opposition or on the fringes of the dominant culture and society. In fact, Phinney (1992) explains the MEIM as ‘a general measure to be used with both minority and majority cultural groups, it is impossible to assess attitudes toward the majority group because for majority group members, ethnic attitudes and attitudes towards the dominant culture overlap.’

It is contended (in response to Phinney) that the uniqueness of the Black experience makes some level of generalization of African descended identity processes a necessary step that should precede any between group evaluation. That being said it is of equal importance to take into account the uniqueness of a Black social identity beyond that of solely their experiences under the social construction of race alone. Taking into account a historical attachment to African people is the primary component of black (ethnic) identity that is not captured comprehensively with empirical analysis (Azibo, 2006; Baldwin et al., 1987; McCowan & Alston, 1998). The vast literature on Africentric psychology affirms the fact that ethnic identity and its correlates should be confirmed and understood intra-racially (within racial groups) prior to comparing and contrasting across

racial groups (Allen & Bagozzi, 2001; Anglin & Whaley, 2006; Brookins, 1994; Cokley, 2005; Cross, 1995a).

AFRICENTRIC VALUES: A NECESSARY LINK IN BLACKS' SOCIAL IDENTITY

Baldwin (1976) has long been a proponent of the utility of African Self consciousness a concept that has been synonymous with Black scholars as a key to psychological and impending physical liberation from the forces of discrimination and racism imposed by the White western world. Many African American social movements as well as cultural and academic leaders have been influenced by the concept of an African cultural reconnection leading to better mental and physical health outcomes (Azibo, 1991; Azibo, Jackson, & Slater, 2004; Diop, 1989; Fanon, 1967; X-Shabazz, 1967). In line with Baldwin's (1985) theory the critical indicators of an Africentric identity were defined and measured according to the following four dimensions:

> '1) awareness/ recognition of one's African identity ad heritage; 2) general ideological and activity priorities placed on Black survival, liberation and proactive/affirmative development; 3) specific activity priorities placed on self-knowledge ad self-affirmation, i.e., Africentric values, customs, institutions, etc.; 4) a posture of resolute resistances toward 'anti-black' forces and threats to Black survival in general. (p. 63)(Baldwin & Bell, 1985)'

These four 'competency dimensions' are situationally dependent and can be differentially salient across the life domains of education, religion/spirituality, political orientation, as well as familial, interpersonal relationships and cultural activities (Baldwin & Bell, 1985; Baldwin et al., 1987). Ultimately the goal of this research is to promote a self determined concept of a contemporary African descended identity (Azibo, 1991). In that way this research echoes the pathos of scholars of African descent who believe that a sociocultural disconnection that was imposed upon African peoples at the start of the African slave trade can only be overcome by the seemingly insurmountable task of achieving a

conceptualized social identity that moves toward the unification of African descendents on a figurative, mental and spiritual level (Azibo, 1991; Azibo et al., 2004; Diop, 1989; Fanon, 1967; X-Shabazz, 1967). In line with this self determining ideology it is important that research pertaining to race, ethnicity and their correlates be measured from a person defined perspective. Racial identity and ethnic identity offer this 'self determined' conceptualization of social identity that is in line with an Africentric model of scientific inquiry as well as consistent with the goals of psychological inquiry from a person centered perspective (Stephan & Stephan, 2000).

### Racial and Ethnic Identity: Overlap for Minority Group Identification within Blacks in America

The literature has painstakingly struggled to establish racial identity as a protective and buffering factor in the face of racially attributed unfair treatment (Caldwell, Kohn-Wood, Schmeelk-Cone, Chavous, & Zimmerman, 2004; Evans & Herr, 1994; Jefferson & Caldwell, 2002; Sellers et al., 2003; Sellers & Shelton, 2003; Watts, 1992; Williams et al., 1999). Ethnic identity is a uniquely important factor for consideration in complement with racial identity, as together they provide a holistic conception of what it means to be an African within the Diaspora, in the past, present and future (Phinney, 1990; Stephenson & Chin, 2004). Ethnic identity allows one to transcend the historical segregation of Africans, physically, mentally and spiritually by unifying under the auspices of a sending continent in lieu of a specific national origin in Africa (Diop, 1989; Fanon, 1967; Stephenson & Chin, 2004; X-Shabazz, 1967). This continental identity is an important component due to the western colonization of Africa that has historically arbitrarily separated and paid no reverence to true ethnic groups, social and community boundaries. Racial identity provides a realistic identity grounded in

the historic personal and group experiences due to blackness but does not attach one explicitly to a group with an indigenous culture (beyond that of oppression, subjugation and disenfranchisement in the context of chattel slavery and its derivatives). This line of thought is evident in nuanced sociopolitical labels stemming from a true cultural connection (beyond skin color) in names such as Afro-American and African American that slowly replaced more degrading labels like Nigger and Negro (Agyemang et al., 2005). This is not to discount the sense of empathetic unity and pride that Blackness has been used within the Black racial label to form group solidarity and resilience resulting in within group uses of euphemisms like "I'm Black and I'm proud" or the use of "Nigga" as a term of endearment (Akom, Weis, & Fine, 2000). Still, the constructs of ethnicity and ethnic identity comprise inherent culturally grounded social measures that connect an individual or group to an indigenous population that should be beneficial in attenuating stressful insults to the self due to Blackness alone.

As a personality characteristic ethnic identity for people of African descent potentially offers a unique identity that is complementary yet distinctly different than racial identity. Ethnic identity is a dimension of social identity that is of historical significance beyond not only the experiences of Africans in America (Diaspora perspective), but is conceptually grounded in ethnic pride and attachment as well grounded in cultural remnants of an African existence (Azibo, 1991). Ethnic identity also offers other avenues of personal appraisal (outside of race) and potential manipulation of stressful life events that are attributed to race by adding a more comprehensive knowledge about group attachment and belonging beyond skin color (race). Importantly, ethnic identity is less mutable than racial identity over (the lifecourse) developmental

stage, between generational statuses, gender, SEP and provides a consistent identity for Africans that attempts to transcend negative stereotypes and other denigrating societal influences (Azibo, 1991).

Previous research on African American racial identity and ethnic identity has been the product of two different approaches. The mainstream approach has primarily acknowledged 'universal' properties associated with ethnic and racial identities. The Multi-group Ethnic Identity Measure (MEIM) is an example from the literature that is consistently used to distinguish between group variations of ethnic identity broadly defined (Phinney, 1992). Conversely, a less accepted approach has focused on illuminating the qualitative meaning of being African American, with an emphasis on the unique cultural and historical experiences of African Americans. Cross's (1971) stage development model of Black identity over the life course as explained from Nigrescence theory led to the measurement of racial identity via the Cross Racial Identity Scale (CRIS) and its subsequent use in the relevant research (Cross, Parham, & Helms, 1991; Cross, Ponterotto, Casas, Suzuki, & Alexander, 1995). The MMRI represents a synergy of the strengths of the 2 approaches used by the MEIM and the CRIS (Sellers et al., 1998). By appreciating both in-group and out-group driven dimensions of a Black identity the MMRI effectively hurdles the shortcomings of more limited (either too broad or too narrow) approaches of understanding the true complexities of Black American social identities.

As a component of a self affirming identity, racial identity and ethnic identity make strong pillars for study of the psychological resources needed to confront discrimination (Branscombe et al., 1999; Phinney, 1990; Sellers, Smith et al., 1998).

However for people of African descent it may be necessary to additionally include their ancestral connection to Africa. The literature has termed this ancestral connection as Africentric values, a self affirming connection with other people of African descent, as well as shared values, customs and culturally affirming behaviors (Stephenson & Chin, 2004). African scholars have long upheld the utility of a strong psychological connection to the African diaspora to be a key determinant in the psychological well being of African descended people (Azibo, 1991).

### Black American Sociocultural Stress and Coping

The stressors that Blacks face are reflective of their experience as minority group members (Neighbors, Jackson, Bowman, & Gurin, 1983). The degree to which these stressors are perceived in a racialized context will have implications pertaining to minority group identification, relevant coping and subsequent mental and physical health outcomes. Sociocultural models of stress and coping have gradually proliferated in contemporary literature, especially concerning the health of Blacks in America (Cross, 1998; Dilworth-Anderson, Goodwin, & Williams, 2004; Jackson & Neighbors, 1996; James, 1994; Neighbors, 1991; Neighbors et al., 1983). Many of these models focus on adolescence or emerging adulthood due to developmental appropriate considerations for identity development (Coll & Magnuson, 1997; Constantine, Donnelly, & Myers, 2002; Neville, Heppner, & Wang, 1997; Spencer & Depree, 1996). These and other developmentally specific models provide ample foundation for the establishment of lifecourse perspectives of stress and coping. Still the need remains to develop sociocultural models of stress and coping that translate across various disciplines leading to unified theories that take into account, sociological, psychological, cultural and

biomechanical manifestations of stress, adaptive coping and subsequent mental and physical health outcomes (Branscombe et al., 1999; Jackson, Knight, Schaie, & Carstensen, 2006; Spencer et al., 1997; Stephenson & Chin, 2004). Within this rubric of academic inquiry about sociocultural stress and coping there remains a need to produce models that relate to fundamental causes of health disparities. Among these fundamental causes, models including specific racialized psychosocial stressors such as racial discrimination and immediate adaptive coping responses that consequently must be engaged to overcome presumed health risks must be generated (Clark et al., 1999). The resultant stress cascades should be indicative of psychological and physiological stress responses that incorporate an individual's coping capacity in the face of chronic racial and ethnic discrimination (Clark et al., 1999; Jackson et al., 2006). Above all the unifying characteristic of these sociocultural specific models are the highlighted role of cultural resilience in the face of abhorrent psychosocial stress based on racial and ethnic indifference.

### Minority Group Social Identity: Racial and Ethnic Identity and its Applications

Janet Helms (2005), furthers the critical discussion of the sociocultural specific inclusion of individual characteristics as they relate to the stress process, by presenting the need to replace racial categories as 'independent variables in psychological research and theory' (Helms et al., 2005). Helms details four sociocultural methodological strategies for the replacement of race by summarizing race-focused critiques in psychology:

> "1)'substitute the concepts of ethnicity, ethnic group, or ethnic identity for race or racial group', in order to specify more meaningful 'individualistic traits' (Yee, 1983, p. 21 as cited in Helms, et al., 2005) that comprise sociocultural factors; 2)

> ‘avoid using racial categories in research designs without a clear conceptual reason for doing so’, in order to circumvent inaccurate assumptions inherent in the ‘unspecified attributes’ racial categories consist of; 3) ‘replace racial categories as independent variables with independent variables derived from racial categorization (RC) theories…(that substitute) conceptually meaningful RC constructs for racial categories’, and; 4) ‘use statistical analyses of theory-derived variables to determine whether some of the myriad of constructs encompassed by racial categories or derived from RC theories can be used to replace racial categories. Although this strategy is not well known, it potentially subsumes the others”(pgs. 27-28) (Helms et al., 2005).

As noted RC theories such as social category, racial identity and ethnic identity theories need to be statistically examined and adjusted for inclusion in applied theories of stress and coping (Allport, 1954; Cross, 1994; Helms, Ponterotto, Casas, Suzuki, & Alexander, 1995; Phinney, 1990, 2000; Sellers, Smith et al., 1998). In order to define useful RC theories as well as understand minority group identity, comprehensive theories are useful that contextualize race, ethnicity and their correlates into broader models of psychological processes such as stress and coping. The addition of RC theories into models of psychosocial stress and coping answer persistent calls to include more self determined conceptualizations of race and ethnicity in attempts to examine intraracial and interethnic heterogeneity, in this case specifically among Black Americans (or Americans of African descent).

An identified model of how minority group identity may act to modulate the psychological effects of racism used in concert with a model of stress and coping may offer an empirical test of whether there is synergy in these two approaches.

## Proposal of Conceptual Model

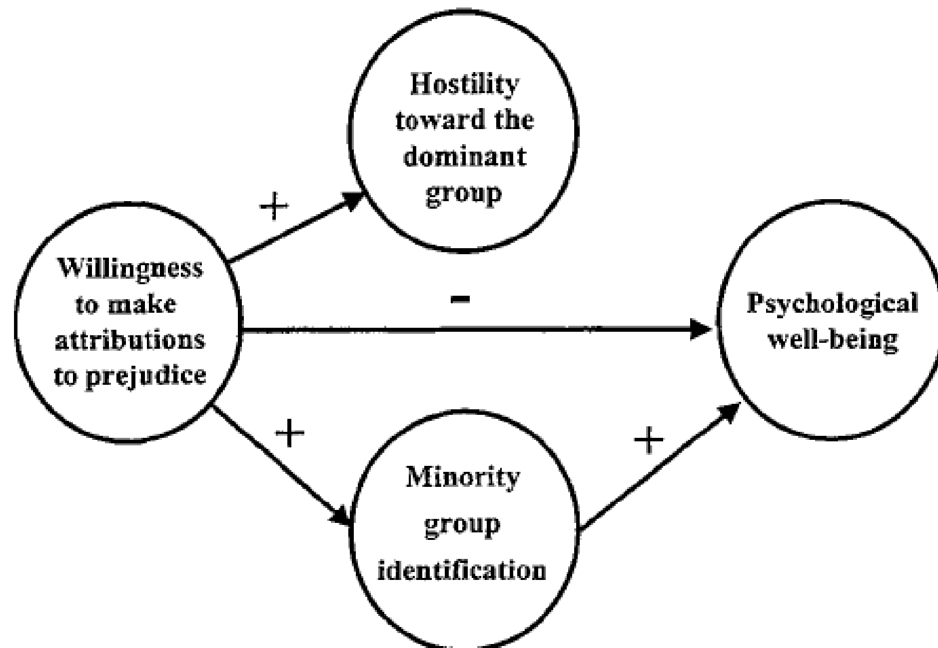


Figure 2.1. The rejection-identification model of the dual effects of attributions to prejudice on the psychological well-being of devalued group members. from Branscombe, Schmitt, & Harvey, *Journal of Personality & Social Psychology, 77*(1), p. 138, 1999.

The rejection identification model (see Figure 2.1) offers a potential model for how minority group identity (i.e. racial and ethnic identity) operates to bolster one's psychological well being in the face of racially and ethnically attributed discrimination (Branscombe et al., 1999). The focal path of the model is from attributions to prejudice, being positive related to minority group identification, ending with a positive effect on mental health. There are also readily available transactional conceptual models of stress and adaptive coping and depression that postulate personal and social resources as significant buffering mediators of the stress and coping paradigm (Folkman & Lazarus, 1986, 1988; Holahan & Moos, 1987, 1991). Combined with existing models of racialized stress and coping that posit racial and ethnic identity as vital (cultural resources, acting

as) effect modifiers for supporting mental health in the face of racial discrimination, a resultant model may be the genesis of more distinct models that can inform each of the more specific models as well as the ensuing extensive model and its applications among Black Americans (see Figure 2.2) (Branscombe et al., 1999; Clark et al., 1999; Phinney, 1990, 2000; Sellers et al., 2006; Sellers & Shelton, 2003; Spencer et al., 1997).

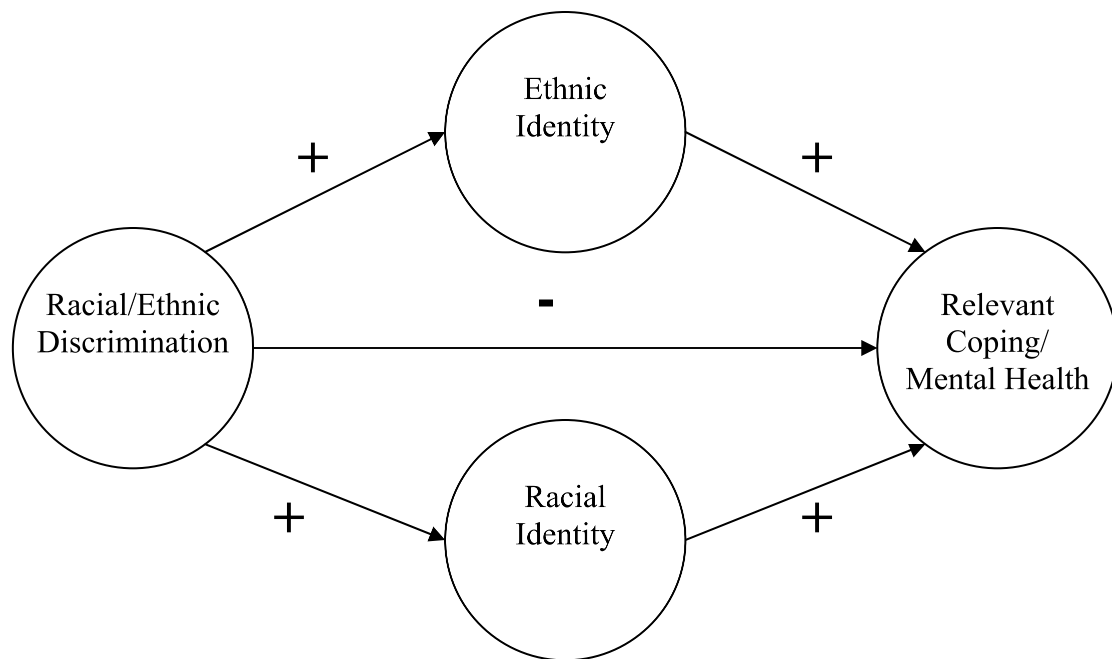


Figure 2.2. Theoretically informed Affirming Identity Model (AIM) of the mediated effects of racially attributed discrimination on efforts to use adaptive coping strategies (protecting mental health in the face of a perceived noxious stressor) [adapted from (Branscombe et al., 1999; Clark et al., 1999; Pearlin, 1996; Phinney, 1990, 2000; Sellers et al., 2006; Sellers & Shelton, 2003; Spencer et al., 1997)

Looking at the proposed Affirming Identity Model (AIM) shown in Figure 2.2 in relation to other sociocultural models of stress and coping, the model is a reasonable extension of recognized theoretical frameworks highlighting minority groups' psychological resources as key determinants of psychological well being. Wherein experiences of racial discrimination prime an individual to seek a self affirming identity based on the unchangeable characteristics (i.e. race and ethnicity) they perceive to be the

reasons attributed to the unfair treatment. These experiences of discrimination will have deleterious effects on adaptive coping with this stressor as well as subsequent mental health outcomes (Wade, 1996; Williams, Neighbors, & Jackson, 2003; Williams, Yu, Jackson, & Anderson, 1997). In turn, a more comprehensive social identity (racial and ethnic), having been primed by discrimination will bolster adaptive coping and subsequently lead to better mental health outcomes. This supplemental conceptualization of a comprehensive identity attempts to discount the notion that race is the most important portion of Black Americans' social understanding of themselves. It is also noted that extensions of this comprehensive conceptualization would also include gender and other socioeconomic identity dimensions. However, given the specificity of the stressor (i.e. racial and ethnic discrimination) it is appropriate to focus on the determining characteristic attributed to be the cause of the stressor.

It is important to acknowledge that the current explanation of the AIM does not reflect the multidimensional nature of the concepts of both racial identity and ethnic identity. More complex elaborations of the model include the dimensions of racial centrality, private regard and public regard as well as the ethnic identity dimensions of intraracial ethnic attitudes and ethnic specific behaviors. The hypothesized relationships are such that an optimal (or health promoting) identity would be one with increased levels of racial centrality, private regard and lower levels of public regard as well as positive intraracial ethnic attitudes and increased ethnic specific behaviors.

Clark, Williams and colleagues identify cultural resources that should be synonymous with ethnic identity and aspects of racial identity as integral tools to be used by individuals to overcome the disadvantaged social treatment that accompanies societies

racial labeling and abhorrent underlying prejudices (Clark et al., 1999; Williams, 1997). Similarly, LaVeist conceptualizes race as an unobserved latent factor and introduces the process of physiognomy, wherein individuals are designated racial labels based the 'manifest indicator' of skin color (LaVeist, 1994). Yet as LaVeist highlights race, ethnicity and culture are emphasized as well in his model as key predictors of external risk exposures (i.e. discrimination) and health/illness behaviors (i.e. coping), he continues by stating the multidimensional nature of a Black minority group identity (LaVeist, 1994). An identity that is comprised of societal orientations along with cultural orientations allows the model to account for an identity based on societal risk exposures as well as culturally informed survival strategies. This comprehensive identity maps on well to the multidimensional treatment of racial identity and ethnic identity literatures (Phinney, 1990, 1992; Sellers et al., 1997; Sellers, Smith et al., 1998). These conceptualizations of racial identity and ethnic identity attempt to understand the psychological processes linked to race and ethnicity that attenuate racialized experiences. Sellers and colleagues conceptualize racial identity as an important personal resource to be used in a multidimensional fashion drawing from various aspects of racial identity to assist in modifying feelings, attributions and psychological well being (Sellers et al., 1997; Sellers & Shelton, 2003; Sellers, Smith et al., 1998). How identity relates to coping has been understood by Moos and colleagues who also explain (group or) self identity as a personal psychological resource that can influence approach type coping that is practical in preserving mental health outcomes in the face of chronic psychosocial stressors (Holahan & Moos, 1990, 1991; Moos, 1997a). Finally the proposed Affirming Identity Model looks at the natural balance of how race and ethnicity may operate for

individuals by matching the exposure, modulators and immediate outcome of coping to the contextual realm of racial discrimination, a specific stressor, with context specific sociocultural mediators (racial identity and ethnic identity)

Furthermore, the identification of conceptual and measurement incongruence and other actors of variability among measures of minority group identity should provide evidence to support the development of intraracial and interethnic specified models of sociocultural stress and adaptive coping. Eventually, this model intends to demonstrate the multifaceted role that race and ethnicity play in the lives of Black Americans.

Indeed most conceptualizations of race, stress and coping have originated using racial discrimination as key exposures, hypothesizing sociocultural resources as coping mediators, leading to better mental health outcomes (Jackson & Neighbors, 1996; Neighbors, 1991; Neville et al., 1997; Williams & Neighbors, 2001; Williams et al., 1999; Williams & Williams-Morris, 2000). In this way the current model builds upon these theories without reservation. Moreover the current model attempts to deal with two conceptual critiques on racial and ethnic conceptualizations of health by dealing with the measurement of race and ethnicity by utilizing current theories of African descended minority group identity. In order to establish interethnic and intraracial heterogeneity the subsequent conceptual and measurement models will be generated by examining how race and ethnicity are realized by individuals of African descent who are casually labeled Black in America. It is the health costs of this Black labeling that is certainly not inconsequential and begs for emerging strategies that understand sociocultural resiliency in ways that are representative of the complex, multidimensional and contextually variant reality.

Models are necessary that begin to understand the psychological underpinnings of peoples' experiences as racial and ethnic minorities, the sophisticated meanings and role that these group identities play in bolstering their health in spite of the psychosocial burden of racial discrimination and correlates that result in diminishing health returns (Branscombe et al., 1999; Clark et al., 1999; Spencer et al., 1997). Specifying racial and ethnic variation remains a cumbersome task to the literature, but nonetheless should yield more adequate understanding of racialized stress processes, relevant culturally induced methods of adaptive coping in relation to mental (and corresponding physical) health outcomes (Geronimus, 2000; Stephan & Stephan, 2000; Williams, GonzÃlez et al., 2007; Williams & Jackson, 2000).

**Discussion**

As a historically disadvantaged population Black Americans continue to be the target of numerous public health intervention strategies aimed at minimizing physical and mental health disparities (Cummings & DeHart, 1995; Mayfield, 1972). Much of the literature has pointed to the need to define a Black health disadvantage in the stress and coping paradigm (i.e. coping with the stress of structural and interpersonal racism) (Neighbors, 1991; Williams & Williams-Morris, 2000). Nevertheless, the need to define African descended health advantages or life course survival strategies is equally imperative. Advances in this scholarly discussion have led many public health interventionists to focus on the need for innovative community based approaches to combat the environmental, economic, and cultural stressors that are particular to the Black American community's experience (Mayfield, 1972; Yung & Hammond, 1997). Yet, the reasons for Black communities' inability to escape the mental and physical

health consequences of unequal societal pressures have continued to be explored in the literature with similar dismal outlooks (Williams, 1999; Yu & Williams, 1999).

The current discussion attempts to explore how racial identity and ethnic identity may inform a model of racialized stress and relevant protective coping in ameliorating the impact of discrimination on mental health outcomes as well as subsequent physical health comorbidities. The point of this conversation is not to minimize the contributions of race or ethnicity in shaping population health. Rather, the goal is to further explore the interplay between race, ethnicity, stress and coping, through the lens of racial identity and ethnic identity as potential modulators between racial discrimination, adaptive coping and depressive symptoms from a self determined identity perspective. Framing race and ethnicity from how individuals interpret these social categories personally, utilizes the empowerment perspective of self determination. Empowerment aims to give individuals power and control over their reality and circumstances. In this way, this agenda advances the concepts of race and ethnicity beyond psychosocial exposures and connects race and ethnicity to culture, behaviors and attitudes that are useful in engaging culturally rooted direct and indirect coping strategies. Ultimately this research agenda aims to inform psychosocial stress interventions and their potential effectiveness within Black American adults as it relates to the stress of racial discrimination, adaptive coping and mental health.

Lastly, policy goals that directly affect the potential mechanisms leading to racial disparities are necessary for any substantial change to occur in racial health disparities. The three main areas of interest for policy-makers would then be access to resources, amelioration of historically structural modes of racial discrimination including racial

segregation, and efforts that minimize interpersonal subjective experiences of racial discrimination. Policy level changes that do not treat race and ethnicity as monolithic constructs may not be as effective. Instead, policy initiatives that seek to ameliorate similar population level exposures due to race, yet account for heterogeneity within racial categories by understanding the differential effects of ethnicity should prove effective. Tests of the aforementioned conceptual model of sociocultural stress and coping will provide evidence that racial identity and ethnic identity offer insight on the muddled and oft misused concepts of race and ethnicity. Specifically, hypotheses that encourage the understanding of race and ethnicity from a person centered perspective and that account more comprehensively, beyond the simplistic traditional uses of race and ethnicity, for how social categories shape individuals' life experiences and their ability to confront (racial and ethnic specific) psychosocial stress are called for. This empirically based evidence should expand the breadth of knowledge that public health researchers can contribute to policy-based initiatives that can decrease the burden of stress on disparaged segments of the population.

Concentrating on how people relate to race and ethnicity attempts to understand their immediate social predicament could be a gateway to empowering many racial and ethnic minority and other socially disparaged groups. Policy-led increases in access to medical care, healthy foods, and health facilitating environments based on sociocultural factors should reap more benefits than direct economic assistance through social welfare initiatives (Morland, Wing, Diez Roux, & Poole, 2002; Schulz & Northridge, 2004). Effective policy solutions could entail universal health care coverage and government enforced standards of care. Beyond these solutions, initiatives that promote positive

conceptualizations of the self for all Americans may push back on psychosocial stressors, providing a foundation for personal responsibility and empowerment to overcome structural conditions. People who think well of themselves, given the opportunity, will do more to protect their wellness. In order to provide racial and ethnic minority populations an 'out' from their psychosocial predicaments, policies geared to encourage suburban residential patterns among racial and ethnic minorities may prove useful. Finally, policy initiatives that acknowledge and intervene (from both the perpetrator and recipient sides) on the pervasive nature of interpersonal and chronic psychosocial exposure to racial discrimination should reap benefits in reducing psychosocial stressors, in turn assisting attempts to preserve physical health via health promoting behaviors (Williams, Neighbors, & Jackson, 2003). Funding community based research and public health outreach interventions targeting awareness of the self and group, the negative health consequences of discrimination (both structural and interpersonal), and effective coping strategies for all populations would be a step in the right direction.

**References**

Agyemang, C., Bhopal, R., & Bruijnzeels, M. (2005). Negro, Black, Black African, African Caribbean, African American or what? Labelling African origin populations in the health arena in the 21st century. *Journal of Epidemiology & Community Health, 59*(12), 1014-1018.

Akom, A. A., Weis, L., & Fine, M. (2000). *The house that race built: Some observations on the use of the word nigga , popular culture, and urban adolescent behavior*. New York, NY, US: Teachers College Press.

Allen, R. L., & Bagozzi, R. P. (2001). Consequences of the Black sense of self. *Journal of Black Psychology, 27*(1), 3-28.

Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison Wesley.

Andujo, E. (1988). Ethnic identity of transethnically adopted Hispanic adolescents. *Social Work, 33*(6), 531-535.

Anglin, D. M., & Whaley, A. L. (2006). Racial/Ethnic Self-Labeling in Relation to Group: Socialization and Identity in African-Descended Individuals. *Journal of Language and Social Psychology, 25*(4), 457-463.

Azibo, D. A. (1991). Towards a metatheory of the African personality. *Journal of Black Psychology, 17*(2), 37-45.

Azibo, D. A. (2006). An African-centered rudimentary model of racial identity in African descent people and the validation of projective techniques for its measurement. *Humboldt Journal of Social Relations, 30*(1), 145-176.

Azibo, D. A., Jackson, A. L., & Slater, S. (2004). A Test of Theoretical Propostitions about Psychological Defense Mechanism Functioning in Contemporary African Descent People. *Humboldt Journal of Social Relations, 28*(1), 83-108.

Baldwin, J. A., & Bell, Y. R. (1985). The African self-consciousness scale: An Africentric personality questionnaire. *Western Journal of Black Studies, 9*(2), 61-68.

Baldwin, J. A., Duncan, J. A., & Bell, Y. R. (1987). Assessment of African self-consciousness among Black students from two college environments. *Journal of Black Psychology, 13*(2), 27-41.

Belgrave, F. Z., & Allison, K. W. (Eds.). (2006). *African American Psychology: From Africa to America*. Thousand Oaks, CA: Sage Publications.

Bhopal, R. S. (2004). Glossary of terms relating to ethnicity and race: For reflection and debate. *Journal of Epidemiology & Community Health, 58*(6), 441-445.

Bhopal, R. S. (2007). *Ethnicity, race, and health in multicultural societies: Foundations for better epidemiology, public health, and health care*. New York, NY, US: Oxford University Press.

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality & Social Psychology, 77*(1), 135-149.

Breslau, J., Aguilar-Gaxiola, S., Kendler, K. S., Su, M., Williams, D., & Kessler, R. C. (2006). Specifying race-ethnic differences in risk for psychiatric disorder in a USA national sample. *Psychological Medicine, 36*(1), 57-68.

Broman, C. L., Jackson, J. S., & Neighbors, H. W. (1989). Sociocultural context and racial group identification among Black adults. *Revue Internationale de Psychologie Sociale, 2*(3), 367-378.
Brookins, C. C. (1994). The relationship between Afrocentric values and racial identity attitudes: Validation of the Belief Systems Analysis Scale on African American college students. *Journal of Black Psychology, 20*(2), 128-142.
Caldwell, C. H., Kohn-Wood, L. P., Schmeelk-Cone, K. H., Chavous, T. M., & Zimmerman, M. A. (2004). Racial Discrimination and Racial Identity as Risk or Protective Factors for Violent Behaviors in African American Young Adults. *American Journal of Community Psychology, 33*(1), 91-105.
Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist, 54*(10), 805-816.
Cokley, K. O. (2005). Racial(ized) Identity, Ethnic Identity, and Afrocentric Values: Conceptual and Methodological Challenges in Understanding African American Identity. *Journal of Counseling Psychology, 52*(4), 517-526.
Coll, C. G., & Magnuson, K. (1997). The psychological experience of immigration: A developmental perspective. In *Immigration and the family: Research and policy on U.S. immigrants* (pp. 91-131). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
Constantine, M. G., Donnelly, P. C., & Myers, L. J. (2002). Collective self-esteem and africultural coping styles in African American adolescents. *Journal of Black Studies, 32*(6), 698-710.
Cooper, R., & David, R. (1986). The biological concept of race and its application to public health and epidemiology. *Journal of Health Politics, Policy & Law, 11*(1), 97-116.
Cross, W. E. (1994). Nigrescence theory: Historical and explanatory notes. *Journal of Vocational Behavior, 44*(2), 119-123.
Cross, W. E. (1995a). In search of Blackness and Afrocentricity: The psychology of Black identity change. In *Racial and ethnic identity: Psychological development and creative expression* (pp. 53-72). Florence, KY, US: Taylor & Francis/Routledge.
Cross, W. E. (1995b). The psychology of nigrescence: Revising the Cross model. In *Handbook of multicultural counseling* (pp. 93-122). Thousand Oaks, CA, US: Sage Publications, Inc.
Cross, W. E. (1998). Black psychological functioning and the legacy of slavery: Myths and realities. In *International handbook of multigenerational legacies of trauma* (pp. 387-400 The Plenum series on stress and coping.). New York, NY, US: Plenum Press.
Cross, W. E., Parham, T. A., & Helms, J. E. (1991). The stages of Black identity development: Nigrescence models. In *Black psychology (3rd ed.)* (pp. 319-338). Berkeley, CA, US: Cobb & Henry Publishers.
Cross, W. E., Ponterotto, J. G., Casas, J. M., Suzuki, L. A., & Alexander, C. M. (1995). *The psychology of nigrescence: Revising the Cross model*. Thousand Oaks, CA, US: Sage Publications, Inc.

Cummings, C. M., & DeHart, D. D. (1995). Ethnic minority physical health: Issues and interventions. In J. F. Aponte & R. Y. Rivers (Eds.), *Psychological interventions and cultural diversity.* (pp. 234-249): Allyn & Bacon.

DHHS. (2001). *Mental health: Culture, Race, and ethnciity- a supplement to mental health: a report of the Surgeon General Executive Summary*. Rockville, MD: US Department of Health and Human Sevice, Office of the Surgeon General.

Dilworth-Anderson, P., Goodwin, P. Y., & Williams, S. W. (2004). Can Culture Help Explain the Physical Health Effects of Caregiving Over Time Among African American Caregivers? *Journals of Gerontology: Series B: Psychological Sciences & Social Sciences, 59*(3), S138-S145.

Diop, C. A. (1989). *The cultural unity of Black Africa: The domains of matriarchy and of Patriarchy in Classical Antiquity*. London: Karnak House.

Dunlop, D. D., Song, J., Lyons, J. S., Manheim, L. M., & Chang, R. W. (2003). Racial/Ethnic Differences in Rates of Depression Among Preretirement Adults. *American Journal of Public Health, 93*(11), 1945-1952.

Evans, K. M., & Herr, E. L. (1994). The influence of racial identity and the perception of discrimination on the career aspirations of African American men and women. *Journal of Vocational Behavior, 44*(2), 173-184.

Fanon, F. (1967). *Black skin, White masks*. New York: Grove Press.

Folkman, S., & Lazarus, R. S. (1986). Stress processes and depressive symptomatology. *Journal of Abnormal Psychology, 95*(2), 107-113.

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology, 54*(3), 466-475.

Ford, M. E., & Kelly, P. A. (2005). Conceptualizing and Categorizing Race and Ethnicity in Health Services Research. *Health Services Research, 40*(5), 1658-1675.

George, L., & Lynch, S. M. (2003). Race Differences in Depressive Symptoms: A Dynamic Perspective on Stress Exposure and Vulnerability. *Journal of Health & Social Behavior, 44*(3), 353-369.

Geronimus, A. T. (2000). To mitigate, resist, or undo: addressing structural influences on the health of urban populations.[see comment]. *American Journal of Public Health, 90*(6), 867-872.

Geronimus, A. T., & Thompson, J. P. (2004). To denigrate, ignore, or disrupt: Racial inequality in health and the impact of a policy-idnuced breakdonw of African American communities. *Du Bois Review, 1*(2), 247-279.

Gregorich, S. E. (2006). Do self-report instruments allow meaningful comparisons across diverse population groups? Testing measurement invariance using the confirmatory factor analysis framework. *Medical Care, 44*(11), 78-94.

Hahn, R. A., & Stroup, D. F. (1994). Race and ethnicity in public health surveillance: criteria for the scientific use of social categories. *Public Health Reports, 109*(1), 7-15.

Helms, J. E. (Ed.). (1994). *The conceptualization of racial identity and other 'racial' constructs*. San Francisco, CA,US: Jossey-Bass.

Helms, J. E., Jernigan, M., & Mascher, J. (2005). The Meaning of Race in Psychology and How to Change It: A Methodological Perspective. *American Psychologist, 60*(1), 27-36.

Helms, J. E., Ponterotto, J. G., Casas, J. M., Suzuki, L. A., & Alexander, C. M. (1995). *An update of Helm's White and people of color racial identity models*. Thousand Oaks, CA, US: Sage Publications, Inc.

Holahan, C. J., & Moos, R. H. (1987). Personal and contextual determinants of coping strategies. *Journal of Personality and Social Psychology, 52*(5), 946-955.

Holahan, C. J., & Moos, R. H. (1990). Life stressors, resistance factors, and improved psychological functioning: An extension of the stress resistance paradigm. *Journal of Personality and Social Psychology, 58*(5), 909-917.

Holahan, C. J., & Moos, R. H. (1991). Life stressors, personal and social resources, and depression: A 4-year structural model. *Journal of Abnormal Psychology, 100*(1), 31-38.

Jackson, J. S., Knight, K. M., Schaie, K. W., & Carstensen, L. L. (2006). *Race and self-regulatory health behaviors: The role of the stress response and the HPA axis in physical and mental health disparities*. New York, NY, US: Springer Publishing Co.

Jackson, J. S., & Neighbors, H. W. (1996). Changes in African American resources and mental health: 1979 to 1992. In *Mental health in Black America* (pp. 189-212). Thousand Oaks, CA, US: Sage Publications, Inc.

James, S. A. (1994). John Henryism and the health of African-Americans. *Culture, Medicine & Psychiatry, 18*(2), 163-182.

Jefferson, S. D., & Caldwell, R. (2002). An exploration of the relationship between racial identity attitudes and the perception of racial bias. *Journal of Black Psychology, 28*(2), 174-192.

Kawachi, I., Daniels, N., & Robinson, D. E. (2005). Health disparities by race and class: why both matter. *Health Affairs, 24*(2), 343-352.

Landrine, H., & Klonoff, E. A. (1996). *African American acculturation: Deconstructing race and reviving culture*. Thousand Oaks, CA, US: Sage Publications, Inc.

LaVeist, T. A. (1994). Beyond dummy variables and sample selection: what health services researchers ought to know about race as variable. *Health Services Research, v29*(1), 1-16.

LaVeist, T. A. (Ed.). (2005). *Minority populations and health: Introduction to health disparities in the United States* (1st ed.). San Francisco, CA: Jossey-Bass.

Makabe, T. (1979). Ethnic identity scale and social mobility: The case of Nisei in Toronto. *The Canadian Review of Sociology and Anthropology, 16*, 136-145.

Mayfield, W. G. (1972). Mental health in the black community. *Social Work, Vol. 17*(3), 106-110.

McCowan, C. J., & Alston, R. J. (1998). Racial identity, African self-consciousness, and career decision making in African American college women. *Journal of Multicultural Counseling and Development, 26*(1), 28-38.

McLoyd, V. C. (2004). Linking race and ethnicity to culture: Steps along the road from inference to hypothesis testing. *Human Development, 47*(3), 185-191.

Moos, R. H. (1997). Assessing approach and avoidance: Coping skills and their determinants and outcomes. In (Vol. 24, pp. 58-64): IndiaUniv of Rajasthan.

Neighbors, H. W. (1991). Mental health. In *Life in black America* (pp. 221-237). Thousand Oaks, CA, US: Sage Publications, Inc.

Neighbors, H. W., Jackson, J. S., Bowman, P. J., & Gurin, G. (1983). Stress, coping, and Black mental health: Preliminary findings from a national study. *Prevention in Human Services, 2*(3), 5-29.

Neighbors, H. W., Jackson, J. S., Campbell, L., & Williams, D. (1989). The influence of racial factors on psychiatric diagnosis: A review and suggestions for research. *Community Mental Health Journal, 25*(4), 301-311.

Neville, H. A., Heppner, P. P., & Wang, L.-f. (1997). Relations among racial identity attitudes, perceived stressors, and coping styles in African American college students. *Journal of Counseling & Development, 75*(4), US American Counseling Assn; 1997, 1303-1311.

Pearlin, L. I. (1996). Some Conceptual Perspectives On the Origins and Prevention of Social Stress Unpublished Unpublished conference paper presentation. National Institute of Mental Health.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*(3), 499-514.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156-176.

Phinney, J. S. (1996). Understanding ethnic diversity: The role of ethnic identity. *American Behavioral Scientist, 40*(2), 143-152.

Phinney, J. S. (2000). Ethnic and racial identity: Ethnic identity. 254-259.

Phinney, J. S., Arnett, J. J., & Tanner, J. L. (2006). *Ethnic Identity Exploration in Emerging Adulthood*. Washington, DC, US: American Psychological Association.

Phinney, J. S., Kohatsu, E. L., Schulenberg, J., Maggs, J. L., & Hurrelmann, K. (1997). *Ethnic and racial identity development and mental health*. New York, NY, US: Cambridge University Press.

Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271-281.

Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress among African American Young Adults. *Journal of Health and Social Behavior, 43*(3), 302-317.

Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. H. (2006). Racial Identity Matters: The Relationship between Racial Discrimination and Psychological Functioning in African American Adolescents. *Journal of Research on Adolescence, 16*(2), 187-216.

Sellers, R. M., Rowley, S. J., Chavous, T. M., Shelton, N. J., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and constuct validity. *Journal of Personality & Social Psychology, 73*(4), US American Psychological Assn.; 1997, 1805-1815.

Sellers, R. M., & Shelton, N. J. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality & Social Psychology, 84*(5), 1079-1092.

Sellers, R. M., Smith, M., Shelton, N., Rowley, S., & Chavous, T. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality & Social Psychology Review, 2*(1), 18-39.

Shelton, J. N., & Sellers, R. M. (2000). Situational stability and variability in African American racial identity. *Journal of Black Psychology: Special Issue: African American culture and identity: Research directions for the new millennium., 26*(1), US Sage Publications Inc; 2000, 2027-2050.

Simic, A. (1987). Ethnicity as a career for the elderly: The Serbian-American case. *Journal of Applied Gerontology, 6*(1), 113-126.

Smedley, A., & Smedley, B. D. (2005). Race as Biology Is Fiction, Racism as a Social Problem Is Real: Anthropological and Historical Perspectives on the Social Construction of Race. *American Psychologist, 60*(1), 16-26.

Spencer, M. B., & Depree, D. (1996). African American youths' ecocultural challenges and psychosocial opportunities: An alternative analysis of problem behavior outcomes. In *Adolescence: Opportunities and challenges* (pp. 259-282 Rochester symposium on developmental psychopathology, Vol. 257.). Rochester, NY, US: University of Rochester Press.

Spencer, M. B., Dupree, D., & Hartmann, T. (1997). A phenomenological variant of ecological systems theory (PVEST): A self-organization perspective in context. *Development and Psychopathology, 9*(4), 817-833.

Stephan, C. W., & Stephan, W. G. (2000). The measurement of racial and ethnic identity. *International Journal of Intercultural Relations, 24*(5), 541-552.

Stephenson, E., & Chin, J. L. (2004). *The African Diaspora and culture-based coping strategies*. Westport, CT, US: Praeger Publishers/Greenwood Publishing Group.

Ullah, P. (1987). Self-definition and psychological group formation in an ethnic minority. *British Journal of Social Psychology, 26*(1), 17-23.

Wade, J. C. (1996). African American men's gender role conflict: The significance of racial identity. *Sex Roles, 34*(1), 17-33.

Waters, M. C. (1994). Ethnic and racial identities of second-generation Black immigrants in New York City. *International Migration Review, 28*(4), 795-820.

Waters, M. C. (1999). *Black identities: West Indian immigrant dreams and American realities*. New York, NY: Russell Sage Foundation.

Watts, R. J. (1992). Racial identity and preferences for social change strategies among African Americans. *Journal of Black Psychology, 18*(2), 1-18.

Williams, D. R. (1997). Race and health: basic questions, emerging directions.[see comment]. *Annals of Epidemiology, 7*(5), 322-333.

Williams, D. R. (1999). Race, socioeconomic status, and health: The added effects of racism and discrimination. In *Socioeconomic status and health in industrial nations: Social, psychological, and biological pathways* (pp. 173-188 ). New York, NY, US: New York Academy of Sciences.

Williams, D. R. (2005). Race/Ethnicity and Socioeconomic Status: Measurement and Methodological Issues. In N. Krieger (Ed.), *Embodying Inequality: Epidemiologic perspectives* (pp. 159-181). Amityville, NY: Baywood Publishing Company.

Williams, D. R., GonzÃlez, H., Neighbors, H., Nesse, R., Abelson, J. M., Sweetman, J., et al. (2007). Prevalence and distribution of major depressive disorder in African Americans, Caribbean Blacks, and Non-Hispanic Whites: Results from the National Survey of American Life. *Archives of General Psychiatry, 64*(3), 305-315.

Williams, D. R., & Jackson, J. S. (2000). Race/ethnicity and the 2000 census: recommendations for African American and other Black populations in the United States. *American Journal of Public Health, 90*(11), 1728-1730.

Williams, D. R., & Neighbors, H. W. (2001). Racism, Discrimination and Hypertension: Evidence and Needed Research. *Ethnicity & Disease, 11*(suppl.), 800-816.

Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/Ethnic Discrimination and Health: Findings From Community Studies. *American Journal of Public Health, 93*(2), 200-208.

Williams, D. R., & Rucker, T. (1996). Socioeconomic status and the health of racial minority populations. In *Handbook of diversity issues in health psychology* (pp. 407-423 The Plenum series in culture and health.). New York, NY, US: Plenum Press.

Williams, D. R., Spencer, M. S., & Jackson, J. S. (1999). Race, stress, and physical health: The role of group identity. In *Self, social identity, and physical health: Interdisciplinary explorations* (pp. 71-100 Rutgers series on self and social identity, Vol. 102.). New York, NY, US: Oxford University Press.

Williams, D. R., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity & Health, 5*(3-4), 243-268.

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial Differences in Physical and Mental Health: Socio-economic Status, Stress and Discrimination. *Journal of Health Psychology, 2*(3), 335-351.

X-Shabazz, M. (1967). *Malcolm X on Afro-American history*. New York: Pathfinder Press.

Yu, Y., & Williams, D. R. (1999). Socioeconomic status and mental health. In *Handbook of sociology of mental health* (pp. 151-166 Handbook of sociology and social research.). New York, NY, US: Kluwer Academic/Plenum Publishers.

Yung, B. R., & Hammond, W. R. (1997). Community-based interventions. In D. K. Wilson & J. R. Rodrigue (Eds.), *Health-promoting and health-compromising behaviors among minority adolescents.* (pp. 269-297): American Psychological Association.

# CHAPTER III

## TOWARDS QUANTIFYING A SELF DETERMINED IDENTITY: MEASUREMENT OF RACIAL AND ETHNIC IDENTITY WITHIN AFRICAN AMERICAN AND AFRICAN CARIBBEAN ADULTS IN THE NSAL RE-INTERVIEW

### Introduction

There is an abundance of literature that highlights the need for health disparities research to maintain vigilance in studying and measuring both racial and ethnic variations in population health (Adebimpe, 2003; Ford & Kelly, 2005; Hahn & Stroup, 1994; Mays, Ponce, Washington, & Cochran, 2003; Perreira, Deeb-Sossa, Harris, & Bollen, 2005; Stephan & Stephan, 2000; Williams, 2005; Williams & Jackson, 2000). Much of this literature engages the use of race and ethnicity as potential proxies for unequal psychosocial exposures such as discrimination, to account for cultural variations in behavior as well as personal and group conceptualizations of the self. The literature also assumes that these psychosocial measures are linked to disparities in health (Hahn & Stroup, 1994; Okazaki, Sue, & Kazdin, 2003; Perreira et al., 2005). Unfortunately, data on race and ethnicity are often not used beyond simple grouping or 'dummy' variables in controlling for the (implicitly) hypothesized effects of race or ethnicity (Helms et al., 2005; LaVeist, 1994). Besides this one-dimensional use of race and ethnicity, these concepts are also used synonymously in the health disparities, services and psychology literatures (Helms et al., 2005; LaVeist, 1994). The inappropriate and underspecified use

of race and ethnicity is related to muddled conceptualizations of how race and ethnicity should be measured, what specific meaning the concepts have to respondents, as well as a reliance upon group assignment and designation that is often based on circumstantial information (Helms et al., 2005; LaVeist, 1994). Beyond this simplistic use, many researchers have called for a more psychologically consistent measurement of individual level variations in self identification that may exist within sociocultural population groups in relation to the concepts of race and ethnicity (Hahn & Stroup, 1994; Okazaki et al., 2003; Perreira et al., 2005). In fact, a simple 'classification into racial/ethnic groupings reifies biologically based systems of ethnic identification and ignores information about the social construction of ethnic identification gleaned from studies employing self-identification as the basis for ethnic identification' (p. 542) (Stephan & Stephan, 2000).

This chapter explores how distinct person centered conceptualizations and measurement of race and ethnicity may vary within Black Americans. To this end, a multidimensional operationalization of race and ethnicity will independently be considered. To do so, this paper will quantitatively examine intraracial and interethnic measurement of racial and ethnic identity, as it pertains to a (socially constructed) self determined identity perspective among Black Americans (Stephan & Stephan, 2000). The findings of this research will add to the discussion of intraracial and interethnic heterogeneity as well as the complexities of meaning ascribed to the concepts of race and ethnicity within people of African descent living in the United States.

## Review of Literature

### IDENTITY THEORY

In general, identity theory posits that a positive self concept influences how an individual perceives, reacts, and interacts with the environment. Social identity importance is emphasized by a strong sense of group identification, belonging and membership to maintain a positive sense of self (Lewin, 1948). Tajfel (1978) added that group identity plays a uniquely important role for ethnic groups, especially in the face of a negative social identity for one's in group. Ultimately, both Lewin and Tajfel agree that, according to social identity theory, group identification for ethnic minorities could be challenging as individuals maneuver between conflicting or complementing identities (Lewin, 1948; Tajfel, 1978). These identity choices may be maladaptive or adaptive responses to negative social identities. Furthermore, the identity decided upon conforms to an ego-identity that informs the choices and behaviors one makes in relation to life events and stressors as well as subsequent mental health outcomes (Sellers et al., 1997).

The identity one chooses is most often affected by the group to which the individual believes they belong. This sense of belonging is reciprocated by the identity, interactions with the group as well as other non group members. For Blacks, this group membership is essential in establishing a sense of a shared group experience that informs values, norms, attitudes, and behaviors. The context of the lived experience among Blacks has a significant impact on the mode of self identification and actualization. As a minority group this sense of belonging is greatly shaped in relation to the White majority (Phinney et al., 1990). Additionally, if Blacks are often in contact with non group members as opposed to same group members, it may have tremendous psychosocial

implications not only for the identity decided upon but also the salience or relevance that a Black person places on their sense of self. In other words Blacks who find themselves in majority Black social environments should be expected to place less importance on their Blackness and perhaps place more importance on some other aspect of their individuality.

Although social identity is complex, it is understandable that scholars have argued that racial and ethnic identity are vital aspects of social identity for Blacks in America (Baldwin et al., 1987; Cross, 1991; Jackson et al., 1991; Phinney et al., 1997; Phinney et al., 1990; Sellers, 1993; Sellers et al., 2003; Sellers et al., 2006). That is, for Blacks in America who have been unfairly treated and discriminated against because of their black skin and ipso facto their African heritage, it makes logical sense that their mental health can be preserved or put in jeopardy based on how they relate to the two social components which affect their lives so dramatically, their race and ethnicity. Racial and ethnic "identity a) provides a sense of group belonging and affiliation; b) acts as a buffer against stress that may arise from prejudice and discrimination; and c) serves as a link to a larger social group,"(p.212)(Belgrave & Allison, 2006). Historically racism and systems of oppression in America and the Western world have been used to disconnect African descendents from Africa as well as expose them denigration based upon the dark color of their skin and other phenotypic expressions of their heritage (Stephenson & Chin, 2004). Presumably disconnecting the individual from a larger social group may lead her/him to feel alone and defenseless in bolstering a strong sense of self concept in the face of explicit or implicit degradation. Dimensions of a minority group identity, specifically racial and ethnic identity, may act in concert to push back against a potential

cultural disconnection and undue the deleterious psychological effects that racial discrimination imposes on its victims (Branscombe et al., 1999).

### Racial Identity

Race as a social construct has it roots in separation of privilege and the propagation of a sociopolitical class system based on presumed ethno-cultural differences surmised by the color of one's skin and other physical features (Bhopal, 2004, 2007; Ford & Kelly, 2005; Stephan & Stephan, 2000). As the concept of race has been used in United States health disparities research, it has maintained relative uniqueness to the concept of ethnicity in that it more readily encompasses how one is perceived, received and treated by members of the broader society (Bhopal, 2004, 2007). The concept of racial identity attempts to measure how salient complex experiences in one's life, due to the Blackness of their skin, affect how they perceive themselves individually, as a social group as well as how other's perceive them (Cross, 1995b; Sellers, Smith et al., 1998; Stephan & Stephan, 2000). These conceptualizations in measurement differ on whether there is a linear stage development of a black identity that is based on racial encounters or a multifaceted identity that is based on racial context, perceived environmental cues and situations to which the individual is exposed (Cross, 1995b; Sellers, Smith et al., 1998).

Notably, Sellers and colleagues' (1998) conceptualization emphasizes a multidimensional understanding of a Black racial identity, one that is comprised of specified dimensions of identity based on the Multidimensional Model of Racial Identity (MMRI) incorporating the concepts of *salience*, or the meaning and importance of being Black in one's everyday life, *centrality,* how central Blackness is to the life of the individual, *ideology,* or political and social beliefs, values and views of Blackness, as

well as *regard* further distinguished as both *private regard and public regard,* or perceived personal and public feelings towards Black people (Sellers et al., 1997; Sellers, Smith et al., 1998). The Multidimensional Inventory of Black Identity (MIBI) is based on the aforementioned theoretical framework and has been developed psychometrically on Black populations ranging from adolescence to adulthood, specifically within the context of resilience and racial discrimination (Sellers, Chavous, & Cooke, 1998; Sellers et al., 2006; Sellers et al., 1997). The MMRI and the measurement constructs defined by the MIBI allow for a more comprehensive measurement of how Americans of African descent incorporate their understandings of their Blackness into their sense of self.

### ETHNIC IDENTITY

Ethnicity as a social construct is less 'black and white' and much more fluid than race in that the concept relates more to cultural and sociopolitical underpinnings that shape how one relates to their immediate social group through customs, behaviors, norms and attitudes (Bhopal, 2004, 2007; Ford & Kelly, 2005; Phinney, 1990, 1992; Stephan & Stephan, 2000). In health research ethnicity is often measured via (a combination of or solely) self identification, nationality, nativity and/or religion in some cases (Ford & Kelly, 2005). The psychological manifestation of ethnicity is theorized as ethnic identity (Phinney, 1992). Ethnic identity is traditionally measured by feelings of closeness towards or attitudes about ones' and other ethnic groups (Allen & Bagozzi, 2001). In addition, concepts such as self-identification (with an ethnic label), ethnic behaviors and practices, affirmation and belonging, and attitudes toward other groups have been utilized most often to define a multidimensional conceptualization of ethnic identity (Phinney, 1992). These concepts in addition to ethnic identity achievement have been used in the

commonly used Multigroup Ethnic Identity Measure (MEIM) to determine, based on elements of commonality, how ethnic group attachment may vary between other distinct ethnic groups (Phinney, 1992).

A critique of the MEIM is that it does not adequately account for potential within group variations in identity. This critique needs consideration when attempting to make comparisons based on conceived social labels used for, among and by diverse groups of Americans of African descent (Agyemang et al., 2005; Anglin & Whaley, 2006). For Americans of African descent, these complicated conceptualizations of the self will relate to various social, political and health consequences (Allen & Bagozzi, 2001; Anglin & Whaley, 2006; Phinney, 1990, 2000; Phinney et al., 1997; Sellers et al., 2006). However some have argued that there may be equal utility in understanding how specific attachment to an individuals' indigenous cultural group may more accurately capture how ethnicity operates and varies within ethnic groups (Baldwin & Bell, 1985). These scholars contend that there are unique contributions that one's indigenous cultural roots bring to the table that perhaps are not highlighted when the objective is comparisons across dissimilar ethnic social groups. The conceptual question remains whether it is possible to measure and study ethnic identity as a general phenomenon with commonalities across groups or whether the uniqueness of each group makes generalizing impossible. At best this generalization of commonalities requires parallel understandings of within group conceptualizations and correlated psychological processes and psychosocial outcomes.

## MEASUREMENT OF RACE AND ETHNICITY: APPLICATIONS OF RACIAL AND ETHNIC IDENTITY

As noted earlier, for Americans of African descent race and ethnicity have long been variables of focal interest to health disparities research as it is presumed that race and ethnicity capture some underlining psychosocial exposures as well as embody cultural differences within population health (Ford & Kelly, 2005). Race is a categorizing variable that has roots in ethnocentric oppression that early settlers unleashed on the 'new world' in the form of genocide on indigenous North Americans, the Trans Atlantic African slave trade, as well as numerous other historical accounts of the mistreatment of other willing and unwilling immigrant groups in America (Cokley, 2005). Taking this historical foundation of race and its propagation in health disparities research the fact remains that the black racial category and social label is at best circumstantial and coincidental in its relationship to ethnicity. Unfortunately, for a large amount of data on racial and ethnic health disparities collected follows the conventions of the Census (OMB directive 15) for defining Americans of African descent by the racial labels of "Black or African American" (Ford & Kelly, 2005). This use of both a racial and ethnic labels reifies original misuses of race and ethnicity specifically for socially disadvantaged groups, but for all American racial and ethnic groups. Still the fact remains overlooked that many 'Americans' may 'have no sense of racial or ethnic identity' and yet, 'are classified into identity categories by governments or researchers' (Stephan & Stephan, 2000). This exemplifies the need for health researchers to acknowledge 'that we may not be measuring who the individuals think they are' (Stephan & Stephan, 2000). Paying closer attention to self determined notions of racial and ethnic identification offers a more direct measurement of OMB directive 15. For instance a person defined as having origins

in any of the black racial groups of Africa (i.e. Black or African American according to the census) will be defined by their own ideals about belonging to the Black racial group (i.e. racial identity) as well as their connection to their indigenous cultural backgrounds (i.e. ethnic identity). The gained sense of meaning for race and ethnicity attributed to measuring racial and ethnic identity will be important factors in understanding how people behave, interact and cope in their immediate social environments.

### Racial and Ethnic Labeling and Categorization

The labels that have been assigned to people of African descent have long been in contention among those being labeled as such, due to the negative social stigma and detestable mistreatment directly attached to that label. Appropriately Blacks in America have long history of defining themselves from their own perspective while being cognizant of societies overarching opinions and attitudes (Agyemang et al., 2005; Sigelman, Tuch, & Martin, 2005). The labels that have been consequently used for Blacks: Nigger, Negroid, Negro, Black, Afro-America, African American are of course driven by sociocultural and political movements to define an acceptable African descended social identity (Agyemang et al., 2005; Sigelman et al., 2005). Much of this struggle for an in-group and out-group self definition has been void of clear conceptual scrutiny. Apparently there are weighty implications of accepting an out-group definition versus in-group definition of Blackness in America, with the former being pejorative. It is paramount then for health disparities research to take this fact of prescribed racial and ethnic self-labeling into account in their conceptualizations of Black group identities (Anglin & Whaley, 2006). This overriding need to measure race and ethnicity in a psychologically consistent way has been taken on by psychologists. Researchers have

advanced social identity theory to envelope a person centered multidimensional conceptualization of the self, yielding the concepts of racial identity and ethnic identity to attempt to gain conceptual clarity and measurement consistency for the concepts of race and ethnicity (Phinney, 1992; Sellers et al., 1997; Sellers, Smith et al., 1998).

Additionally there is reason to question the reliability of racial and ethnic labels and categories used in survey research data collection and statistical analysis (Gregorich, 2006; LaVeist, 1994). In the case of African Americans there is often no ethnic option after one designates oneself as Black or African American (Agyemang et al., 2005; Bhopal, 2004; LaVeist, 1994). This is in part because the two label options (Black and African American) represent both a racial and ethnic interpretation, although the question is asked to determine racial group self designation. In fact, research has shown there are generational, gender and ideological variations in racial designations and labels chosen by Black Americans to identify themselves based on social, political, economic and culture driven understandings and conceptualizations of self (Agyemang et al., 2005; Bhopal, 2004; LaVeist, 1994). What is apparent from this research is that a Black American identity is at least multidimensional and undoubtedly a fluid entity that may be in flux based on contextual cues, social environments and a host of demographic, sociocultural and psychological factors. This research speaks to the great diversity found among Americans of African descent and opens the door for the need to more accurately account for how individuals have integrated their understandings of life as Black in America into their psyche. Psychologist as well as survey methodologist have understood the complex nature of race and ethnicity and have begun to slowly advocate the use of

nuanced theory-based techniques in measurement and conceptual clarity (Agyemang et al., 2005; Bhopal, 2004; Helms et al., 2005; LaVeist, 1994).

### Finding Statistical Evidence: Intraracial or Interethnic Comparisons

Using race just as a simple dummy variable is fallible, as it does not account for variability within racial categorizations (LaVeist, 1994). This line of reasoning also holds true for intraracial and interethnic variations that individuals may ascribe to the meaning of race and ethnicity. The mixing and differentiation in the meaning of race and ethnicity has important connotation for Americans of African descent as a co-racial 'in' group (i.e. African Americans) has increased contact with a co-racial 'outside' social group (i.e. African Caribbeans) some adaptation of behaviors, attitudes and cultural practices may blend (Ford & Kelly, 2005). Without clear statistical justification or conceptualization for the meaning of race or ethnicity, simple racial or ethnic comparisons confound and distort the meaning of race and ethnicity in the life of survey respondents. This leads to weakened and often unclearly substantiated conceptual modeling and theory development. The continued use of self report instruments furthers the argument about making meaningful comparisons across social groups (Gregorich, 2006). Additionally, tests of conceptual and measurement invariance, such as confirmatory factor analysis (CFA) and structural equation modeling (SEM) methodologies, can provide statistical evidence of the validity of these social comparisons (Gregorich, 2006). Consistent with this line of thought, the development of scales to measure racial and ethnic identity has been done using CFA frameworks to overcome greater errors in measurement as well as relevant tests of reliability and consistency (Phinney, 1992; Sellers et al., 1997).

OVERVIEW OF THE STUDY

The aforementioned conceptual, theoretical and methodological problems with race and ethnicity and subsequent racial and ethnic categorization and labeling have yet to be dealt with in a comprehensive way by multidisciplinary empirical inquiry. To this end this chapter takes an initial step in clarifying the potential for consistent psychological measurement of race and ethnicity via the conceptual application of racial identity and ethnic identity theories. The following research aim and relevant hypotheses will guide the analyses.

**Research Aim and Hypotheses**

Research Aim:

1. Examine evidence of conceptual and measurement congruence of racial identity and ethnic identity between Black American ethnic groups (African American and African Caribbean) in order to establish how meaningful comparisons can be made between ethnic groups to inform a sociocultural model of stress and coping.

Hypotheses:

1. There will be sufficient evidence of dimensional variance, whether the instruments used to measure racial identity and ethnic identity represents the same number of common factors across groups, between two Black American ethnic groups (African American and African Caribbean). The factor patterns for the mediating variables racial identity and ethnic identity will vary by ethnicity.
2. There will be sufficient evidence of configural variance, whether the items used to measure racial and ethnic identity load onto the same common factors across the two Black American ethnic groups (African American and African Caribbean).
3. There will be sufficient evidence to support the claim that Americans of African descent possess (an individual and group) racial and ethnic identity that can be measured and has meaning across ethnic groups.

**Methods**

Sample. The NSAL was part of the National Institute of Mental Health Collaborative Psychiatric Epidemiology Survey (CPES) initiative that included the NSAL as well as the National Comorbidity Survey Replication (NCS-R), and the

National Latino and Asian American Study (NLAAS). The NSAL was an integrated national household probability sample of 3570 African Americans and 1621 Blacks of Caribbean descent (African Caribbeans), as well as 891 White Americans, aged 18 and over (Jackson, et al, 2004). For the purpose of the current research aims and hypotheses only the Americans of African descent sub-sample was used. The African American sample was selected exclusively from targeted geographic segments in proportion to the African American population; 265 African Caribbeans were selected from the African American segments and 1356 from targeted metropolitan segments with more than 10% Blacks of Caribbean descent.

Adult Re-Interview. Following administration of the initial interview all respondents were asked to complete a self administered questionnaire, the NSAL Adult Re-interview (RIW). The RIW asked additional questions about social, group and individual characteristics: psychological resources, group and personal identity (racial awareness and identity), as well as ideology and racial relations. Of the 6,082 NSAL respondents, 3,438 (2762 Blacks) completed the RIW. The overall response rate was 56.5%. Response rates differed for each race group: 68% of Whites and 60% of African Americans responded, to 43% for African Caribbeans. Being female, being unemployed, having higher levels of education, and participating in the original NSAL interview post-September 11, 2001 were also associated with higher response rates on the RIW. Weights were created and used to account for these non-response variations that are above and beyond the original interview, to account for national population distributions.

In both the African American and African Caribbean samples, it was necessary for respondents to self-identify their race as Black. Those self-identifying as Black were

included in the African Caribbean sample if they answered affirmatively to any of these inclusion criteria: 1) West Indian or Caribbean descent, or 2) from a Caribbean area country, or 3) parents or grandparents were born in a Caribbean area country. This sample was designed to be optimal for comparative analyses in which residential, environmental, and socio-economic characteristics are controlled in the black-white statistical contrasts (Heeringa, et al, 2004). Additionally, the African Caribbean sample was separated into three ethnic sub-groups: persons from Spanish-speaking Caribbean countries (i.e. Puerto Rico, Dominican Republic, Cuba), persons from English-speaking Caribbean countries (i.e. Jamaica, Trinidad & Tobago, Guyana), and French-speaking Haitians (Williams, Haile et al., 2007). For the purpose of this study only the English-speaking Caribbean sub-sample was used. This was due to the potential confounding nature of language as it pertains to conceptual parsimony.

There are a number of characteristics which make the NSAL pertinent to the proposed research agenda. Notably, the study contains a large, nationally representative sample of African Americans, allowing a more accurate investigation of intra-group differences and life contexts among this segment of the Black American population. Of equal importance, the NSAL includes the first nationally representative sample of African Caribbeans. This will adequately allow for the detection of mental health differences among differing vital demographic groups who have been frequently treated as one homogenous group of Black Americans. Also the NSAL includes multiple, theory guided assessments of socioeconomic status. This will prove useful given the diverging SES conditions between native African Americans and their African Caribbean counterparts. Lastly, all respondents were selected from the targeted catchment areas in proportion to

the African American and African Caribbean population, distinguishing a first national sample of different ethnic groups within black America who live in the same contexts and geographical area in which blacks are actually distributed (both hi and low density, urban and rural, inner-city and suburban, for example).

### MEASURES

In order to measure racial identity, one of the key person factors of interest, a modified version of the Multidimensional Inventory of Black Identity (MIBI) scale was utilized (Sellers et al., 1997). This modified scale measures two of the three dimensions of a Black American identity, *centrality* or overall importance of race in everyday life and *regard* for blacks in both private and public domains (Sellers et al., 1997; Sellers, Smith et al., 1998). Examples of items are: 'being black is a large part of how I think of myself' (*centrality*), 'I am proud to be black' (*private regard*), and 'White people in this country do not respect black people' (*public regard*). Responses were coded from a 4-point Likert scale so that higher values meant greater agreement with the desired dimensional construct question (i.e. centrality, private regard, public regard). See Tables 3.2 & 3.3 for complete list of items used and descriptives by ethnic group.

The other person factor of interest was an adapted measure for an African descended ethnic identity and was created using relevant constructs from the African self consciousness and ethnic identity literature such as self determined identification, closeness to African Americans, African Caribbeans and Africans on the continent, sense of a common fate with other African descendents as well as Black and Caribbean Media consumption (Allen & Bagozzi, 2001; Phinney, 1992). Examples of items are: a 4-point Likert response to three recurring questions asking about feelings of closeness to

American Blacks, Caribbean Blacks and Blacks in Africa; an open ended answer to the question, ‘people use different words to refer to people whose original ancestors come from Africa. What word best describes what you like to be called?’; as well as a 4-point Likert response to ‘In an average week, how often do you listen to Caribbean radio’ and, ‘read Black newspapers or magazines’. Responses were coded from a 4 point Likert scale so that higher values meant greater agreement with the desired construct question (i.e. ethnic attitudes and ethnic behaviors). See Tables 3.2 & 3.3 for complete list of items used and descriptives by ethnic group.

### DATA ANALYSIS STRATEGY

Again, the research aim of this paper is to examine evidence of conceptual and factorial measurement invariance of racial identity and ethnic identity between Black American ethnic groups (African American and African Caribbean) in order to establish how meaningful comparisons can be made between ethnic groups to inform a sociocultural model of stress and coping. To this end, the structural equation modeling (SEM) technique of confirmatory factor analysis (CFA) will be used to identify the best fitting factor structure and more adequately account for measurement error between groups. The key study variables, racial identity and ethnic identity, will be evaluated in order to confirm the dimensional and configural factor structures of the key variables.

As a preparatory step for the current study an exploratory factor analysis (EFA) was performed using the Statistical Package for the Social Sciences version 15 (SPSSv15) on the relevant item clusters to determine which items actually loaded and how many factors were generated from the given racial identity and ethnic identity. All conceptual clusters of racial identity and ethnic identity variables were independently

tested using principal component analysis with the Kaiser criterion used to determine the factors to be retained as well as principal axes analysis using squared multiple correlations as initial communality estimates (varimax rotation) for their factor loadings (Bagozzi, 1993; Bagozzi & Yi, 1991; Triandis, 1964). Factor eigenvalues above one were used to define a factor and item correlation coefficients less than .35 was used as an elimination criteria. These steps were taken to provide evidence about confirmation of the conceptual measurement models to be run in the CFA (Bagozzi, 1993).

Confirmatory factor analysis (CFA) models were used to test hypothesis concerning the measurement of dimensions of racial identity and ethnic identity (or a comprehensive African descended American social identity). The factor structure and loading that were tested was based on the information obtained from the aforementioned EFA analysis. However due to conceptual concerns all items were initially run in the CFA based on EFA loadings. The resultant CFA models were altered using the EFA results along with the CFA modification indices to obtain the best fitting model for the given construct (i.e. racial or ethnic identity).

The Mplus program version  4.2 was employed for the CFA analyses (L. K. Muthen & Muthen, 1998-2007). Mplus was utilized because of the program's ability to account for complex data design in the estimation of structural equation models (B. O. Muthen & Satorra, 1995).The goodness of fit of the models were asses with chi-square test, the root mean squared error of approximation (RMSEA), the comparative fit index (CFI) and the standardized/weighted root mean square residual (SRMR/WRMR). More thorough discussions of these model fit indices can be found in methodological literatures (Bentler, 1990; Bollen, 1989; Byrne, 1998). Satisfactory model fits are typically indicated

by non-significant chi-square tests. However, in the case of large sample sizes chi-square test are less likely to provide adequate supporting evidence of model fit. Other satisfactory indicative model fit indices are SRMR and RMESEA values less than .08, WRMR values less than .90 and CFI values greater than or equal to .90.

## Results

### Overview of Sample

The data presented in this chapter are from a sub-sample of the NSAL, which was designed to explore intra-and inter-group racial and ethnic differences in mental disorders, psychological distress and informal and formal service use, as they are manifested in the context of a variety of stressors, risk and resilience factors, and coping resources, particularly among national Black American samples (Neighbors, Njai, & Jackson, 2007).

About half of the respondents who participated in the initial adult survey completed a re-interview in the form of a self administered questionnaire. The results presented are thus from that subset of about twenty one hundred African Americans and five hundred English-speaking African Caribbean adults. On average Caribbeans had significantly higher incomes by about $10,000, were four years younger, and more equally distributed by gender than their African American counterparts.

## CONFIRMATORY FACTOR ANALYSIS (CFA) RESULTS FOR AFRICAN AMERICANS AND AFRICAN CARIBBEANS

Table 3.1. CFA Results for Number of Corresponding Factors and Best Fitting Model for Racial Identity and Ethnic Identity Among African American and African Caribbean adults

| | *African Americans* | | *African Caribbeans* | |
|---|---|---|---|---|
| Scale | # of Factors | Goodness of Fit Statistics | # of Factors | Goodness of Fit Statistics |
| Racial Identity | 3 | $\chi^2$ (22) = 89.96, *p*≈.00<br>RMSEA=.04<br>SRMR=.04<br>CFI=.96 | 2 | $\chi^2$ (4) = 5.26, *p*≈ ns<br>RMSEA=.03<br>WRMR=.48<br>CFI=.96 |
| Ethnic Identity | 2 | $\chi^2$ (9) = 26.54, *p*≈.01<br>RMSEA=.03<br>WRMR=.95<br>CFI=.97 | 3 | $\chi^2$ (7) = 9.72, *p*≈ns<br>RMSEA=.03<br>WRMR=.57<br>CFI=.92 |

In looking at the results in table 3.1, first for African Americans one can see that the best-fitting confirmatory factor analysis (CFA) model yielded three hypothesized factors for racial identity: racial centrality, public regard and private regard (χ2 (22) = 89.96, p≈.00, RMSEA=.04, SRMR=.04, CFI=.96). Of the twelve original items included in the CFA, nine were included in the final model with three items loading on each of the three emergent dimensions based on initial CFA modification indices and EFA results (see figure 3.1).

However, in looking at the best fitting model for African Caribbeans, the CFA yielded two factors for racial identity: racial centrality and public regard with private regard remaining unspecified (χ2 (4) = 5.26, p≈ ns, RMSEA=.03, WRMR=.48, CFI=.96). Of the twelve items included in the CFA, seven were included in the final model, with

four items loading on racial centrality and the other three items loading on public regard based on initial CFA modification indices and EFA results (see figure 3.2).

Now looking at the results in table 3.1 for the best fitting CFA models for the concept of ethnic identity, first for African Americans two dimensions of ethnic identity were identified: ethnic attitudes and ethnic behaviors relating to black Americans ($\chi 2$ (9) = 26.54, $p \approx .01$, RMSEA=.03, WRMR=.95, CFI=.97). Out of the 12 items run in the CFA, three items loaded on the ethnic attitudes factor while the other 6 items loaded onto the ethnic behaviors factor based on initial CFA modification indices and EFA results (see figure 3.3). Although they were initially included in the factor analysis two items relating to Caribbean ethnic behaviors failed to load in the model.

In looking at the CFA results of the best fitting model for ethnic identity among African Caribbeans in table 3.1 a relatively similar overall factor pattern emerged, however in addition to ethnic attitudes and ethnic behaviors relating to blackness, the dimension of ethnic behaviors relating to Caribbeans emerged as a separate dimension, yielding three factors ($\chi 2$ (7) = 9.72, $p \approx ns$, RMSEA=.03, WRMR=.57, CFI=.92). Out of the 12 items ran in the CFA, four items loaded on the ethnic attitudes factors, seven items loaded on the ethnic behaviors factor (1), while three items loaded on the other ethnic behaviors factor (2) based on initial CFA modification indices and EFA results (see figure 3.4). Additionally, unlike their African American counterparts, one item loaded on all three dimensions: closeness to Caribbeans (see figure 3.4).

> *Hypothesis 1: There will be sufficient evidence of dimensional variance, whether the instruments used to measure racial identity and ethnic identity do not represent the same number of common factors across groups, between two Black American ethnic groups (African American and African Caribbean).*

*Hypothesis 2: There will be sufficient evidence of configural variance, whether the specific items used to measure racial identity and ethnic identity do not map onto the same common factors across groups, between two Black American ethnic groups (African American and African Caribbean).*

*Hypothesis 3: There will be sufficient evidence to support the claim that Americans of African descent possess a racial identity and ethnic identity that can be measured and has meaning across ethnic groups.*

The best fitting model findings for both groups showed that there was not the same number of common factors identified in measuring racial identity and ethnic identity across ethnicities. Thus, the first hypothesis was sufficiently supported. The best fitting model results also show the instruments used to measure racial identity and ethnic identity do not represent the same number of common factors across the ethnic groups. Thus, there is sufficient evidence to accept the second hypothesis that there is configural variance between African Americans and African Caribbeans. Additionally, there is sufficient evidence to support the third hypothesis based on good model fit statistics and subsequent significant factor loadings between racial identity and ethnic identity factor structures across both groups (see tables 3.4-3.7). These good fitting models support the claim that racial identity and ethnic identity are measurable constructs and more importantly that the constructs do in fact have meaning in the lives of the two ethnic groups.

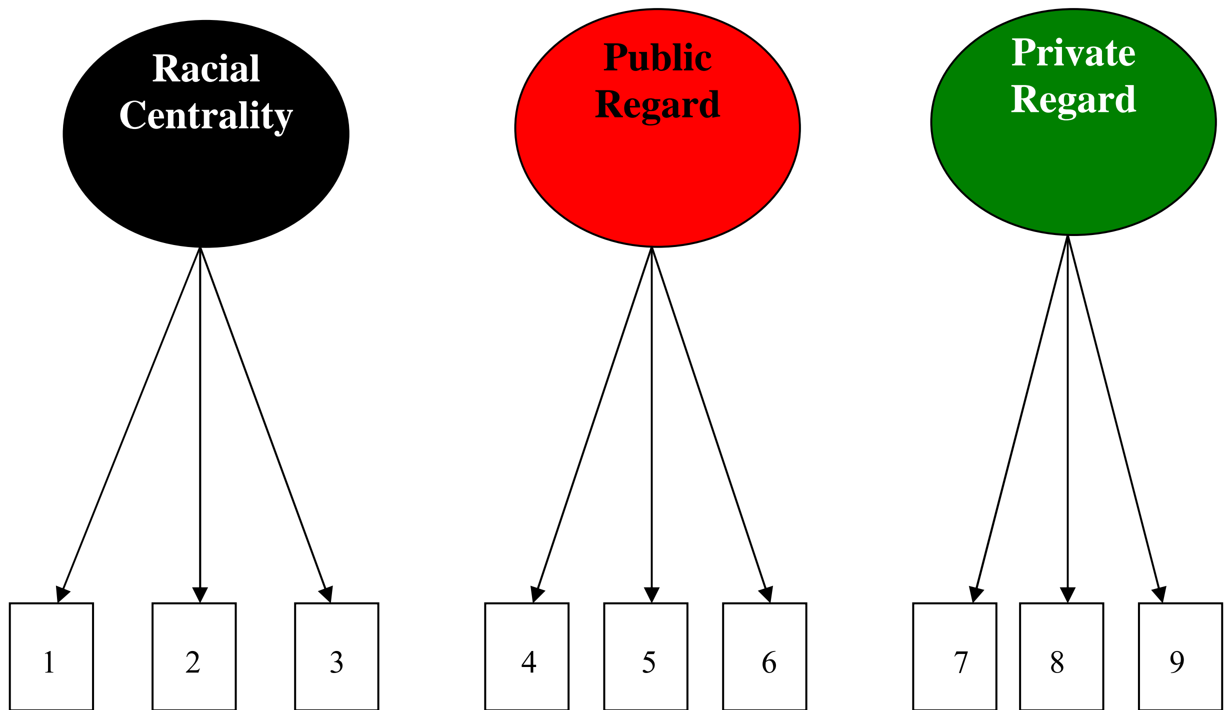


Figure 3.1. CFA pictorial representation of racial identity factors that emerged for African Americans: racial centrality, public regard and private regard

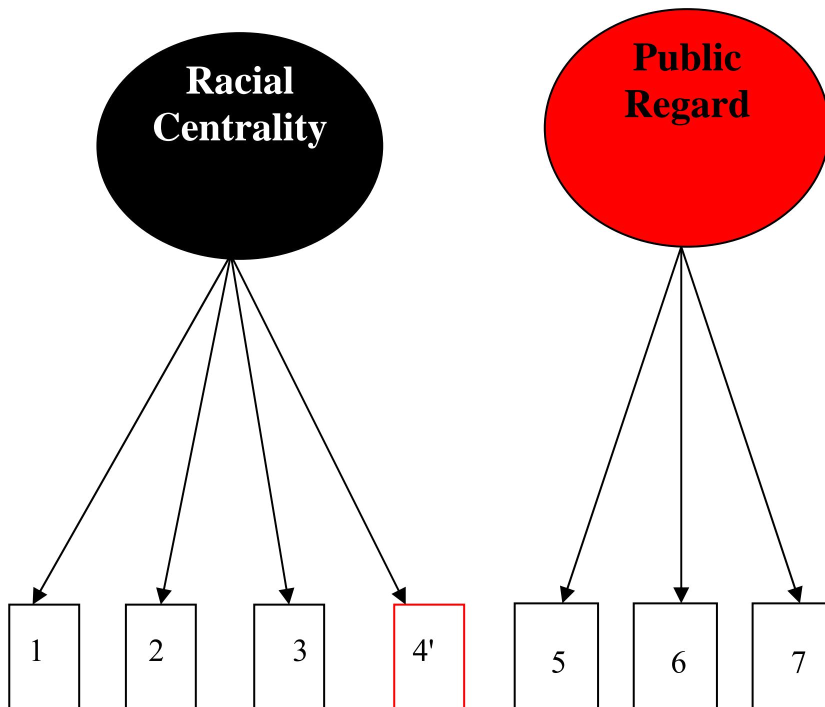


Figure 3.2. CFA pictorial representation of racial identity factors that emerged for African Caribbeans: racial centrality and public regard.

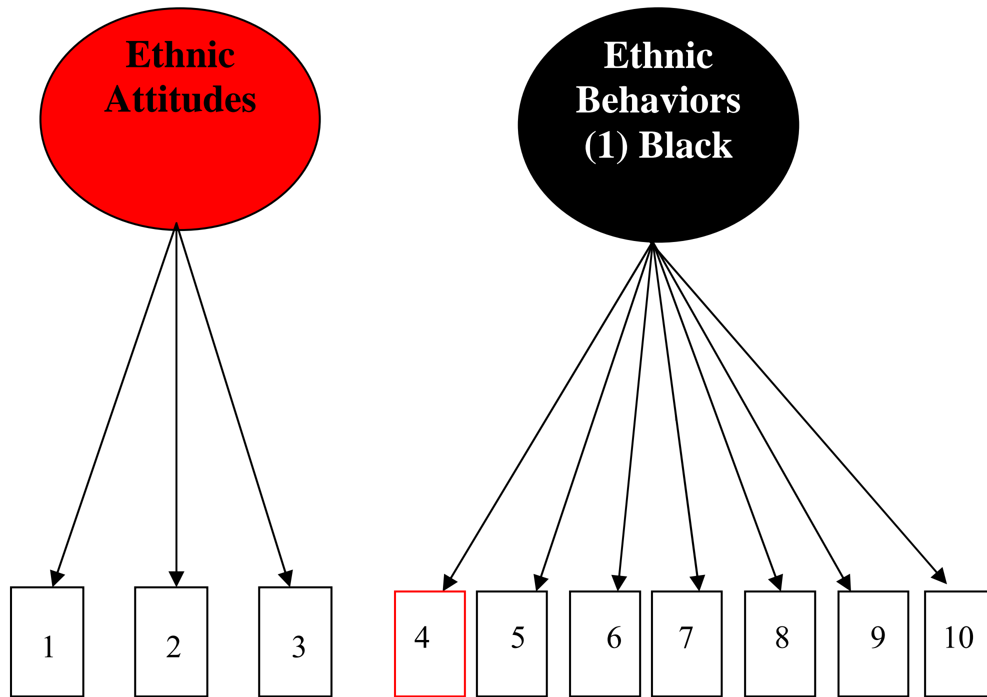


Figure 3.3. CFA pictorial representation of ethnic identity factors that emerged for African Americans: ethnic attitudes and ethnic behaviors relating to Blacks.

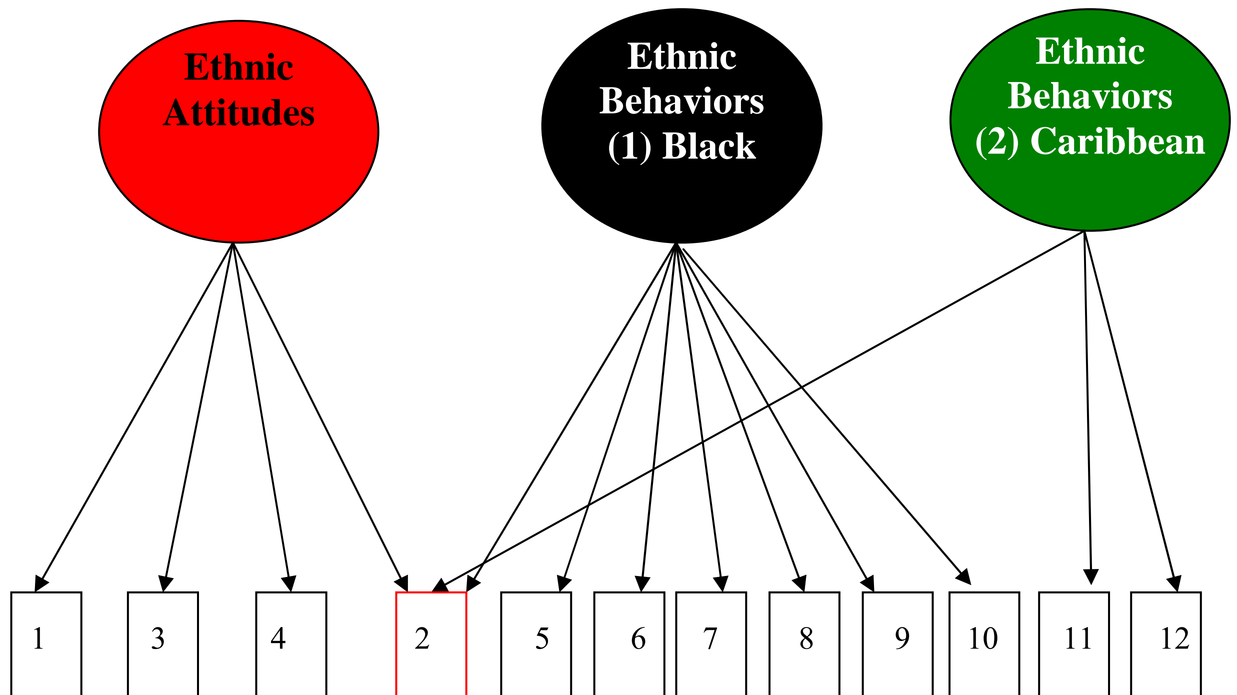


Figure 3.4. CFA pictorial representation of ethnic identity factors that emerged for African Caribbeans: ethnic attitudes, ethnic behaviors relating to Blacks and ethnic behaviors relating to Caribbeans.

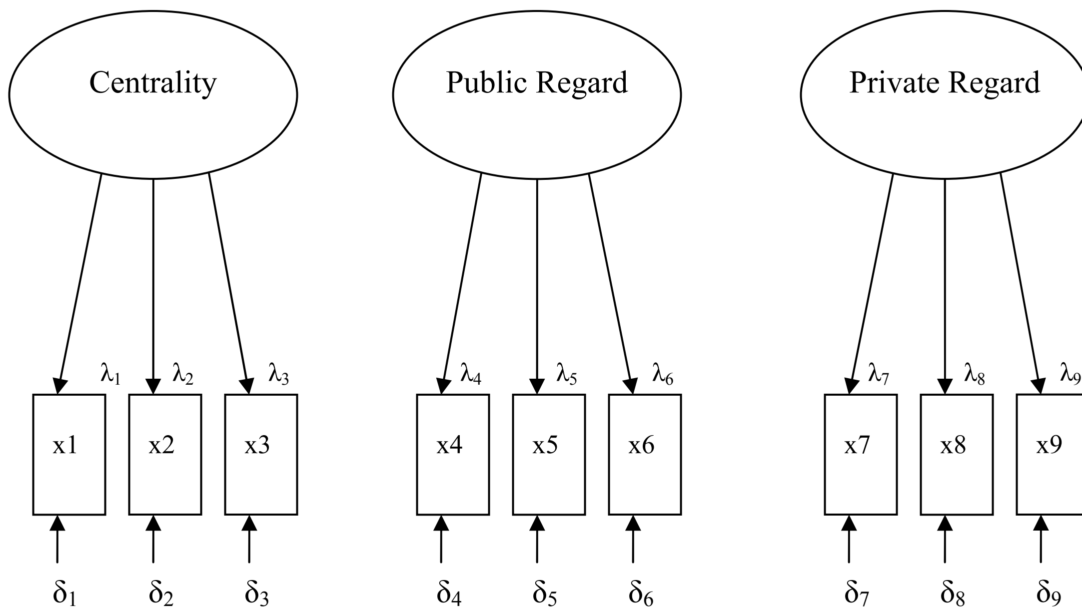


Figure 3.5. CFA model representation of racial identity factors that emerged for African Americans: racial centrality, public regard and private regard (significant loadings bolded)

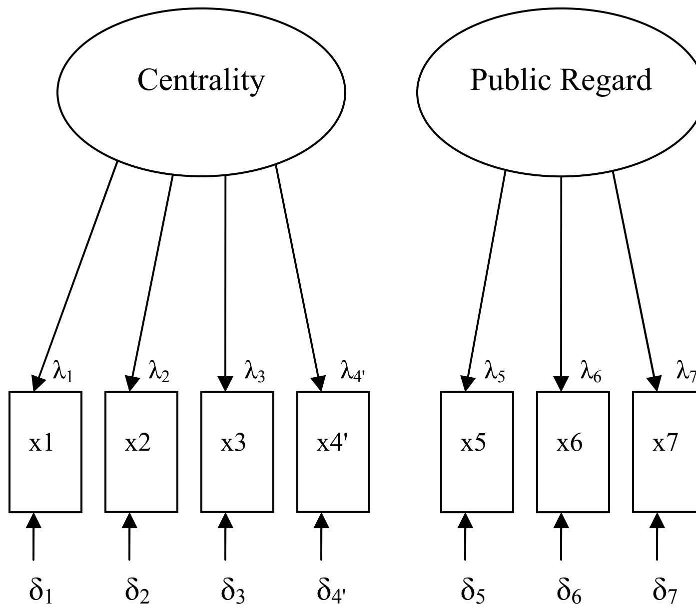


Figure 3.6. CFA model representation of racial identity factors that emerged for African Caribbeans: racial centrality and public regard (significant loadings bolded).

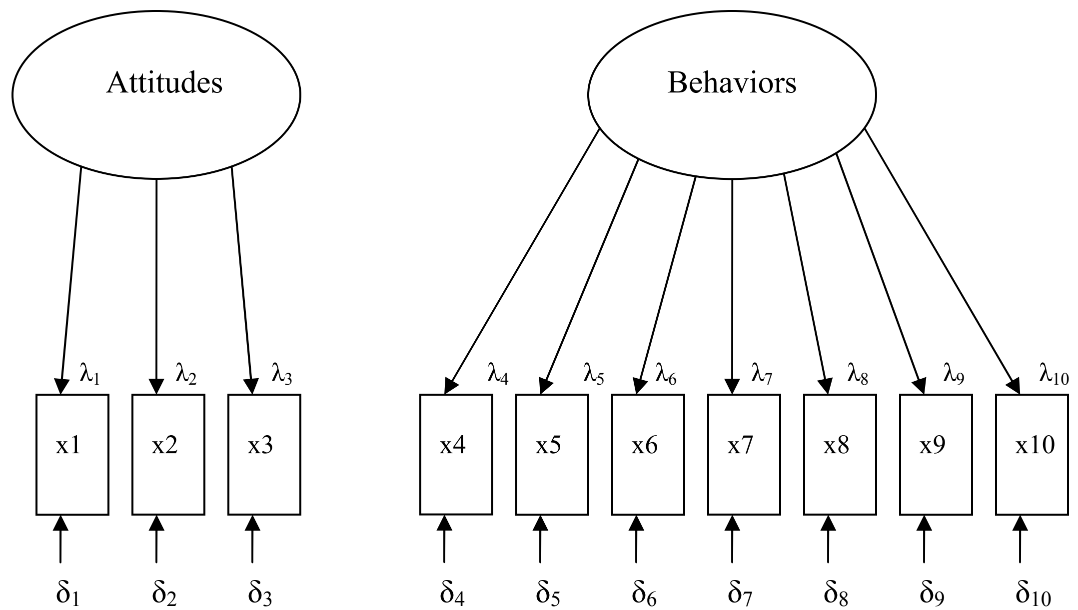


Figure 3.7. CFA model representation of ethnic identity factors that emerged for African Americans: ethnic attitudes and ethnic behaviors relating to Blacks (significant loadings bolded).

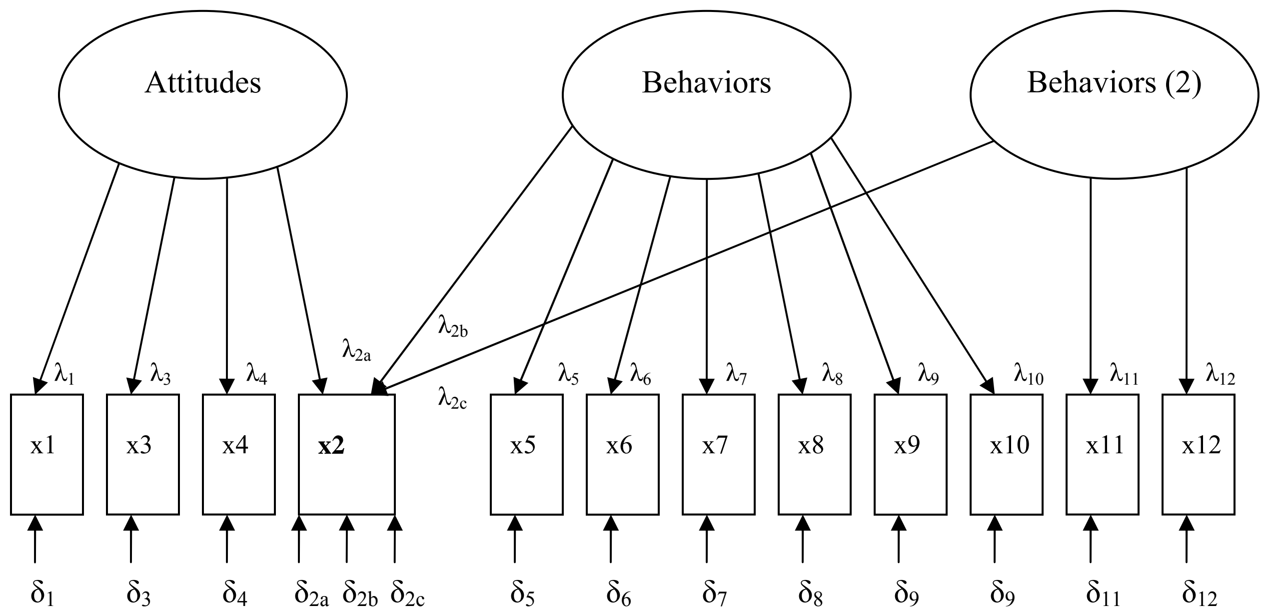


Figure 3.8. CFA pictorial representation of ethnic identity factors that emerged for African Caribbeans: ethnic attitudes, ethnic behaviors relating to Blacks and ethnic behaviors relating to Caribbeans (significant loadings bolded).

Table 3.2. Descriptive Statistics of African American Adult Latent Variable Items

| Variable | Range | M | SE |
|---|---|---|---|
| **Racial Identity** | | | |
| **Racial Centrality** | | | |
| (G22) How often do you think about being Black? [r] | 1-5 | 2.94 | .06 |
| (G24a) Being a Black person is a large part of how I think of myself. [r] | 1-4 | 2.84 | .03 |
| (G24d) What happens in my life is largely the result of what happens to other Black people in this country. [r] | 1-4 | 2.30 | .02 |
| (G24g) I do not feel strongly tied to other Black people. | 1-4 | 2.96 | .03 |
| (G24j) Being Black is not an important part of who I am as a person. | 1-4 | 2.43 | .04 |
| **Private Regard** | | | |
| (G24b) I feel good about other Black people. [r] | 1-4 | 3.37 | .01 |
| (G24e) I am not happy that I am Black. | 1-4 | 3.77 | .01 |
| (G24h) I am proud to be Black. [r] | 1-4 | 3.81 | .01 |
| (G24k) Black people have made important contributions to the development of this country. [r] | 1-4 | 3.79 | .02 |
| **Public Regard** | | | |
| (G24c) White people in this country do not respect Black people. | 1-4 | 2.33 | .03 |
| (G24f) Other racial and ethnic groups in this country are positive about Black people. [r] | 1-4 | 2.23 | .02 |
| (G24i) White people in this country do not think of Black people as important contributors to this country. | 1-4 | 2.15 | .02 |
| (G24l) Other racial and ethnic groups in this country do not think of Blacks as intelligent and competent. | 1-4 | 2.12 | .02 |
| | | | |
| **Ethnic Identity** | | | |
| **Attitudes** | | | |
| (G1G2) 1) People use different words to refer to people whose original ancestors came from Africa. What word best describes what you like to be called? / 2) Which would you say is more important to you--being (response to question 1) or (being American, or are both equally important to you)? | 1-3 | 1.14 | .02 |
| Now I am going to ask you some questions about how close you feel in your ideas and feelings about things to different groups of people. [for G3a,f,g] | | | |
| (G3a) Please tell me if you feel closeness to Blacks (in America). [r] | 1-4 | 3.43 | .03 |
| (G3f) Please tell me if you feel closeness to Black Caribbeans. [r] | 1-4 | 2.64 | .03 |
| (G3g) Please tell me if you feel closeness to Blacks in Africa. [r] | 1-4 | 2.66 | .03 |
| (G11) Do you think what happens generally to Black people in this country will have something to do with what happens in your life? [r] | 1-4 | 1.32 | .04 |

| | | | |
|---|---|---|---|
| **Behaviors** | | | |
| In an average week, how often do you do the following things? [for J11a-J11i] | | | |
| (J11a) How often do you listen to Black radio? | 1-4 | 3.38 | .02 |
| (J11b) Listen to Caribbean radio? | 1-4 | 1.40 | .02 |
| (J11c) Watch Black TV shows? | 1-4 | 3.25 | .03 |
| (J11d) Read Black newspapers? | 1-4 | 2.42 | .03 |
| (J11e) Read Caribbean newspapers? | 1-4 | 1.30 | .02 |
| (J11f) Read Black magazines? | 1-4 | 2.93 | .03 |
| (J11g) Read Black literature? | 1-4 | 2.77 | .03 |
| (J11h) Watch Black movies? | 1-4 | 3.21 | .02 |
| (J11i) Listen to Rap music? | 1-4 | 2.33 | .04 |
| **Coping with Discrimination Strategy** | | | |
| How did you respond to this/these experience(s) [of discrimination]? Please tell me if you did each of the following things. | | %Yes | |
| (G21a) Tried to do something about it. | **Yes/No** | 29 % | -- |
| (G21b) Accepted it as a fact of life. | **Yes/No** | 64 % | -- |
| (G21e) Talked to someone about how you were feeling. | **Yes/No** | 48 % | -- |

Table 3.3. Descriptive Statistics of African Caribbean Adult Latent Variable Items

| Variable | Range | M | SE |
|---|---|---|---|
| **Racial Identity** | | | |
| **Racial Centrality** | | | |
| (G22) How often do you think about being Black? [r] | 1-5 | 2.93 | .22 |
| (G24a) Being a Black person is a large part of how I think of myself. [r] | 1-4 | 2.74 | .13 |
| (G24d) What happens in my life is largely the result of what happens to other Black people in this country. [r] | 1-4 | 2.19 | .07 |
| (G24g) I do not feel strongly tied to other Black people. | 1-4 | 2.83 | .10 |
| (G24j) Being Black is not an important part of who I am as a person. | 1-4 | 2.29 | .14 |
| **Private Regard** | | | |
| (G24b) I feel good about other Black people. [r] | 1-4 | 3.40 | .07 |
| (G24e) I am not happy that I am Black. | 1-4 | 3.82 | .03 |
| (G24h) I am proud to be Black. [r] | 1-4 | 3.84 | .04 |
| (G24k) Black people have made important contributions to the development of this country. [r] | 1-4 | 3.78 | .06 |
| **Public Regard** | | | |
| (G24c) White people in this country do not respect Black people. | 1-4 | 2.35 | .09 |
| (G24f) Other racial and ethnic groups in this country are positive about Black people. [r] | 1-4 | 2.23 | .09 |
| (G24i) White people in this country do not think of Black people as important contributors to this country. | 1-4 | 2.11 | .10 |
| (G24l) Other racial and ethnic groups in this country do not think of Blacks as intelligent and competent. | 1-4 | 2.06 | .06 |
| | | | |
| **Ethnic Identity** | | | |
| **Attitudes** | | | |
| (G1G2) 1) People use different words to refer to people whose original ancestors came from Africa. What word best describes what you like to be called? / 2) Which would you say is more important to you--being (response to question 1) or (being American, or are both equally important to you)? | 1-3 | 1.20 | |
| Now I am going to ask you some questions about how close you feel in your ideas and feelings about things to different groups of people. [for G3a,f,g] | | | |
| (G3a) Please tell me if you feel closeness to Blacks (in America). [r] | 1-4 | 3.26 | .06 |
| (G3f) Please tell me if you feel closeness to Black Caribbeans. [r] | 1-4 | 3.39 | .06 |
| (G3g) Please tell me if you feel closeness to Blacks in Africa. [r] | 1-4 | 2.94 | .06 |
| (G11) Do you think what happens generally to Black people in this country will have something to do with what happens in your life? [r] | 1-4 | 1.36 | .13 |

| | | | |
|---|---|---|---|
| **Behaviors** | | | |
| In an average week, how often do you do the following things? [for J11a-J11i] | | | |
| (J11a) How often do you listen to Black radio? | 1-4 | 3.00 | .07 |
| (J11b) Listen to Caribbean radio? | 1-4 | 2.63 | .07 |
| (J11c) Watch Black TV shows? | 1-4 | 3.04 | .09 |
| (J11d) Read Black newspapers? | 1-4 | 2.28 | .11 |
| (J11e) Read Caribbean newspapers? | 1-4 | 2.36 | .11 |
| (J11f) Read Black magazines? | 1-4 | 2.75 | .08 |
| (J11g) Read Black literature? | 1-4 | 2.58 | .08 |
| (J11h) Watch Black movies? | 1-4 | 2.87 | .09 |
| (J11i) Listen to Rap music? | 1-4 | 2.07 | .14 |
| **Coping with Discrimination Strategy** | | | |
| How did you respond to this/these experience(s) [of discrimination]? Please tell me if you did each of the following things. | | %Yes | |
| (G21a) Tried to do something about it. | **Yes/No** | 30 % | -- |
| (G21b) Accepted it as a fact of life. | **Yes/No** | 61 % | -- |
| (G21e) Talked to someone about how you were feeling. | **Yes/No** | 52 % | -- |

Table 3.4. Factor Loadings and R-Squares for best fitting Confirmatory Factor Model of Racial Identity Variables for African American Adults

| Measure and Variable | Standardized factor loading (λ) | SE (δ) | $R^2$ |
|---|---|---|---|
| **Racial ID** | | | |
| **Centrality** | | | |
| x1 (G24a) Being a Black person is a large part of how I think of myself. | .41*** | .04 | .17 |
| x2 (G22) How often do you think about being Black? | .35*** | .07 | .12 |
| x3 (G24d) What happens in my life is largely the result of what happens to other Black people in this country. | .78*** | .04 | .61 |
| **Public Regard** | | | |
| x4 (G24c) White people in this country do not respect Black people. | .84*** | .02 | .71 |
| x5 (G24i) White people in this country do not think of Black people as important contributors to this country. | .60*** | .03 | .36 |
| x6 (G24l) Other racial and ethnic groups in this country do not think of Blacks as intelligent and competent. | .51*** | .03 | .26 |
| **Private Regard** | | | |
| x7 (G24e) I am not happy that I am Black. | .38*** | .04 | .14 |
| x8 (G24h) I am proud to be Black. | .57*** | .04 | .32 |
| x9 (G24k) Black people have made important contributions to the development of this country. | .36*** | .04 | .13 |

Note: Dashes indicate the standard error was not estimated.

Table 3.5. Factor Loadings and R-Squares for best fitting Confirmatory Factor Model of Racial Identity Variables for African Caribbean Adults

| Measure and Variable | Standardized factor loading (λ) | SE (δ) | $R^2$ |
|---|---|---|---|
| **Racial ID** | | | |
| **Centrality** | | | |
| x1 (G24a) Being a Black person is a large part of how I think of myself. | .68*** | .16 | .46 |
| x2 (G22) How often do you think about being Black? | .46*** | .07 | .21 |
| x3 (G24d) What happens in my life is largely the result of what happens to other Black people in this country. | .60*** | .09 | .36 |
| x4' (G24j) Being Black is not an important part of who I am as a person. | .16 (ns) | .18 | .03 |
| **Public Regard** | | | |
| x5 (G24c) White people in this country do not respect Black people. | .61*** | .07 | .37 |
| x6 (G24i) White people in this country do not think of Black people as important contributors to this country. | .81*** | .11 | .66 |
| x7 (G24l) Other racial and ethnic groups in this country do not think of Blacks as intelligent and competent. | .73*** | .09 | .54 |

Note: Dashes indicate the standard error was not estimated. (') prime symbol denotes different item (in comparison to African American counterparts) loading on factor.

Table 3.6. Factor Loadings and Significance for Confirmatory Factor Model of Ethnic Identity Variables for African American Adults

| Measure and Variable | Standardized factor loading (λ) | SE (δ) | $R^2$ |
|---|---|---|---|
| **Ethnic ID** | | | |
| **Attitudes** | | | |
| x1 (G3a) Please tell me if you feel closeness to Blacks (in America). | 1.00 (ns) | .00 | 1.00 |
| x2 (G3f) Please tell me if you feel closeness to Black Caribbeans. | .36*** | .03 | .16 |
| x3 (G3g) Please tell me if you feel closeness to Blacks in Africa. | .39*** | .03 | .17 |
| **Behaviors** | | | |
| x4 (G1G2) 1) People use different words to refer to people whose original ancestors came from Africa. What word best describes what you like to be called? / 2) Which would you say is more important to you--being (response to question 1) or (being American, or are both equally important to you)? | .13*** | .03 | .02 |
| x5 (J11a) How often do you listen to Black radio? | .59*** | .03 | .35 |
| x6 (J11c) Watch Black TV shows? | .74*** | .02 | .55 |
| x7 (J11d) Read Black newspapers? | .49*** | .03 | .24 |
| x8 (J11f) Read Black magazines? | .65*** | .03 | .42 |
| x9 (J11g) Read Black literature? | .54*** | .03 | .30 |
| x10 (J11h) Watch Black movies? | .83*** | .03 | .70 |

Table 3.7. Factor Loadings and Significance for Confirmatory Factor Model of Ethnic Identity Variables for African Caribbean Adults

| Measure and Variable | Standardized factor loading (λ) | SE (δ) | $R^2$ |
|---|---|---|---|
| **Ethnic Identity** | | | |
| **Attitudes** | | | |
| x1 (G3a) Please tell me if you feel closeness to Blacks (in America). | .76*** | .07 | .57 |
| x2a (G3f) Please tell me if you feel closeness to Black Caribbeans. | .84*** | .09 | .72 |
| x3 (G3g) Please tell me if you feel closeness to Blacks in Africa. | .62*** | .11 | .39 |
| x4 (G1G2) 1) People use different words to refer to people whose original ancestors came from Africa. What word best describes what you like to be called? / 2) Which would you say is more important to you--being (response to question 1) or (being American, or are both equally important to you)? | .12(ns) | .08 | .01 |
| **Behaviors (1)** | | | |
| x2b (G3f) Please tell me if you feel closeness to Black Caribbeans. | -.40*** | .09 | -- |
| x5 (J11a) How often do you listen to Black radio? | .78*** | .16 | .61 |
| x6 (J11c) Watch Black TV shows? | .83*** | .10 | .60 |
| x7 (J11d) Read Black newspapers? | .74*** | .13 | .68 |
| x8 (J11f) Read Black magazines? | .77*** | .12 | .55 |
| x9 (J11g) Read Black literature? | .71*** | .09 | .63 |
| x10 (J11h) Watch Black movies? | .72*** | .09 | .59 |
| **Behaviors (2)** | | | |
| x2c (G3f) Please tell me if you feel closeness to Black Caribbeans. | .13 (ns) | .07 | -- |
| x11 (J11b) Listen to Caribbean radio? | .79*** | .14 | .51 |
| x12 (J11e) Read Caribbean newspapers? | .77*** | .13 | .51 |

Note: Dashes indicate the parameter was not estimated. (a,b,c) denote the same item loading across the subsequent emerging factors.

## Discussion

The results demonstrate that the hypothesized conceptual understandings of racial and ethnic identity in fact differ by ethnicity. Overall, the results show that racial and ethnic identity constructs do in fact have meaning in the lives of African American and African Caribbean adults. Moreover the results indicate that the way that African Americans relate to race and ethnicity as dimensions of their identity vary from their African Caribbean counterparts. Specifically racial identity dimensions may be of different importance to the two ethnic groups in this study sample. These results speak to ethnic differences in how Americans of African descent relate to Blackness as a socially defining characteristic. The results on the dimensionality of racial identity specifically show that African Americans and African Caribbeans have similar understandings of the overall importance or centrality of race in their life. Similarly, along the dimension of racial public regard or beliefs about how other racial groups perceive Blacks both ethnic group show corresponding values. However, when looking at the dimension of private regard or how one feels about Blacks on a personal level the intraracial comparison is more dissimilar. This is to say that African Americans in this sample may possess a stronger sense of pride in their Black American social category designation, or at least express it differently. This makes sense because the conceptualization of the MMRI and the MIBI subscales were developed for use on native born African Americans. This study represents a novel attempt at exploring racial identity within African Caribbeans, given the fact that the MIBI was developed on African Americans. It is understandable that African Caribbeans in this sample may not think about pride in their group membership from a racial perspective per say. In the Caribbean blackness is not a minority

characteristic in the same vain as it is in the U.S. social order. Thus it makes sense that even after immigration and subsequent generations of African Caribbeans being born and raised in the U.S. for members of this ethnic group to place more importance on their ethnic expressions of the self in comparison to racial expressions of themselves, especially concerning the inner driven social dimension of racial identity in question, private regard. Although there may be reason to suspect African Caribbeans to have feelings of disassociation with other Blacks in the U.S. these data to do not speak to this possibility beyond conjecture. These suggestions should be tempered by the fact that the items and scales used were not developed specifically for use within Black American immigrant populations such as African Caribbeans as well as an inability to validate these results over time and across multiple samples.

A similar intraracial dissimilarity occurs when comparing the results for the dimensions of ethnic identity examined in the preceding analyses. African Americans exhibited a two dimensional pattern for ethnic identity distinguished by the concepts of ethnic behaviors ad ethnic attitudes. Whereas, African Caribbeans exhibited three dimensions with the dimension of Caribbean specific ethnic behaviors delineating from the factor analysis including the two dimensions described for their African American counterparts. Again these results demarcate two different factor patterns between these intraracial ethnic groups for ethnic identity. They point to a possible additional or supplementing component of ethnic identity that is very group specific and may point to the distinguishing sociocultural factors that are often sought through less sophisticated applications of race and ethnicity as cultural proxies. Again these suggestions should be

tempered due to newness of the items and scales used to measure ethnic identity as well as an inability to validate these results over time and across multiple samples.

Overall these results offer an important step in lending support to the claim that intraracial and interethnic heterogeneity is apparent when looking at the multidimensional, multifaceted and complex social identities that Americans of African descent possess. They suggest that African Caribbeans perhaps have a relatively different concept of how they may view their Blackness as well as their ethnic specific identity in terms of the meaning the two constructs have as being a personally defining characteristic in comparison to their African American counterparts in this sample. The implications of these findings is that they begin to validate the difficulty in assuming racial and ethnic categories accurately capture true population variation at a social level that reflects an individuals understanding and subsequent psychological correlates. There is sufficient evidence to support the claim that Americans of African descent possess (an individual and group) racial and ethnic identity that can be measured and has meaning across ethnic groups. This adds credence to the belief that in order to understand how racial identity and ethnic identity may inform a sociocultural model of stress and coping for Black Americans separate ethnicity models should be employed. Lastly, these results point to the need to retool, refine and reconfigure some of the conceptualizations and measurement tools used to define minority identity as they apply to Americans of African descent broadly.

Research has shown that race and its compliment ethnicity remain key determinants of differences in population health in the United States (Anderson & Jackson, 1987; Bhopal, 2007; Brown, Sellers, Brown, & Jackson, 1999; Ford & Kelly,

2005; Hahn & Stroup, 1994; LaVeist, 2002; Mays et al., 2003). Notably this research has found a persistent disadvantage for groups of color, although there has been confounding evidence when looking at intraracial counterparts (Bhopal, 2007; Ford & Kelly, 2005; Hahn & Stroup, 1994; Lopez, 2003). Also since the decision of the federal government to change how race and ethnicity were measured on the census, there has been cause for concern (Lopez, 2003; Mays et al., 2003; Williams & Jackson, 2000). One major concern was with the ability to identify as multiracial or multiethnic, it was feared that 'true' population health differences may become muted. This fact is apparent as more and more Americans are multi-ethnic and multiracial the persistence of the 'one drop' rule that was most appropriately used to justify the categorization of Black to anyone who appeared to have any phenotypic expression of being African descended. As immigration both legal and illegal becomes an increasing concern for majority group members in the United States the Hispanic ethnic categorization that seemingly supersedes any racial categorization has drawn more attention (Alba, Rumbaut, & Marotz, 2005). Although the Hispanic ethnic category has grown to become the largest American minority group, a position historically held by African Americans, there is evidence that there are great interethnic differences within this population that goes beyond simple census categories as well. What is also apparent by comparing Hispanics to Black Americans is that racialized stress seems to affect Blacks to the most detriment (Utsey, Chae, Brown, & Kelly, 2002). As many African descended immigrants groups are increasingly migrating to the United States a similar intraracial phenomena is going on within the Black or African American racial category as measured by the census. The Black American case offers an illumination of potential confounding from under or over estimated effects of

intraracial and/or interethnic variability Black Americans will be the focus of the proposed research.

## References

Adebimpe, V. R. (2003). Constraints on the Validity of Black/White Differences in Epidemiologic Measurements. Journal of the National Medical Association, 95(8), 743-745.

Agyemang, C., Bhopal, R., & Bruijnzeels, M. (2005). Negro, Black, Black African, African Caribbean, African American or what? Labelling African origin populations in the health arena in the 21st century. Journal of Epidemiology & Community Health, 59(12), 1014-1018.

Alba, R., Rumbaut, R. n. G., & Marotz, K. (2005). A Distorted Nation: Perceptions of Racial/Ethnic Group Sizes and Attitudes Toward Immigrants and Other Minorities. Social Forces, 84(2), 901-909.

Allen, R. L., & Bagozzi, R. P. (2001). Consequences of the Black sense of self. Journal of Black Psychology, 27(1), 3-28.

Anderson, N. B., & Jackson, J. S. (1987). Race, ethnicity, and health psychology: The example of essential hypertension. In Health psychology: A discipline and a profession (pp. 264-283). Chicago, IL, US: The University of Chicago Press.

Anglin, D. M., & Whaley, A. L. (2006). Racial/Ethnic Self-Labeling in Relation to Group: Socialization and Identity in African-Descended Individuals. Journal of Language and Social Psychology, 25(4), 457-463.

Baldwin, J. A., & Bell, Y. R. (1985). The African self-consciousness scale: An Africentric personality questionnaire. Western Journal of Black Studies, 9(2), 61-68.

Baldwin, J. A., Duncan, J. A., & Bell, Y. R. (1987). Assessment of African self-consciousness among Black students from two college environments. Journal of Black Psychology, 13(2), 27-41.

Belgrave, F. Z., & Allison, K. W. (Eds.). (2006). African American Psychology: From Africa to America. Thousand Oaks, CA: Sage Publications.

Bentler, P. M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107, 238-246.

Bhopal, R. S. (2004). Glossary of terms relating to ethnicity and race: For reflection and debate. Journal of Epidemiology & Community Health, 58(6), 441-445.

Bhopal, R. S. (2007). Ethnicity, race, and health in multicultural societies: Foundations for better epidemiology, public health, and health care. New York, NY, US: Oxford University Press.

Bollen, K. (1989). Structural equation modeling with latent variables. New York: John Wiley.

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. Journal of Personality & Social Psychology, 77(1), 135-149.

Brown, T. N., Sellers, S. L., Brown, K. T., & Jackson, J. S. (1999). Race, ethnicity, and culture in the sociology of mental health. In Handbook of sociology of mental health (pp. 167-182 Handbook of sociology and social research.). New York, NY, US: Kluwer Academic/Plenum Publishers.

Byrne, B. M. (1998). Structural equationn modeling with LISREL, PRELIS and SIMPLIS: Basic concepts, applications and programming. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Cokley, K. O. (2005). Racial(ized) Identity, Ethnic Identity, and Afrocentric Values: Conceptual and Methodological Challenges in Understanding African American Identity. Journal of Counseling Psychology, 52(4), 517-526.

Cross, W. E. (1991). Shades of black: Diversity in African-American identity. Philadelphia, PA, US: Temple University Press.

Cross, W. E. (1995). The psychology of nigrescence: Revising the Cross model. In Handbook of multicultural counseling (pp. 93-122). Thousand Oaks, CA, US: Sage Publications, Inc.

Ford, M. E., & Kelly, P. A. (2005). Conceptualizing and Categorizing Race and Ethnicity in Health Services Research. Health Services Research, 40(5), 1658-1675.

Gregorich, S. E. (2006). Do self-report instruments allow meaningful comparisons across diverse population groups? Testing measurement invariance using the confirmatory factor analysis framework. Medical Care, 44(11), 78-94.

Hahn, R. A., & Stroup, D. F. (1994). Race and ethnicity in public health surveillance: criteria for the scientific use of social categories. Public Health Reports, 109(1), 7-15.

Helms, J. E., Jernigan, M., & Mascher, J. (2005). The Meaning of Race in Psychology and How to Change It: A Methodological Perspective. American Psychologist, 60(1), 27-36.

Jackson, J. S., McCullough, W. R., Gurin, G., & Broman, C. L. (1991). Race identity. In Life in black America (pp. 238-253). Thousand Oaks, CA, US: Sage Publications, Inc.

LaVeist, T. A. (1994). Beyond dummy variables and sample selection: what health services researchers ought to know about race as variable. Health Services Research, v29(1), 1-16.

LaVeist, T. A. (Ed.). (2002). Race, Ethnicity, and Health: A Public Health Reader (1st ed.). San Francisco, CA: Jossey-Bass.

Lewin, K. (1948). Resolving social conflicts. New York: Harper.

Lopez, A. M. (2003). Collecting and tabulating race/ethnicity data with diverse and mixed heritage populations: A case-study with US high school students. Ethnic and Racial Studies, 26(5), 931-961.

Mays, V. M., Ponce, N. A., Washington, D. L., & Cochran, S. D. (2003). Classification of race and ethnicity: implications for public health. Annual Review of Public Health, 24, 83-110.

Muthen, B. O., & Satorra, A. (1995). Complex sample data in stuctural equation modeling. Sociological Methodology, 25, 267-316.

Muthen, L. K., & Muthen, B. O. (1998-2007). Mplus User's Guide: Statistical analysis with latent variables (4.2 ed.): Muthen & Muthen.

Neighbors, H. W., Njai, R., & Jackson, J. S. (2007). Race, ethnicity, John Henryism, and depressive symptoms: The national survey of American life adult reinterview. Research in Human Development, 4(1&2), 71-87.

Okazaki, S., Sue, S., & Kazdin, A. E. (2003). Methodological issues in assessment research with ethnic minorities. Washington, DC, US: American Psychological Association.

Perreira, K. M., Deeb-Sossa, N., Harris, K. M., & Bollen, K. (2005). What Are We Measuring? An Evaluation of the CES-D Across Race/Ethnicity and Immigrant Generation. Social Forces, 83(4), 1567-1602.
Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. Psychological Bulletin, 108(3), 499-514.
Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. Journal of Adolescent Research, 7(2), 156-176.
Phinney, J. S. (2000). Ethnic and racial identity: Ethnic identity. 254-259.
Phinney, J. S., Kohatsu, E. L., Schulenberg, J., Maggs, J. L., & Hurrelmann, K. (1997). Ethnic and racial identity development and mental health. New York, NY, US: Cambridge University Press.
Phinney, J. S., Lochner, B. T., & Murphy, R. (1990). Ethnic identity development and psychological adjustment in adolescence. In Ethnic issues in adolescent mental health (pp. 53-72). Thousand Oaks, CA, US: Sage Publications, Inc.
Sellers, R. M. (1993). A call to arms for researchers studying racial identity. Journal of Black Psychology, 19(3), US Sage Publications Inc; 1993, 1327-1332.
Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress among African American Young Adults. Journal of Health and Social Behavior, 43(3), 302-317.
Sellers, R. M., Chavous, T. M., & Cooke, D. Y. (1998). Racial ideology and racial centrality as predictors of African American college students' academic performance. Journal of Black Psychology, 24(1), US Sage Publications Inc; 1998, 1998-1927.
Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. H. (2006). Racial Identity Matters: The Relationship between Racial Discrimination and Psychological Functioning in African American Adolescents. Journal of Research on Adolescence, 16(2), 187-216.
Sellers, R. M., Rowley, S. J., Chavous, T. M., Shelton, N. J., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and constuct validity. Journal of Personality & Social Psychology, 73(4), US American Psychological Assn.; 1997, 1805-1815.
Sellers, R. M., Smith, M., Shelton, N., Rowley, S., & Chavous, T. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. Personality & Social Psychology Review, 2(1), 18-39.
Sigelman, L., Tuch, S. A., & Martin, J. K. (2005). What's in a Name? Preference for 'Black' versus 'African-American' among Americans of African Descent. Public Opinion Quarterly, 69(3), 429-438.
Stephan, C. W., & Stephan, W. G. (2000). The measurement of racial and ethnic identity. International Journal of Intercultural Relations, 24(5), 541-552.
Stephenson, E., & Chin, J. L. (2004). The African Diaspora and culture-based coping strategies. Westport, CT, US: Praeger Publishers/Greenwood Publishing Group.
Tajfel, H. (1978). The social psychology of minorities New York: Minority Rights Group.

Utsey, S. O., Chae, M. H., Brown, C. F., & Kelly, D. (2002). Effect of ethnic group membership on ethnic identity, race-related stress and quality of life. Cultural Diversity & Ethnic Minority Psychology, 8(4), 366-377.

Williams, D. R. (2005). Race/Ethnicity and Socioeconomic Status: Measurement and Methodological Issues. In N. Krieger (Ed.), Embodying Inequality: Epidemiologic perspectives (pp. 159-181). Amityville, NY: Baywood Publishing Company.

Williams, D. R., Haile, R., GonzÃlez, H., Neighbors, H., Baser, R. E., & Jackson, J. S. (2007). The Mental health of Black Caribbean immigrants: Results from the National Survey of American Life. American Journal of Public Health, 97(1), 52-59.

Williams, D. R., & Jackson, J. S. (2000). Race/ethnicity and the 2000 census: recommendations for African American and other Black populations in the United States. American Journal of Public Health, 90(11), 1728-1730.

# CHAPTER IV

# AN EVALUATION OF SOCIOCULTURAL STRESS AND COPING: BLACK AMERICAN SOCIAL IDENTITIES AS MEDIATORS FOR ADAPTIVE COPING

## Introduction

Current trends show that over 2.8 million immigrants from the Caribbean countries reside in the U.S., many in the metropolitan areas of New York and Miami (Levitt & Waters, 2002; Waters, 2001). Qualitative and quantitative studies of racial and ethnic differences in health outcomes have revealed somewhat paradoxical findings among English-speaking Black Caribbean[3] immigrants in the U.S. compared to their African American and White counterparts (Waters, 1994; Williams & Rucker, 1996). Notably findings have shown African Caribbean immigrants have better physical and mental health than African Americans and comparable health to their White counterparts even when controlling for socioeconomic indicators. This health advantage has been posited to disappear in subsequent generations as African Caribbeans seemingly become more African American and exposed to more racially noxious environments (Williams, Haile et al., 2007).

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[3] When discussing native Black (African-) American and Black Caribbean adolescents/adults of African Descent as a combined group, they will be referred to synonymously as 'Black;' in order to acknowledge how they are viewed by a color-conscious society. Additionally, because the English-speaking Caribbeans are of African descent, henceforth they will be referred to as 'African Caribbeans' and the former 'African American.'

This chapter examines how accurate measurement of race and ethnicity may help to inform a sociocultural model of stress and coping among Black Americans (LaVeist, 1994). First, the current study attempts to describe intricacies of establishing a precise measurement of how Black Americans relate to a self determined conceptualization of their minority group identity (Stephan & Stephan, 2000). Additionally, this study aims to further understanding of the complexities of Black Americans' experience with racial discrimination and the subsequent mental health consequences. Of particular interest is how self determined notions of race and ethnicity, as measured by the constructs of racial identity and ethnic identity, may relate to adaptive coping with interpersonal experiences of perceived racial discrimination. Racial and ethnic identity have both been found to be independent protective factors for psychological well being and mental health in the context of racial discrimination (Phinney, 1990; Sellers & Shelton, 2003; Waters, 1999). Racial and ethnic identity represent personal resources that may mediate the effects of life stressors on adaptive coping strategies and subsequent depression (Holahan & Moos, 1991). Furthermore, adaptive coping has been hypothesized to have mediating effects on the relationship between discrimination and mental health for Black Americans (Jackson et al., 1991). The current study pursues the notion that racial and ethnic identity are unique sociocultural resources that Black Americans may use to modify detrimental lifetime exposure to racially attributed discrimination, by relating to increased adaptive coping methods and reductions in subsequent depressive symptom expression.

This study "conceives African American culture as a template for organizing, interpreting, and understanding social experience and making sense of the world" (p.187) (Sellers, Smith et al., 1998). To this end, Black American racial identity and ethnic

identity are being used as direct and related proxies of these ideals (Phinney, 1990; Sellers, Smith et al., 1998). Specifically, racial identity is conceptualized as by and large an externally driven social identity, while ethnic identity is conceptualized as largely an internally driven social identity. Furthermore, by including African Caribbeans, this study adds to the current literature on stress and coping by distinguishing the impact of intraracial and interethnic variations in the meaning of race and ethnicity (via the concepts of racial and ethnic identity) within the Black American racial label. The development of a distinctively informed sociocultural model of stress and coping is anticipated.

## Review of the Literature

### Race, Discrimination, Identity and the Stress Process

The concept of race, a social construct, has been used increasingly in health research as a social grouping variable representing varying exposures to risk and health promoting factors (LaVeist, 2005a). Although conceptualizations and uses of the term vary, it is typically used as a ‘proxy measure for unmeasured biological, socioeconomic, and/or sociocultural factors’ (p.322)(Williams, 1997). Race is generally viewed as reflecting some phenotypic expression (i.e. skin color) of genetic variation among different (seemingly homogenous) ethnic subgroups (LaVeist, 2005a). Used in the context of stress, race may be useful in understanding behavior and physiological responses to psychosocial stress as they relate to racial and ethnic health disparities (Neighbors, 1991; Williams, 1997). In the U.S. racial variations in health have often been simplified to a Black/White health difference comparison, and as such most of the examples provided from the racialized stress literature focus on African Americans.

Accurate measurement of race and ethnicity, as well as identified covariates of these concepts should help paint a clearer picture of factors that mediate stress. Using the combination approach of conceptualizing and measuring race effects on stress differentials, as opposed to the separation approach, more accurately accounts for the true complexity of a racist encounter within its context (Avison & Gottlieb, 1994). The combination approach allows for the study of the specific lifetime stressor (i.e. discrimination), relevant coping and depressive symptoms within the same context and temporal order. An alternative view would be to study separately the stressor, coping methods, and health outcome differences by group. Some may argue that the effects of unfair treatment on stress differentials independent of race should be measured, followed by measurement of the effects of race on stress differentials independent of discrimination. The combination approach used in the current study combines the measurement of the stressor with the conceptual variables of stress exposure (i.e. racial discrimination), effect modifiers (i.e. racial and ethnic identity), within the context of the coping and the outcome of interest (i.e. depressive symptoms). Disadvantages of this application include confounding measurement of the stressor and context. Nevertheless, the inclusion of race in the stress process model allows for greater empirical examination of proximal and distal causes of racial health disparities related to stress. Using the combination approach existing literature has consistently shown that there is a relationship between stress and social class (with a lower class standing adding to stress) for African Americans (House & Williams, 2000; Williams et al., 1997).

Race is often equated with exposure to social risk factors such as discrimination, segregation and stress (LaVeist, 2005a; Massey & Fischer, 2000). In a recent review,

racial discrimination was found to be positively associated with increased levels of psychological distress, decreases in self esteem and poorer overall physical and mental health (Williams et al., 2003). Racial discrimination has been and will continue to be a key determinant in health disparities for African Americans and other populations of color, primarily as a stress predictor and secondarily by its myriad of effects on the stress process variables such as perceptions of the self and the in-group.

### STRESS, ETHNICITY, IDENTITY, AND MENTAL HEALTH

A heightened level of stress as a result of psychosocial and economic disadvantage can result in 'allostatic load' that can be detrimental to mental and physical health outcomes (Schulz & Northridge, 2004). Furthermore allostatic load may be dependent on a host of stress mediators that effect exposure, responses and outcomes to stress (McEwen, 1998; McEwen & Lasley, 2002; McEwen & Seeman, 1999). This idea is relevant to this study's aim of distinguishing malleable identity characteristics that both African Americans and their African Caribbeans counterparts bring to a racist encounter.

Furthermore as the inescapable position of being Black in America is assumed for African Caribbeans, a cascade of stress that ensues may become unpreventable. When this racially explicit discrimination becomes chronic and is coupled by an inability to escape structural hindrances, high effort coping in the face of chronic stressors will take its physical toll on the individual's physical and mental health (James, 1994). "John Henryism," a synonym for such coping efforts, is defined as a "behavioral predisposition" that many African Americans acquire (James, 1994). The cultural value that one ascribes to this individual coping effort typically persists regardless of the likelihood of attaining social and economic mobility, and may be dependent on realizing

the presence (or absence) of racism. The social hurdles and health risks imposed by blackness seem to transcend ethnicity and social class. African Caribbeans may achieve a position of relative advantage economically and socially compared to their African American counterparts, but will eventually assimilate to African Americans' health profile through a race conscious understanding of self and experiences of unfair treatment due to their blackness (Williams, Haile et al., 2007).

Although sociological research has suggested that a strong ethnic identity, in this case specifically a Caribbean identity, may be protective with regards to economic well-being and experiences of discrimination, there has been scant epidemiologic research on ethnic identity, racial identity and mental health (Hall & Carter, 2006; Waters, 1994). A secondary analysis of Britain's Fourth National Survey of Ethnic Minorities (1993-94) published in 2002, however, analyzed the relationship between Caribbean ethnic identity, measured along five dimensions (nationality, ethnicity/race, traditional, community participation, membership in a racialized group), and self-reported health (Karlsen & Nazroo, 2002). The study found that the "importance of nationality in a self-description," and the "degree of racialization" were significantly associated with better health statuses among Caribbeans. To explain these findings, researchers suggested that ethnicity is related to health through associated experiences of racialization and class, rather than through experiences associated with personal identification (Karlsen & Nazroo, 2002).

Another line of research highlights the dynamic features of Black racial identity, particularly exploring whether collective commitments to the in-group derive more from in-group or inter-group aspects of group identity (Jackson et al., 1991). The National Survey of Black Americans found that individuals socialized with positive group

messages about being Black were more likely to be infused with greater collective orientations (Neighbors, Jackson, Broman, & Thompson, 1996). Thus a positive Black identity, or view of one's self, may make one more adept at calling on the coping and social support networks of 'in-group' (racial and/or ethnic) members in the face of a common stressor.

RACIAL IDENTITY PERSPECTIVES

The Multidimensional Model of Racial Identity (MMRI) amalgamates Black American racial identity into a multifaceted conceptualization of the self in relation to the psychosocial meaning of blackness (Sellers, Smith et al., 1998). This conceptualization is distinct in its multidimensionality and contextual specificity from other similar psychological well being measures. The operationalization of the MMRI is carried out using the Multidimensional Inventory of Black Identity (MIBI) with context specific summary scores that do not distinguish positive or negative identities, and are independent of the health outcome. The MMRI is grounded by the premise that racial identity is more than simply a reaction against racism (Sellers, Smith et al., 1998). The MMRI and the operational MIBI addresses two questions: What significance does the individual place on race in defining oneself? How does the individual define what it means to be Black? This approach is valued as it encompasses not only a social component (independent of the self) to define a black social identity but also takes into account individual definitions of self rather than simply the identity society ascribes to a sense of group belonging.

In this way the MIBI captures Black identity across four dimensions: salience, centrality, regard, and ideology (Sellers et al., 1997). Salience refers to the overall

relevance of race in one's life while centrality relates to how central a role being black plays in one's life. Regard speaks to the consideration of blackness in attitudes about individuals in one's own group (private regard) as well as the consideration of blackness in attitudes one feels others outside the group ascribes (public regard). Lastly, ideology deals with sociopolitical orientations relating to Black group solidarity. Consistent with MMRI conceptualization, in relation to discrimination and mental health the more relevant aspects of racial identity typically found are centrality (both a normative definition in terms of self concept as well as cross-situationally consistent), "how you normally define yourself with respect to race" and public regard, how one thinks outside group members view Blacks (Caldwell et al., 2004; Sellers et al., 2003; Sellers et al., 2006; Sellers & Shelton, 2003). It is also important to note that this theory was conceptualized from a native (not immigrant) Black American perspective, taking into account a historically Black American experience (Sellers et al., 2006). Thus the MMRI was not conceived with Black American immigrant groups, such as African Caribbeans, in mind and thus the MIBI was not created to be used with this group. However, because African Caribbeans are often labeled simply as Black in America it is a logical first step to attempt to view their racial identity from an African American perspective in the absence of better conceptualizations and measurement tools.

Previous research on African American racial identity, and to a lesser degree ethnic identity, has been the product of two different approaches. The mainstream approach has primarily acknowledged 'universal' properties associated with ethnic and racial identities. The Multi-group Ethnic Identity Measure (MEIM) represents this approach as it aims to account for variations in ethnic group belonging between ethnic

groups (Phinney, 1992). Conversely, a less accepted approach has focused on illuminating the qualitative meaning of being African American, with an emphasis on the unique cultural and historical experiences of African Americans. Scales that focused on Africentric personality characteristics among all peoples of African descent such as the African Self Consciousness Scale offer an example of a culturally specific application of personality measurement (Baldwin & Bell, 1985). The MMRI represents a synergy of the strengths of these 2 approaches (Sellers et al., 1998). Although the MMRI was not developed to account for immigrant specific conceptualizations of blackness, it does offer an opportunity to measure how Black immigrants diverge or converge on dimensions of blackness from a (native) African American black conceptualization of self.

### Coping Responses

The stress and coping paradigm underscores the importance of coping to the stress process model (Lazarus & Folkman, 1991; Monat & Lazarus, 1991; Moos, 1997b). Coping is simply defined as actions that individuals engage as they attempt to resist or alleviate the deleterious and noxious stressors in life (Pearlin & Schooler, 1978). Coping responses 'represent some of the things people *do*, in their concrete efforts to deal with life strains they encounter in different roles' (Pearlin & Schooler, 1978) [p.3]. There are two ways to classify coping responses in the context of appraisals: 1) primary appraisals or effective damage reports that attempt to understand the threat of the stressor (direct confrontation) in order to engage direct coping methods and; 2) secondary appraisals that may elicit indirect coping strategies that avoid dealing with the stressor head on (Lazarus, Folkman, Monat, & Lazarus, 1991). There is another two-fold split in terminology when looking at secondary appraisals; problem focused coping strategies, that are enlisted

typically when the stressor is perceived as controllable; and emotion focused coping employed when the stressor is appraised as being immutable (Lazarus & Folkman, 1991; Pearlin & Schooler, 1978). Given this, it is expected that given an appraisal of a racial or ethnic discriminatory event, initial experiences would engage primary appraisals that focus on direct confrontations, while over time chronic experiences may cause secondary appraisals focusing on emotion to become more prominent.

The literature on coping has successfully established that coping is situational (Krause, 2001; Moos, 1997a; Pearlin & Schooler, 1978). Pearlin affectionately refers to coping responses as ‘repertoires’ that change and are in flux due to contextual differences perceived across stressful situations. Although it may appear that ‘decisions’ are actually made to cope, it is more of a reflex action as the mind and body in time becomes conditioned to the contextual cues of some stressors that are routine.

The need to accurately identify and measure specific coping responses still exists within the literature. This is important to consider when attempting to link coping responses with contextual stressors (Pearlin, 1996). Pearlin states that much of the literature does not account for the fact that coping responses may be guided by ‘anticipated acceptance by others with whom one is in interaction.’ Pearlin posits, given that individuals will generally intervene on a stressor in order to make a positive impact, there may be reasonable and differential limits to the stress ameliorating effects of coping efforts (Pearlin, 1996). This is to say that an individuals’ coping efforts may be more effective in dealing with interpersonal problems within informal networks as opposed to more formal networks (Krieger, Sidney, & Coakley, 1998) . Thus the coping literature

has room to make gains in determining how specific coping responses are elicited given varying stressors.

Coping with stress is a complex process, grounded in appraisal (evaluation of the stressor) followed by the selection of a plan of action against the stressor (coping response). In the current context, it may also be informative to look at how observed life events, chronic life strains, self concepts, coping and social supports come together to form a process of (racialized) stress (Lazarus, 1992). These exacerbated strains, in turn, erode positive concepts of self, such as self-esteem, control and coping self efficacy. The diminished self-concepts and/or ineffective coping efforts then leave one especially vulnerable to experiencing symptoms of stress, of which depression (symptomatology) is of relative importance to the proposed study model (as a mental health outcome).

Lazarus showed that interventions of coping and social supports are mainly indirect; or do not act directly to buffer depression (Lazarus, Cohen, & Levi, 1987). He found instead, they minimize the increased presentation of depression by softening the antecedent process. Additional scientific inquiry found a mediation role for coping, having tremendous effects on mental health outcomes (Holahan & Moos, 1991). What's more, findings have shown that personality resources have the ability to potentiate adaptive coping in the face of negative life stressors by helping to resist harmful mental health outcomes (Holahan & Moos, 1990, 1991). Given these facts there is need to understand how personality resources such as racial and ethnic identity assist with adaptive coping strategies Black Americans enlist in dealing with perceptions of racialized stress and mental health.

Branscombe et al. tested a model predicting a positive effect of Black identity on well-being among African Americans who differed in their attributions to prejudice. The potential negative consequences of perceiving oneself as a victim of racial prejudice may be reduced by identification with the minority group (Branscombe et al., 1999). Utsey et al. found that life satisfaction and self-esteem were best predicted by avoidance coping, which was negatively related to racism-related stress (Utsey, Ponterotto, Reynolds, & Cancelli, 2000). These findings make sense given that problem focused coping strategies (in response to the perceived uncontrollable stressor of racism) as well as emotion focused coping should prove most effective when employed against an appraised immutable stressor (i.e. racism) (Lazarus et al., 1991; Pearlin & Schooler, 1978). In the context of identity, higher racial centrality and private regard as well as increased within group ethnic attitudes aids in positive self evaluation leading to pride, self assertion and is related to subsequent alternative coping strategies to block the negative effects of racism (Fernando, 1984; Phinney, 1990; Sellers et al., 2003).

Recently research has shown that racial identity has important connections to the effects of racialized stressors on the health of African Americans (Brown et al., 1999; Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Phinney et al., 1990). Racial identity has been shown to influence African Americans' perceptions of racially ambiguous events (Shelton & Sellers, 2000). Higher levels of centrality and private regard in concert with lower public regard may help increase feelings of control in the face of discrimination by taking the ambiguity of negative interaction and placing it in the context of race where racial identity can increase self esteem, personal efficacy and

coping mechanisms (Sellers et al., 2003). Thoits contends that variation in exposure to identity-relevant experiences can help explain status differences (e.g. race) in psychological distress more than conventional measures of life events and chronic strain (Thoits, 1991).

It can be inferred that discrimination is comprised of a set of unpredictable events that damage African Americans mental health. This unpredictable attack at one's self image can 'trigger the stress response in a more lasting way, leading to both adaptive or maladaptive changes in behavior' (McEwen & Lasley, 2002). The presence of an achieved racial and ethnic identity provides Black Americans with a (relatively stable) coping activation mechanism to engage racist experiences in a more proactive way leading to control of the stress of racism, and to less deleterious health affects (Bagley & Copeland, 1994; Phinney, 1990). Conversely, without achievement of a racial or ethnic identity, experiences of racial discrimination may force an individual into exacerbating the stress by producing unstable conceptions of themselves and leading them into more stressful identity explorations. Without truly knowing oneself in relation to the social order and historical contexts of one's ethnic group, the stress of racism may be truly insurmountable to one's self worth. Thus, it is important to the current study to investigate adaptive coping in the face of chronic life strains such to racially biased discrimination.

### Black American Social Identity Development

In her studies of West Indian ethnic identity in the U.S., Waters (1994) reports that first generation West Indians form a "reactive identity" when they reside in proximity to native Blacks or experience racism (Waters, 1994). This ethnic identity then

acts as a "hedge" against the racial identity society continuously ascribes to them. As Foner (2001) explains, "without an accent or other clues to immediately telegraph their ethnic status to others, they will be seen and subjected to the same kind of racial exclusion as Black Americans," suggesting that the way in which various generations of English-speaking African Caribbean immigrants formulate and develop their identity has important implications for their socioeconomic success and well being. Given that identity formation occurs most poignantly during emerging adulthood, the process of identity development has significant implications for how Caribbean immigrants (and subsequent generations) experience life as "Americans" (Phinney et al., 2006; Waters, 1999)..

The illumination of both ethnic and racial identity differences between African American and African Caribbean adults should be informative to what adaptation processes are engaged in the context of experiencing and coping with the non-normative stress of perceived racial discrimination. Furthermore, by going beyond simple categorization based on social correlates of race and ethnicity, such as skin color and nationality, this study attempts to expose the great intraracial and interethnic heterogeneity in the minority group identity that Black Americans express. These expressions of one's racial and ethnic identities are expected to have significant effects on an individual level sociocultural model of racialized stress and adaptive coping. As stated earlier, the proposed research agenda will inform the development of a conceptual model including both racial and ethnic identity as key predictors and potential mediators of the (stress and coping) relationship between perceived stress from racially attributed discrimination and relevant coping, in relation to depressive symptoms for Blacks in

America (see figure 4.1). Furthermore, by including African Caribbeans, this study adds to the current literature on stress and coping by distinguishing the impact of ethnicity compared to ethnic and racial identity effects within Blacks.

In line with LaVeist, Sellers & Neighbors (2001), the current research agenda attempts to understand how racial and ethnic identity act as personality resources related to adaptive coping and diminished effects of racial discrimination on poor mental health (LaVeist, Sellers, & Neighbors, 2001; Phinney, 1990; Sellers et al., 2003; Williams & Williams-Morris, 2000). Building on the foundations of conceptual models such as the rejection identification model (see Figure 2.2 in chapter 2), and other models of identity and resilience, this chapter attempts to establish racial and ethnic identity as mediators between racial discrimination and adaptive coping (see Figure 4.1 below). Lastly this chapter aims to understand the hypothesized relationship for racial and ethnic identity as adaptive coping mediators leading to better mental health outcomes in the face of racial discrimination, as conceptualized in the Affirming Identity Model (AIM) discussed in (Figure 2.2) chapter 2.

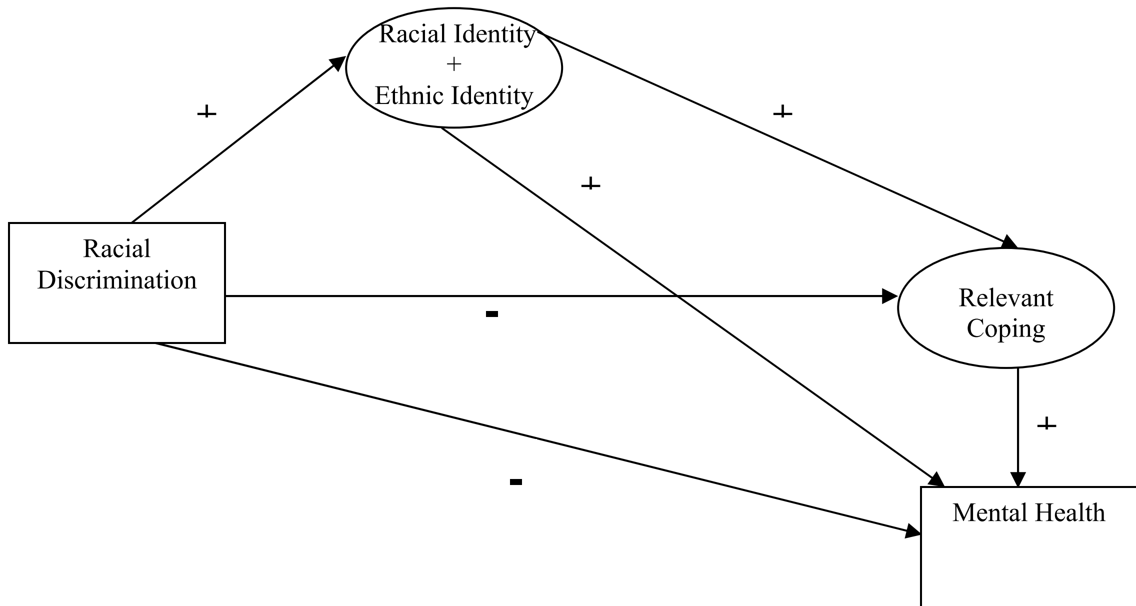



Figure 4.1. Theoretically informed Affirming Identity Model (AIM) depicted as path model of racial identity and ethnic identity combined mediation effects on discrimination, adaptive coping and subsequent effects on mental health (depressive symptoms) [adapted from (Branscombe et al., 1999; Clark et al., 1999; Pearlin, 1996; Phinney, 1990, 2000; Sellers et al., 2006; Sellers & Shelton, 2003; Spencer et al., 1997)].

**Research Aim and Hypotheses**

The following research aims and related hypotheses will guide the proposed analysis and development of a conceptual model of racialized stress and coping presented in this chapter.

Research Aim:

1. Understand and explore how Black American social identity operates as a sociocultural mediating resource of racialized stress and adaptive coping. Specifically, how the mediating effects (independent and combined) of racial and ethnic identity on the relationship between racial discrimination, adaptive coping and depressive symptoms differ among Black ethnic groups (African American and African Caribbean); and how different relevant coping strategies reduce depressive symptom expression adaptively.

Hypotheses:

1. (H1) It is expected that the bivariate relationship between racial discrimination and depressive symptoms will be mediated by racial identity, ethnic identity and coping variables for both Black ethnic groups; and that there will be differences between groups in way these variables operate to mediate the bivariate relationship.

2. (H2) It is expected that for both Black ethnic groups, there will be greater variance explained in the (combined) models which include both racial and ethnic identity mediating variables as compared to (independent) models which only include either racial or ethnic identity mediating variables.

3. (H3) It is expected that there will be differences between groups in the way racial and ethnic identity variables mediate the bivariate relationship across different adaptive coping strategies:

   (H3a)-- Ethnic identity variables will be key mediators of the relationship between discrimination and depressive symptoms for African Americans
   (H3b)-- Racial identity variables will be key mediators of the relationship between discrimination and depressive symptoms for African Caribbeans

**Methods**

DESCRIPTION OF THE SAMPLE: NATIONAL SURVEY OF AMERICAN LIFE (NSAL)

Sample. The NSAL was part of the National Institute of Mental Health Collaborative Psychiatric Epidemiology Survey (CPES) initiative that included the NSAL as well as the National Comorbidity Survey Replication (NCS-R), and the National Latino and Asian American Study (NLAAS). The NSAL was an integrated national household probability sample of 3570 African Americans and 1621 Blacks of Caribbean descent (African Caribbeans), as well as 891 White Americans, aged 18 and over (Jackson, et al, 2004). For the purpose of the current research aims and hypotheses only the Black American sub-sample was used. The African American sample was selected exclusively from targeted geographic segments in proportion to the African American population; 265 African Caribbeans were selected from the African American segments and 1356 from targeted metropolitan segments with more than 10% African Caribbeans.

Adult Re-Interview. Following administration of the initial interview all respondents were asked to complete a self administered questionnaire, the NSAL Adult Re-interview (RIW). The RIW asked additional questions about social, group and individual characteristics: psychological resources, group and personal identity (racial awareness and identity), as well as ideology and racial relations. Of the 6,082 NSAL respondents, 3,438 (2762 Blacks) completed the RIW. The overall response rate was 56.5%. Response rates differed for each race group: 68% of Whites and 60% of African Americans responded, to 43% for African Caribbeans. Being female, being unemployed, having higher levels of education, and participating in the original NSAL interview post-

September 11, 2001 were also associated with higher response rates on the RIW. Weights were created and used to account for these non-response variations.

In both the African American and African Caribbean samples, it was necessary for respondents to self-identify their race as Black. Those self-identifying as Black were included in the African Caribbean sample if they answered affirmatively to any of these inclusion criteria: 1) West Indian or Caribbean descent, or 2) from a Caribbean area country, or 3) parents or grandparents were born in a Caribbean area country. This sample was designed to be optimal for comparative analyses in which residential, environmental, and socio-economic characteristics are controlled in the black-white statistical contrasts (Heeringa, et al, 2004). Additionally, the African Caribbean sample was separated into three ethnic sub-groups: persons from Spanish-speaking Caribbean countries (i.e. Puerto Rico, Dominican Republic, Cuba), persons from English-speaking Caribbean countries (i.e. Jamaica, Trinidad & Tobago, Guyana), and French-speaking Haitians (Williams, Haile et al., 2007). In making intraracial and interethnic comparisons only African Caribbeans from English-speaking Caribbean countries were included in the analysis, so as not to confound language and other potential ethno-cultural variability.

There are a number of characteristics which make the NSAL pertinent to the proposed research agenda. Notably, the study contains a large, nationally representative sample of African Americans, allowing a more accurate investigation of intra-group differences and life contexts among this segment of the Black American population. Of equal importance, the NSAL includes the first nationally representative sample of African Caribbeans. This will adequately allow for the detection of mental health differences among differing demographic groups who have been frequently treated as one

homogenous group of Black Americans. Also the NSAL includes multiple, theory guided assessments of socioeconomic status. This will prove useful given the diverging SEP conditions between native African Americans and their African Caribbean counterparts. Lastly, all respondents were selected from the targeted catchment areas in proportion to the African American and African Caribbean population, distinguishing a first national sample of different ethnic groups within black America who live in the same contexts and geographical area in which blacks are actually distributed (both hi and low density, urban and rural, inner-city and suburban, for example).

MEASURES

The key exposure in this analysis is major lifetime experiences of discrimination attributed to race, ancestry, or ethnicity as measured by Major Experiences of Discrimination scale (Williams et al., 1997). This scale measures lifetime exposure to discrimination across the domains of employment, housing, education, harassment from police and other interpersonal interactions. The scale also asks respondents to attribute the experiences of discrimination to race, ethnic background, age, gender, or other personal characteristics. For obvious relevancy only experiences attributed to race and ethnic background were used in these analyses. A summary of lifetime experiences of major discrimination was generated by counting the experiences across the aforementioned domains to create a total lifetime discrimination measure. Please see table 4.1 for individual items and descriptives by ethnic group.

To measure racial identity, one of the key factors of interest, a modified version of the Multidimensional Inventory of Black Identity (MIBI) scale was utilized (Sellers et al., 1997). This modified scale measures two of the three dimensions of a Black American

identity operationalized by the MIBI, *centrality*-overall importance of race in everyday life, and *regard* for blacks in both private and public domains (Sellers et al., 1997; Sellers, Smith et al., 1998). Examples of items are: 'being black is a large part of how I think of myself' (*centrality*), 'I am proud to be black' (*private regard*), and 'White people in this country do not respect black people' (*public regard*). Responses were coded from a 4-point Likert scale so that higher values meant greater agreement with the desired dimensional construct question (i.e. centrality, private regard, public regard). Please see measurement chapter (chapter 3) for complete measurement model factor structure as well as tables 4.8 & 4.9 this chapter for individual items and descriptives by ethnic group.

Another key factor of interest was an adapted measure of African descended ethnic identity, created using relevant constructs from the African self consciousness and ethnic identity literature: self determined identification; closeness to African Americans, African Caribbeans and Africans on the continent; sense of a common fate with other African descendents; and Black and Caribbean Media consumption (Allen & Bagozzi, 2001; Phinney, 1992). Examples of items are: a 4-point Likert response to three questions asking about feelings of closeness to American Blacks, Caribbean Blacks and Blacks in Africa; an open ended answer to the question, "People use different words to refer to people whose original ancestors come from Africa. What word best describes what you like to be called?" and a 4-point Likert response to the questions, 'In an average week, how often do you listen to Caribbean radio? …read Black newspapers or magazines?' Responses were coded from a 4-point Likert scale so that higher values meant greater agreement with the desired construct question (i.e. ethnic attitudes and ethnic behaviors).

Please see measurement chapter (chapter 3) for complete measurement model factor structure as well as tables 4.8 & 4.9 for individual items and descriptives by ethnic group.

Relevant coping with experiences of discrimination was measured using an adapted scale from the CARDIA heart study measuring the impact of discrimination and coping efforts on health (Krieger et al., 1998). The scale items were distinguished using criteria from literature relating life stressors, personal resources, adaptive coping and depression (Holahan & Moos, 1991). Examples of items are: a dichotomous (yes/no) response to questions asking about three different responses to experiences of racial discrimination: tried to do something about it, talked to someone about how you were feeling, and accepted it as a fact of life.' Please see table 1 (this chapter) for individual items and descriptives by ethnic group.

Depressive symptoms were measured with a shortened version of the Center for Epidemiologic Studies Depression (CES-D) scale (Roberts & Sobhan, 1992). The CES-D is a 12-item scale that asks questions about symptoms of depression (such as depressed mood, etc.) experienced by the respondent during a period of one month prior to the interview. The response choices per item ranged from 'rarely or none of the time' (e.g., less than 1/day) to 'most or all of the time' (e.g., 5-7 days). The variable used in the analyses is a summed score for the CES-D ranging from 0 to 36. A sum score (across the 12 items) greater than nine denotes high depressive symptoms. The minimum and maximum scores for the sample were 2 to 32 respectively. The average sum score was 8.65 for the Black sample, 8.84 for African Americans and 8.45 for African Caribbeans. The reliability for the scale, as measured by Cronbach's alpha, was .76 African Americans and .78 for African Caribbeans, respectively.

The demographic covariates of age, gender (coded with males as the referent group: males=1, female=0), and the income-to-needs ratio (measure of family wealth versus the poverty line) were included in baseline analysis in order to determine their effects on key study variables. Only age and gender were found to have significant relationships with the exogenous exposure variable lifetime racial discrimination. These demographic variables were included as controls in all models due to their presumed effects on the exogenous racial discrimination variable and the endogenous racial and ethnic identity dimensions. Please see table 4.1 (this chapter) for individual items and descriptives by ethnic group.

### Data Analysis Strategy

This chapter will examine the independent mediating effects of racial and ethnic identity on the relationship between racialized stresses (i.e. racially attributed discrimination), adaptive coping and mental health outcomes (i.e. depressive symptoms) by comparing African American adults and their African Caribbean counterparts in a national sample (NSAL) (see Figure 4.3A & 4.3B). Additionally, this paper will examine the combined mediating effects of racial and ethnic identity on the aforementioned stress and coping relationship by Black ethnic group (see Figures 4.4 & 4.5).

In order to establish the causal pathways of the observed relationships, structural equation modeling was utilized to test the potential mediating effects of racial and ethnic identity. Specifically, theoretically informed multi-group structural equation model (SEM) analyses was conducted independently for each of the two Black ethnic groups to determine the impact of ethnicity status on the theoretically based causal pathway and structurally modeled independent effects of both racial and ethnic identity (mediators), on

the relationship between racialized stress (perceived racial discrimination), and depressive symptoms taking into account psychosocial resources (see basic path model Figures 4.3A & 4.3B). Additional SEMs were run in order to determine the combined mediating effects of racial and ethnic identity on the mediator, adaptive coping, in the complex relationship between racialized stress depressive symptoms by ethnic group (see complex path models Figures 4.4 & 4.5). Model specification was informed from theory and measurement of conceptual variables (racial and ethnic identity) via confirmatory factor analysis (CFA); and identified model fit and subsequent alternative models were examined to explore the complex relationships hypothesized.

Confirmatory factor analysis (CFA) models were used to test the hypothesis concerning the measurement of dimensions of racial and ethnic identity. Additional SEM analysis was performed to further test hypothesized conceptual relationships among key study variables (racial discrimination, racial identity, ethnic identity, coping and depressive symptoms). The Mplus program version 4.2 was employed for the analyses because of the program's ability to account for complex data design in the estimation of structural equation models (L. K. Muthen & Muthen, 1998-2007) (B. O. Muthen & Satorra, 1995).The goodness of fit of the models were assessed with chi-square test, the root mean squared error of approximation (RMSEA), the comparative fit index (CFI) and the standardized/weighted root mean square residual (SRMR/WRMR). More systematic discussions of these model fit indices can be found in methodological literatures (Bentler, 1990; Bollen, 1989; Byrne, 1998). Satisfactory model fits are typically indicated by non-significant chi-square tests. However, in the case of large sample sizes, chi-square tests are less likely to provide adequate supporting evidence of model fit. Other satisfactory

indicative model fit indices are SRMR and RMESEA values less than .08, WRMR values less than .90 and CFI values greater than or equal to .90.

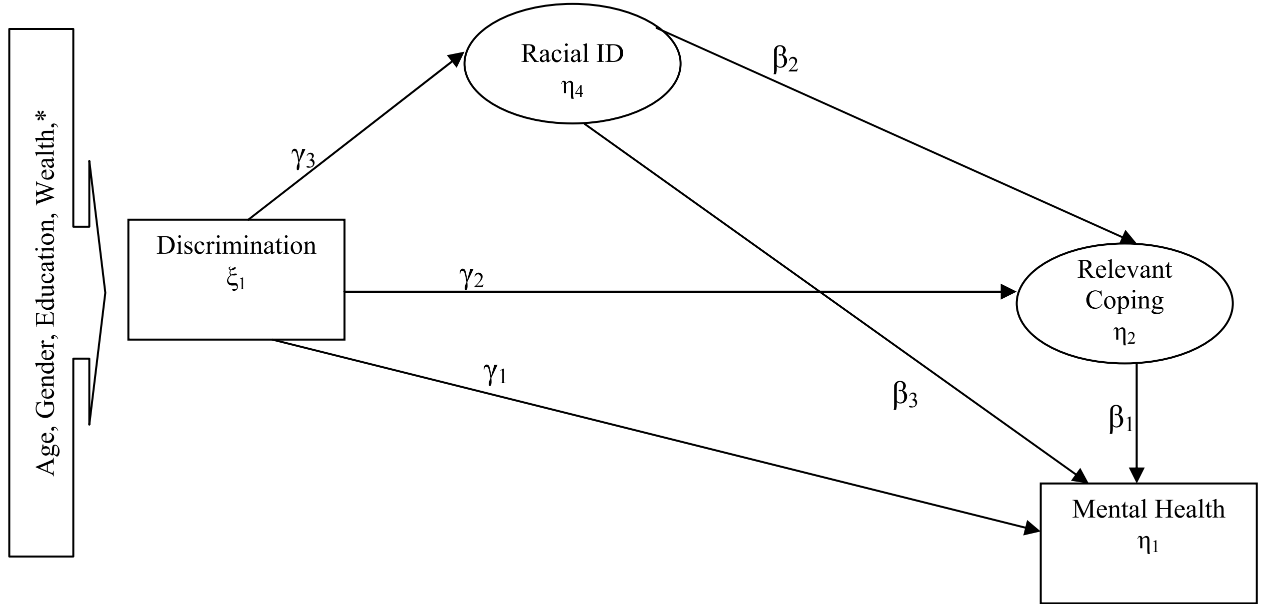



Figure 4.2a. Path model demonstrating proposed independent mediation effects of racial identity on the relationship between racial discrimination, relevant adaptive coping and mental health (depressive symptoms).

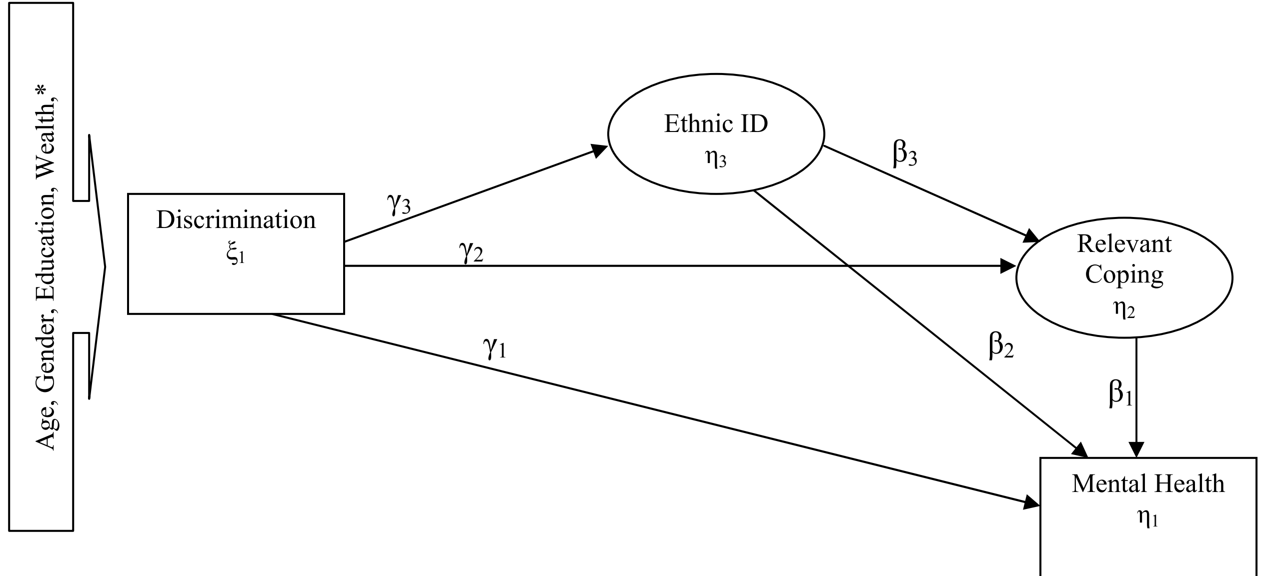



Figure 4.2b. Path model demonstrating proposed independent mediation effects of ethnic identity on the relationship between racial discrimination, relevant adaptive coping and mental health (depressive symptoms).

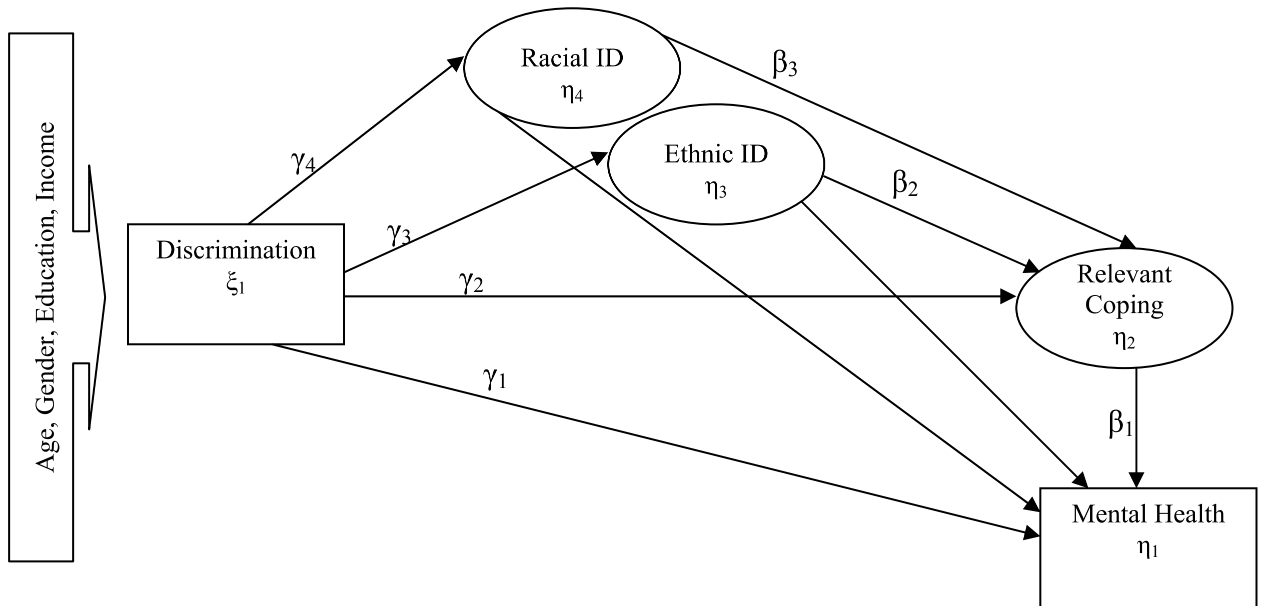



Figure 4.3. Path model demonstrating proposed racial and ethnic identity combined mediation effects on the relationship between racial discrimination, relevant adaptive coping and mental health (depressive symptoms).

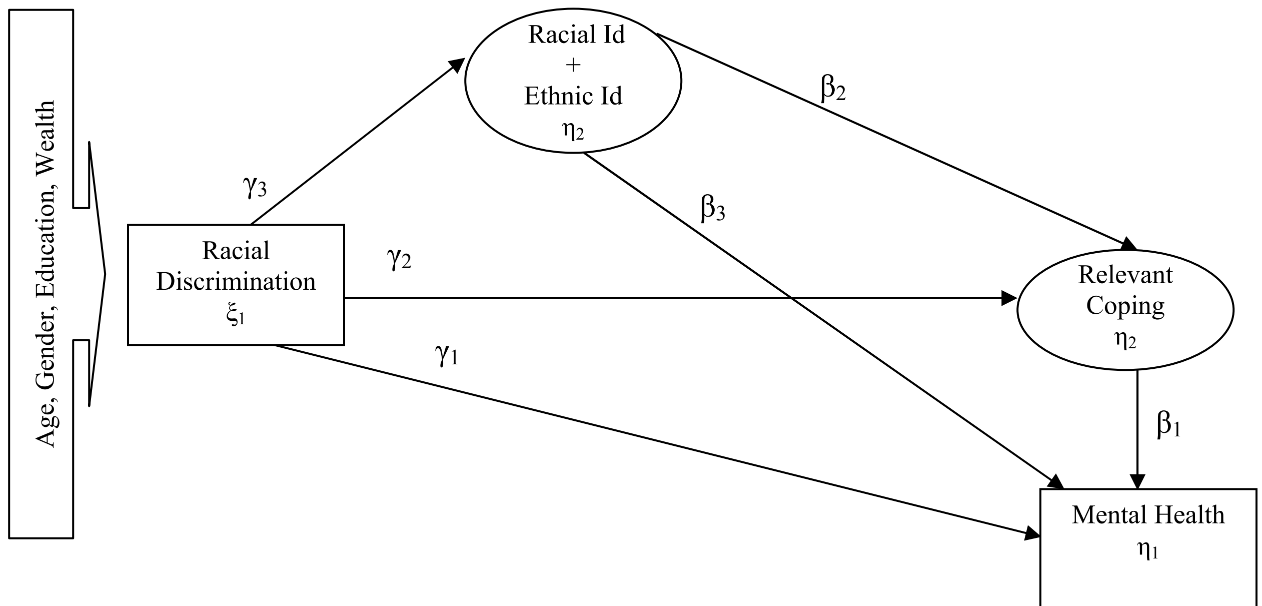



Figure 4.4. Another representation of the path model of racial and ethnic identity combined mediation effects on the relationship between racial discrimination, relevant adaptive coping and mental health (depressive symptoms).

## Results

### DESCRIPTIVE INFORMATION AND BIVARIATE RELATIONSHIPS

Table 4.1 presents the unweighted sample sizes, relevant weighted means and standard errors, and relevant weighted proportions of the variables in the study. On average African Caribbeans had significantly higher incomes by about $10,000, were slightly older with higher levels of education, and more equally distributed by gender than their African American counterparts. The demographic control variable household income was the only variable of which significant differences existed between the two Black American ethnic groups ($F=9.67$, $p < .01$). On average both African American and African Caribbean adults reported lifetime experience of racially attributed discrimination across one of the domains of employment, housing, education, police, banking and other services (i.e. mechanic or plumber). Additionally, the coping methods used when faced with discrimination did not differ by ethnic groups. Although levels of depressive symptoms for African Americans were slightly higher than African Caribbeans these values did not differ significantly by ethnicity, with both groups reporting noticeably low levels of depressive symptoms.

The bivariate analyses shown in tables 4.2 through 4.4 present the Pearson product correlations for the items comprising the latent variables in this study: racial identity (racial centrality, public regard, private regard), ethnic identity (ethnic attitudes, ethnic behaviors) and methods of coping with discrimination.

Table 4.1. Descriptive Statistics for key study variables by Black American ethnic groups

| Variable | | | | |
|---|---|---|---|---|
| Age | | **n** | **Mean** | **SE** |
| | African Americans | 2186 | 42.51 | (.62) |
| | Caribbean Blacks | 576 | 44.28 | (1.60) |
| Sex | (Male referent: males=1) | **n** | **% Male** | |
| | African Americans | 2186 | 43.91% | - |
| | Caribbean Blacks | 576 | 51.46% | - |
| Household Income | | **n** | **Median Income** | |
| | African Americans | 2186 | $35,637 | - |
| | Caribbean Blacks | 576 | $51,371** | - |
| Education | (Years of) | **n** | **Mean** | **SE** |
| | African Americans | 2186 | 12.44 | (.11) |
| | Caribbean Blacks | 576 | 12.73 | (.27) |
| Racial/Ethnic Discrimination | Major Lifetime (9 domains) | **n** | **Mean** | **SE** |
| | African Americans | 2186 | .86 | (.04) |
| | Caribbean Blacks | 576 | .88 | (.09) |
| Coping Methods | | | | |
| Coping (1) | Tried to do something | **n** | **% Yes** | |
| | African Americans | 2186 | 29.4 | |
| | Caribbean Blacks | 576 | 29.9 | |
| Coping (2) | Talked to Someone | **n** | **% Yes** | |
| | African Americans | 2186 | 47.8 | |
| | Caribbean Blacks | 576 | 51.7 | |
| Coping (3) | Accept as a fact of life | **n** | **% Yes** | |
| | African Americans | 2186 | 63.7 | |
| | Caribbean Blacks | 576 | 60.7 | |
| Depressive Symptoms | CES-D (12-item) | **n** | **Mean** | **SE** |
| $\alpha = .74$ | African Americans | 2186 | 8.84 | (.20) |
| $\alpha = .77$ | Caribbean Blacks | 576 | 8.45 | (.68) |

Note: Ns are unweighted, percentages are weighted proportions
*** $p < .001$ ** $p < .01$ * $p < .05$

Table 4.2 shows the correlations for all individual racial identity items, grouped in order of factor dimensionality: racial centrality (variables 1-5), private regard (6-9) and public regard (10-13). African American correlations appear above the diagonal and African Caribbean values appear below the diagonal. Individual item patterns show significant correlations among items according to related factor items ($r$ = .02-.36 for centrality, $r$ = .01-.40 for private regard, $r$ = .12-.64 for public regard). Individual item correlations were higher for public regard and racial centrality variables than private regard variables.

Table 4.3 shows the correlations for all individual ethnic identity items grouped in order of general factor dimensionality: ethic attitudes (G variables) and Black American ethnic behaviors [1] (J variables a-g), and Caribbean ethnic behaviors [2] (J variables h-i). African American correlations appear above the diagonal and African Caribbean values appear below the diagonal. Individual item patterns show significant correlations among items according to related factor items ($r$ = .35-.71 for attitudes, $r$ = .03-.70 for behaviors). Individual item correlations were higher for ethnic attitudes variables than ethic behavior variables.

Table 4.4 shows the correlations for the three methods of coping with discrimination variables used in the analyses. African American correlations appear above the diagonal and African Caribbean values appear below the diagonal. As anticipated the two active coping variables (tried to do something about it; talked to someone about how you were feeling) were positively correlated with one another ($r$ = .28 - .33) and negatively correlated with the more passive coping variable (accept it as a fact of life) ($r$ = (-.11) - (-.30)).

Table 4.2. Bivariate Correlations of Racial Identity Variables by Ethnicity

| Variable | 1-G22 | 2-G24a | 3-G24d | 4-G24g | 5-G24j | 6-G24b | 7-G24e | 8-G24h | 9-G24k | 10-G24c | 11-G24f | 12-G24i | 13-G24l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-G22 | ___ | .36*** | .27*** | -.02 | .18*** | .04+ | -.08*** | -.06** | .01 | -.15*** | -.05* | -.14*** | -.11*** |
| 2-G24a | .32*** | ___ | .31*** | -.05* | .22*** | .21*** | -.06** | .07** | .08*** | -.22*** | .00 | -.18*** | -.09*** |
| 3-G24d | .32*** | .31*** | ____ | -.08*** | .07*** | .09*** | -.07** | .02 | .04+ | -.41*** | .01 | -.27*** | -.26*** |
| 4-G24g | -.03 | .16*** | .07 | ____ | .20*** | .12*** | .21*** | .08*** | .03 | .10*** | -.07** | .15*** | .14*** |
| 5-G24j | .31*** | .32*** | .06 | 23*** | ____ | .01 | .09*** | .02 | .00 | .01 | -.11*** | .04+ | .10*** |
| 6-G24b | .03 | .18*** | .04 | .19*** | .07 | ____ | .08*** | .25*** | .14*** | -.03 | .14*** | -.01 | .01 |
| 7-G24e | -.14** | -.13** | -.24*** | .08 | .01 | .06 | ____ | .22*** | .13*** | .06** | -.18*** | .03 | .02 |
| 8-G24h | -.00 | .08+ | .19*** | .07 | -.02 | .17*** | .40*** | ____ | .20*** | -.02 | -.02 | -.08*** | -.04 |
| 9-G24k | 18*** | -.14** | .05 | -.02 | -.21*** | -.05 | -.01 | .04 | ____ | -.07** | -.06** | -.15*** | -.12*** |
| 10-G24c | -.04 | -.21*** | -.31*** | .08+ | -.01 | .04 | .17*** | .09+ | -.20*** | ____ | .12*** | .50*** | .43*** |
| 11-G24f | .01 | .01 | .08 | .03 | -.14** | .10* | .10* | .03 | -.04 | .22*** | ____ | .13*** | .18*** |
| 12-G24i | -.04 | -.18*** | -.13** | .20*** | .12** | .03 | -.03 | -.09* | -.21*** | .49*** | .22*** | ____ | .52*** |
| 13-G24l | .01 | -.17*** | -.14** | .12** | -.00 | -.07 | -.05 | -.10* | -.10** | .44*** | .13** | .64*** | ____ |

Note. Correlations for AA are above the diagonal (N = 2186); correlations for AC are below the diagonal (N = 576). The following items were reverse coded: G22, G24a, G24b, G24d, G24f, G24h, G24k. [1-5, centrality; 6-9, private regard; 10-13, public regard]

+ p < .10. * p < .05. ** p < .01. *** p < .001.

Table 4.3. Bivariate Correlations of Ethnic Identity Variables by Ethnicity

| | G1G2 | G3a | G3f | G3g | G11 | J11a | J11b | J11c | J11d | J11e | J11f | J11g | J11h | J11i |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G1G2 | ___ | .07*** | -.03 | .03 | .09*** | .08*** | .02 | .08*** | .05* | .00 | .07*** | .06** | .05* | .10*** |
| G3a | .09+ | ____ | .35*** | .36*** | .14*** | .06** | .06** | .03 | .05** | .04+ | .04+ | .09*** | .02 | .02 |
| G3f | .18*** | .57*** | ____ | .71*** | .07** | -.03 | .13*** | -.03 | .03 | .07** | .01 | .05* | -.04+ | -.01 |
| G3g | -.05 | .51*** | .49*** | ____ | .09*** | .00 | .09*** | -.01 | .06** | .05* | .03 | .06** | -.03 | .03 |
| G11 | .06 | .20*** | .05 | .00 | ____ | .03 | .03 | -.06** | -.01 | .01 | -.00 | .02 | -.02 | -.01 |
| J11a | .01 | .24*** | .01 | .20*** | .18*** | ____ | .08*** | .48*** | .29*** | .03 | .40*** | .32*** | .47*** | .35*** |
| J11b | .14** | .21*** | .15*** | .28*** | -.00 | .52*** | ____ | .09*** | .19*** | .59*** | .16*** | .19*** | .11*** | .13*** |
| J11c | .03 | .21*** | .03 | .17*** | .12** | .63*** | .41** | ____ | .38*** | .04+ | .46*** | .37*** | .66*** | .38*** |
| J11d | .02 | .11** | -.11** | .09+ | .17*** | .46*** | .38*** | .60*** | ____ | .21*** | .54*** | .52*** | .38*** | .20*** |
| J11e | .12** | .15*** | .07 | .14** | .13** | .39*** | .61*** | .47*** | .63*** | ____ | .18*** | .20*** | .07*** | .10*** |
| J11f | .00 | .14** | -.12** | .08 | .20*** | .56*** | .24*** | .64*** | .65*** | .44*** | ____ | .67*** | .55*** | .28*** |
| J11g | .00 | .17*** | -.12** | .13** | .07 | .50*** | .33*** | .47*** | .54*** | .36*** | .70*** | ____ | .47*** | .22*** |
| J11h | -.06 | .08+ | -.13** | .03 | .04 | .55*** | .32*** | .68*** | .53*** | .33*** | .56*** | .57*** | ____ | .41*** |
| J11i | -.05 | -.03 | -.13** | .07 | .07 | .40*** | -.14** | .33*** | .23*** | .17*** | .34*** | .31*** | .56*** | ____ |

Note. Correlations for AA are above the diagonal (N = 2186); correlations for AC are below the diagonal (N = 576). All items were reverse coded or recoded.
[G-variables= Attitudes; J-Variables= Behaviors]

$+ p < .10$. $* p < .05$. $** p < .01$. $*** p < .001$.

Table 4.4. Bivariate Correlations of Coping with Discrimination Variables by Ethnicity

| | Coping (1) | Coping (2) | Coping (3) |
|---|---|---|---|
| Coping (1) *Tried to do Something* | ___ | .28*** | -.30*** |
| Coping (2) *Talked to Someone* | .33*** | ___ | -.20*** |
| Coping (3) *Acceptance* | -.12* | -.11*** | ____ |

Note. Correlations for AA are above the diagonal (N = 2186); correlations for AC are below the diagonal (N = 576). All items were recoded (1 = yes 0 = no).
+ p < .10. * p < .05. ** p < .01. *** p < .001.

SEM ANALYSES: RACIAL AND ETHNIC IDENTITY MEDIATION MODELS

Prior to the proceeding analyses, exploratory factor analysis (EFA) and confirmatory factor analyses (CFA) and subsequent latent variables creation was carried out following procedures described by Joreskog & Sorbom (2001), Muthen & Muthen (2007) and Bryne (1998). These authors suggest the development of a measurement model prior to assessing path equation models (Byrne, 1998; L. K. Muthen & Muthen, 1998-2007). Consequently a measurement model was developed for racial and ethnic identity factors across the two Black American ethnic groups. The results of these analyses were used in the current analysis to define latent variables among African American and African Caribbeans respectively. More details of these results can be found in Chapter 3 of this dissertation. Moreover, the results of the CFA measurement models provided evidence that the factor structures of racial and ethnic identity were conceptually incongruent, suggesting that separate SEM analyses should be run rather than multiple group SEM path models. As such, separate but parallel results for African Americans and African Caribbeans will be presented. Additionally regression analysis (not presented here) was conducted to demonstrate the significant positive effects of lifetime racial discrimination on depressive symptoms. These results confirm the

hypothesized positive relationship of discrimination on depressive symptoms for both Black American ethnic groups, which is a necessary requirement to test mediation.

SEM model comparisons were made by comparing fit indices across the relevant models. The research question and hypothesis aim to understand how racial and ethnic identity independently and together mediate the stress and coping relationship in the context of depressive symptoms across various relevant coping strategies. Thus the models that are subsequently shown represent the best fitting models (based on fit indices) for the given study criteria (e.g., racial and ethnic identity combined effects on the relationship between racial discrimination, relevant (acceptance) coping and depressive symptoms). In all models presented all hypothesized relationships were tested for parsimony in making general comparisons across study criteria. Ideally, in the presence of conceptual congruence of the study variables, multi-group SEM analysis would be conducted. However due to the resultant conceptual incongruence exhibited by the samples (see Chapter 3) the purpose of this study does not call for multi-group analysis. As such were appropriate significant relationships were compared between models, r-squared (variance explained) was compared in addition to $\chi 2$ difference to denote if models fit the data significantly better than the comparison models (with a significantly higher $\chi 2$ indicating a better fit).

### African Americans and Racial Identity

In order to examine whether dimensions of racial identity independently mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Americans, a model was tested in which three dimensions of racial identity (racial centrality, public regard, private regard) were added as mediators to the

hypothesized model of lifetime racial discrimination, relevant coping [1-'*tried to do something'*] and depressive symptoms. Overall the model fit the data well, but suggested improvement was possible ($\chi 2$ (16) = 49.03, p≈.00, RMSEA=.03, WRMR=.04, CFI=.92). These results are presented in Figure 4.5. The direct effects of the key study variables for African Americans are summarized in Table 4.5. The paths from discrimination to racial centrality, discrimination to private regard, discrimination to coping and coping to depressive symptoms were found to be significantly positive. Additionally, paths from discrimination to public regard, discrimination to depressive symptoms, private regard to depressive symptoms, and private regard to coping were found to be significantly negative. In brief, racial discrimination is positively related to private regard which in turn is related to decreases of both depressive symptoms and efforts to cope (by trying to do something about it). At the same time, discrimination is directly related to increases in efforts of coping (by trying to do something about it) which is related to increases in depressive symptoms for African Americans in this sample. These results provide evidence to support the hypothesis that the private regard dimension of racial identity mediates the impact of racial discrimination, by it relationship to decreasing maladaptive relevant coping and fewer depressive symptoms for African Americans.

### AFRICAN AMERICANS AND ETHNIC IDENTITY

In order to examine whether dimensions of ethnic identity independently mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Americans, a model was tested in which two dimensions of ethnic identity (ethnic attitudes and Black American ethnic behaviors [1]) were added as mediators to the hypothesized model of lifetime racial discrimination, relevant coping [1-'*tried to do*

*something'*] and depressive symptoms. Overall the model fit the data well, but suggested improvement was possible ($\chi 2$ (17) = 47.83, p≈.00, RMSEA=.03, WRMR=.99, CFI=.95). Notably this model did not fit the data significantly better than the racial identity model ($\chi 2$ difference= 1.2).These results are presented in Figure 4.6. The direct effects of the key study variables for African Americans are summarized in Table 4.5. The paths from discrimination to ethnic attitudes, discrimination to coping, Black American ethnic behaviors (1) to coping, and coping to depressive symptoms were found to be significantly positive. Additionally, paths from ethnic attitudes to depressive symptoms and ethnic attitudes to coping were found to be significantly negative. In brief, racial discrimination is positively related to ethnic attitudes, which in turn is related to both lower depressive symptoms and efforts to cope (by trying to do something about it). At the same time, discrimination is related to increases in efforts of coping (by trying to do something about the event) which is related to increases in depressive symptoms for African Americans in this sample. These results provide evidence to support the hypothesis that ethnic attitudes mediate the impact of racial discrimination, by the relationship to decreasing maladaptive relevant coping and fewer depressive symptoms for African Americans.

### AFRICAN CARIBBEANS AND RACIAL IDENTITY

In order to examine whether dimensions of racial identity independently mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Caribbeans, a model was tested in which two dimensions of racial identity (racial centrality and public regard) were added as mediators to the hypothesized model of lifetime racial discrimination, relevant coping [1-'*tried to do something'*] and

depressive symptoms. Overall the model fit the data well, but suggested improvement was possible ($\chi 2$ (9) = 9.87, p≈.00, RMSEA=.02, WRMR=.55, CFI=.92). These results are presented in Figure 4.7. The direct effects of the key study variables for African Caribbeans are summarized in Table 4.6. Only the paths from discrimination to racial centrality and discrimination to coping were found to be significantly positive. In short, racial discrimination is positively related to racial centrality and racial discrimination which are both related to increases in adaptive relevant coping efforts (by trying to do something about it) for African Caribbeans in this sample. These results provide limited evidence to support the hypothesis that dimensions of racial identity mediate the relationship between racial discrimination, adaptive relevant coping and depressive symptoms for African Caribbeans.

### African Caribbeans and Ethnic Identity

In order to examine whether dimensions of ethnic identity independently mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Caribbeans, a model was tested in which three dimensions of ethnic identity (ethnic attitudes, Black American ethnic behaviors [1] and Caribbean ethnic behaviors [2]) were added as mediators to the hypothesized model of lifetime racial discrimination, relevant coping [1-‘*tried to do something*’] and depressive symptoms. Overall the model fit the data well, but suggested improvement was possible ($\chi 2$ (8) = 11.52, p≈.17, RMSEA=.03, WRMR=.60, CFI=.90). Notably this model did not fit the data significantly better than the racial identity model ($\chi 2$ difference= 1.65). These results are presented in Figure 4.8. The direct effects of the key study variables for African Caribbeans are summarized in Table 4.6. Only the paths from discrimination to Caribbean ethnic

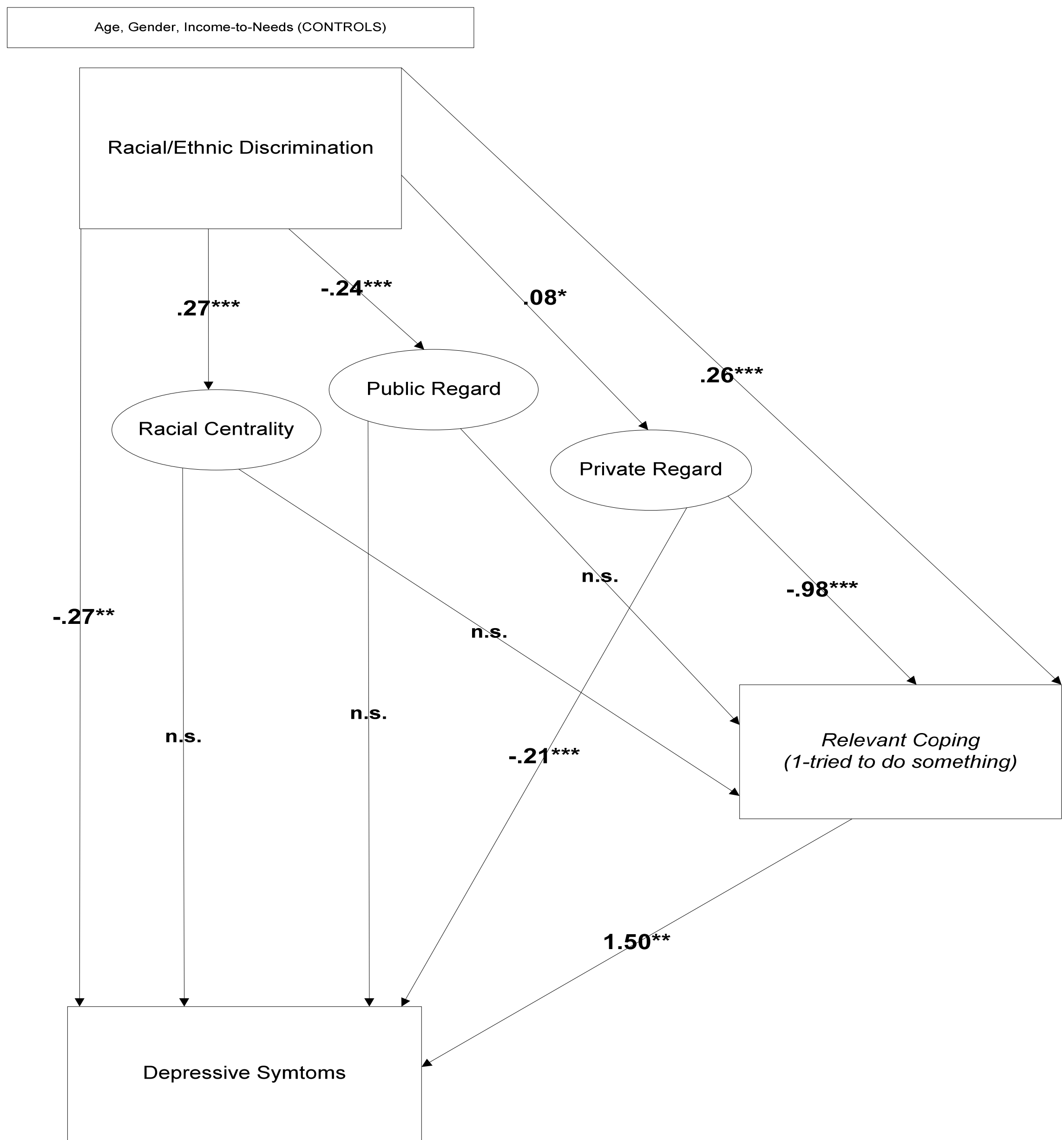
behaviors (2) and ethnic attitudes to depressive symptoms were found to be significant and negative. In short, racial discrimination is negatively related to Caribbean ethnic behaviors, while ethnic attitudes were related to decreases in depressive symptom expression for African Caribbeans in this sample. These results provide limited evidence to support the hypothesis that dimensions of ethnic identity mediate the relationship between racial discrimination, adaptive relevant coping and depressive symptoms for African Caribbeans.

### Summary of Racial and Ethnic Identity Independent Effects

In an overall comparison of the results for African Americans and African Caribbeans, there is evidence to support the hypothesized independent mediation of racial identity dimensions, but for African Americans only. Specifically, private regard has a protective relationship with African Americans' depressive symptoms directly, as well through relevant coping. Similarly, there is evidence to support the hypothesized independent mediation of ethnic identity dimensions, but for African Americans only. Specifically, ethnic attitudes have a protective effect on African Americans' depressive symptoms directly, as well through relevant coping. There is also evidence to support the hypothesized mediation of an active, relevant coping method (1-tried to do something about it), but for African Americans only. Furthermore, the models produced for the African American sample showed more significant relationships among the key study variables. Together these results do not produce sufficient evidence to completely reject or accept the proposed hypothesis. The expected between group differences in the effects of racial and ethnic identity dimensions was supported, however mediation of the

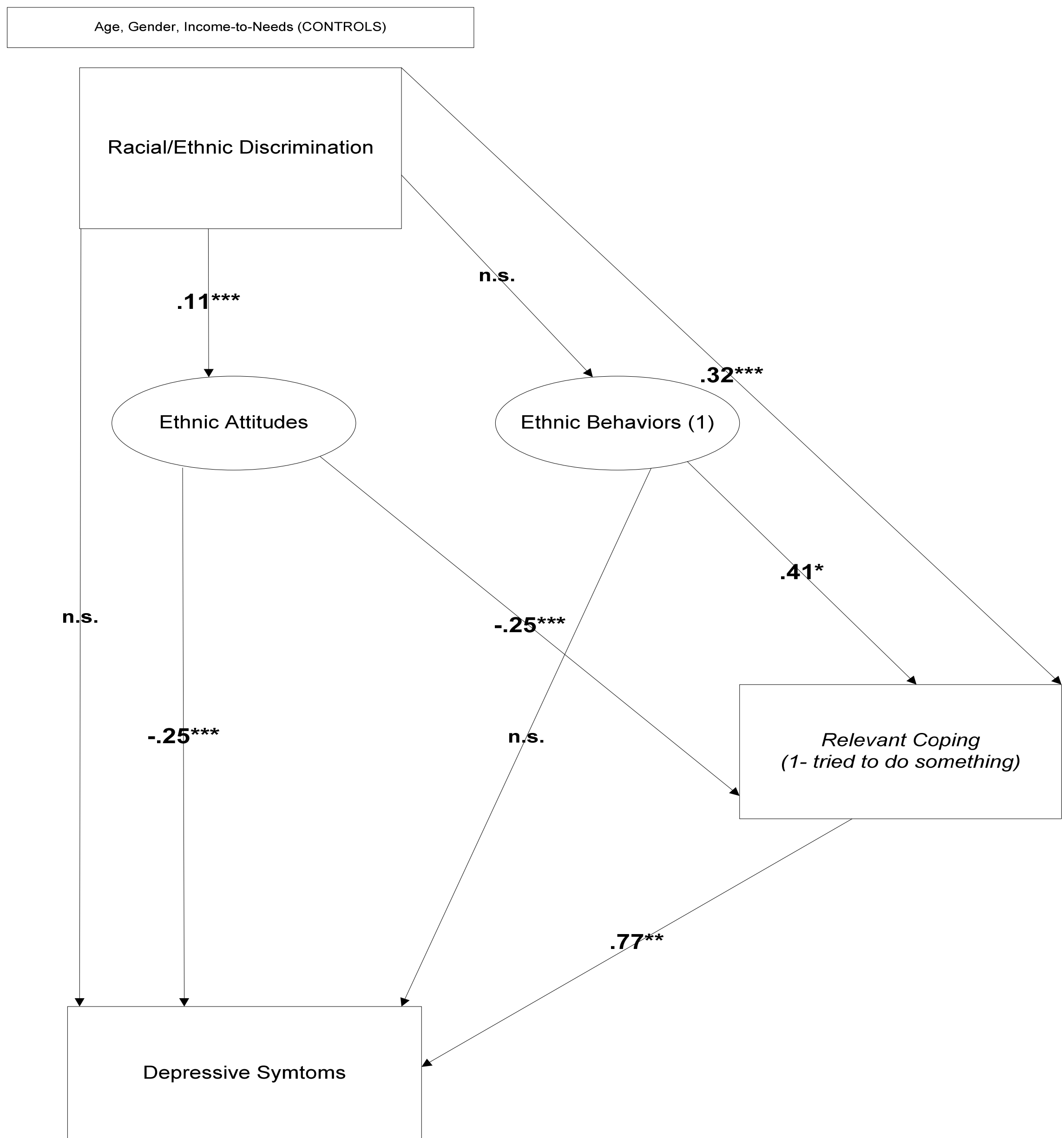
bivariate relationship between discrimination and depressive symptoms for African Caribbeans was not supported.

> Hypothesis 1: It is expected that the bivariate relationship between racial discrimination and depressive symptoms will be mediated by racial identity, ethnic identity and coping variables for both Black ethnic groups; and that there will be differences between groups in way these variables operate to mediate the bivariate relationship.



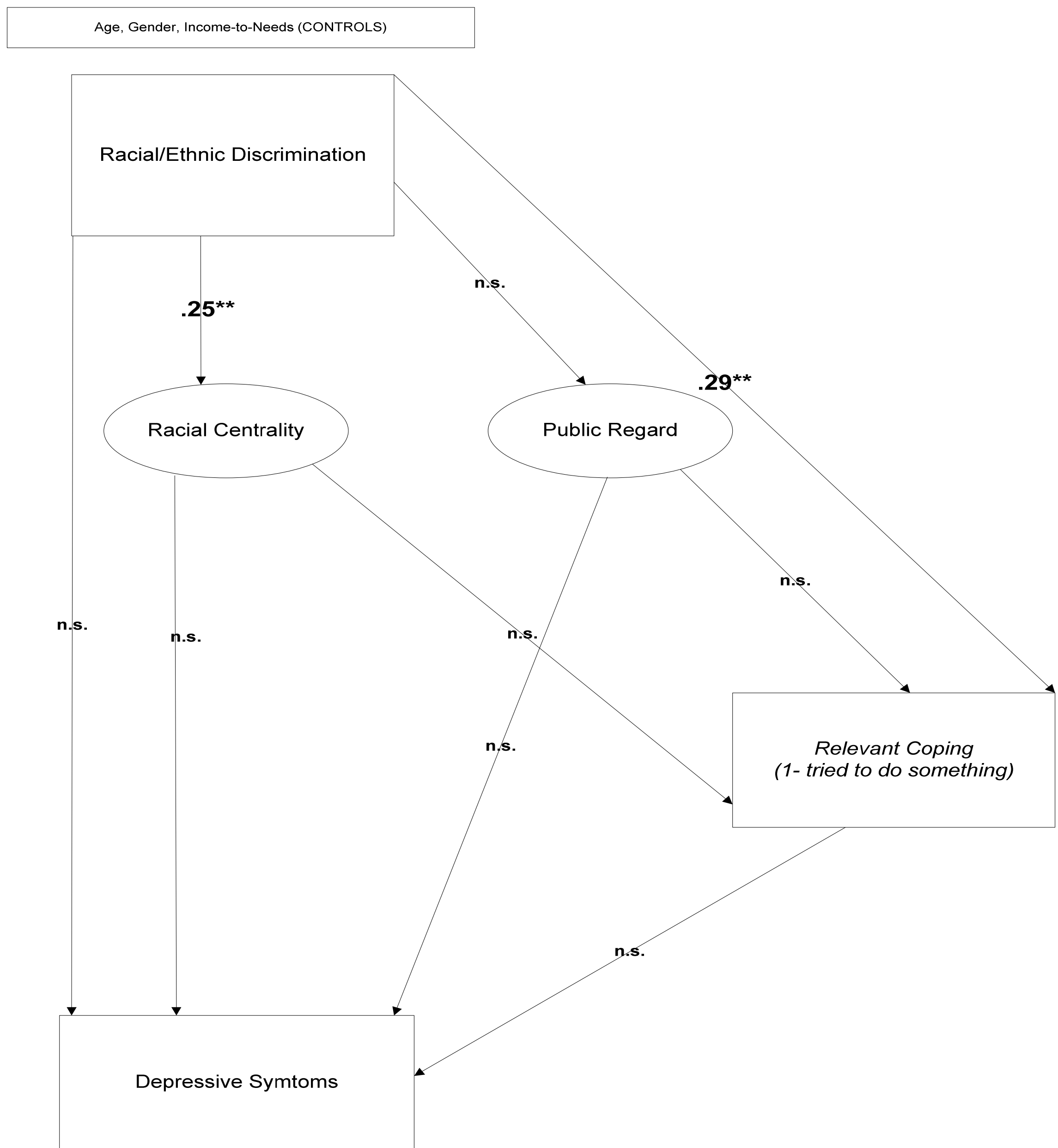

Model Fit Statistics: ($\chi 2$ (16) = 49.03, p≈.00, RMSEA=.03, WRMR=.04, CFI=.92).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.5. Proposed mediation model of independent effects of racial identity for African Americans [with relevant coping (1- tried to do something)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).



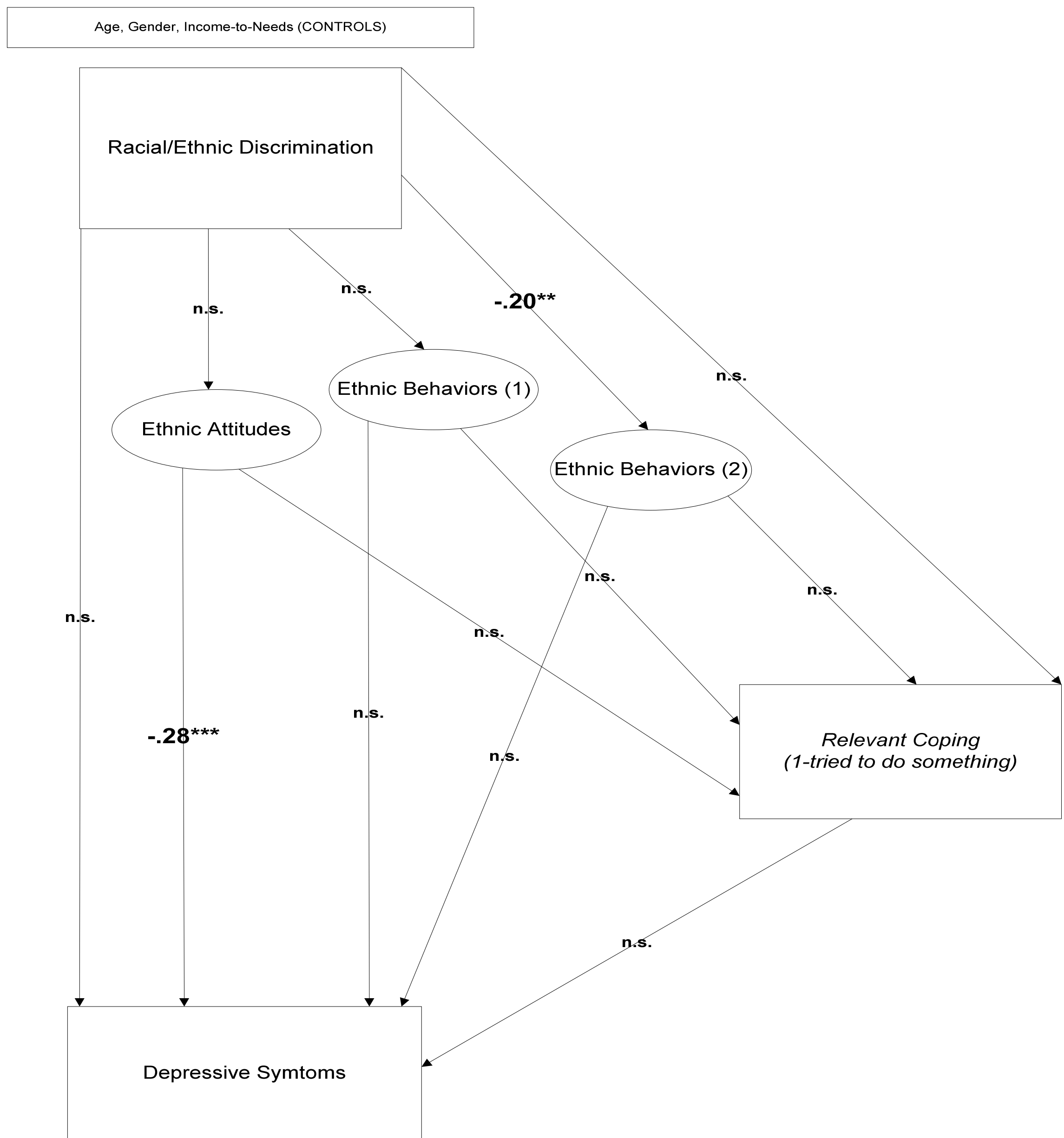

Model Fit Statistics: ($\chi$2 (17) = 47.83, p≈.00, RMSEA=.03, WRMR=.99, CFI=.95).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.6. Proposed mediation model of independent effects of ethnic identity for African Americans [with relevant coping (1- tried to do something)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).




Model Fit Statistics: ($\chi 2$ (9) = 9.87, p≈.00, RMSEA=.02, WRMR=.55, CFI=.92).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.7. Proposed mediation model of independent effects of racial identity for African Caribbeans [with relevant coping (1- tried to do something)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).




Model Fit Statistics: ($\chi 2$ (8) = 11.52, p≈.17, RMSEA=.03, WRMR=.60, CFI=.90).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.8. Proposed mediation model of independent effects of ethnic identity for African Caribbeans [with relevant coping (1- tried to do something)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).

Table 4.5. Standardized Coefficients of Direct Effects for African Americans

| African American | Dependent Variable | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Racial Centrality | | Public Regard | | Private Regard | | Coping (1) | | Depressive Symptoms | |
| Independent Variables | B | SE | B | SE | B | SE | B | SE | B | SE |
| **Model 1** | | | | | | | | | | |
| Racial/Ethnic Discrimination | .27*** | (.03) | -.24 | (.03) | .08* | (.03) | .26*** | (.03) | -.27** | (.42) |
| Racial Centrality | | | | | | | .09 | (.07) | -.12 | (.79) |
| Public Regard | | | | | | | -.07 | (.07) | -.11 | (.56) |
| Private Regard | | | | | | | -.98*** | (.06) | -.21** | (.39) |
| Coping (1) | | | | | | | | | 1.50** | (2.91) |

| | Dependent Variable | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Ethnic Attitudes | | Ethnic Behaviors(1) | | Coping (1) | | Depressive Symptoms | |
| **Model 2** | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .11** | (.03) | -.02 | (.02) | .32*** | (.03) | -.09 | (.24) |
| Ethnic Attitudes | | | | | -.77*** | (.08) | -.25*** | (.35) |
| Ethnic Behaviors (1) | | | | | .41* | (.19) | .07+ | (.22) |
| Coping (1) | | | | | | | .77** | (1.45) |

| | Dependent Variable | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Racial Centrality | | Public Regard | | Private Regard | | Coping (1-try to do) | | Depressive Symptoms | |
| **Model 3** | B | SE | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .27*** | (.03) | -.24*** | (.03) | .08* | (.03) | | | | |
| Racial Centrality | | | | | | | .08 | (.08) | -.02 | (.42) |
| Public Regard | | | | | | | .02 | (.12) | -.07 | (.32) |
| Private Regard | | | | | | | -.55 | (.70) | -.20*** | (.25) |

| | Ethnic Attitudes | | Ethnic Behaviors(1) | | Coping (1) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|
| | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .11** | (.03) | -.02 | (.02) | .32*** | (.04) | -.08 | (.20) |
| Ethnic Attitudes | | | | | -.62 | (.54) | -.25*** | (.34) |
| Ethnic Behaviors (1) | | | | | .24 | (.20) | .06 | (.25) |
| Coping (1) | | | | | | | .73** | (1.38) |

| Summary Statistics | | **Model 1** | **Model 2** | **Model 3** |
|---|---|---|---|---|
| Latent $R^2$ | Racial Centrality | .11 | | .11 |
| Latent $R^2$ | Public Regard | .07 | | .07 |
| Latent $R^2$ | Private Regard | .02 | | .01 |
| Latent $R^2$ | Ethnic Attitudes | | .04 | .04 |
| Latent $R^2$ | Ethnic Behaviors (1) | | .07 | .08 |
| | Total Latent $R^2$ | .20 | .11 | .31 |

Note: all models controlled for age, gender and income to needs ratio (based on poverty index).
+p< .10. *p< .05. **p< .01. ***p<.001.

Table 4.5. Standardized Coefficients of Direct Effects for African Americans (continued)

| African American | Racial Centrality | | Public Regard | | Private Regard | | Coping (2) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Model 4** | B | SE | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .27*** | (.03) | -.24*** | (.03) | .08* | (.03) | | | | |
| Racial Centrality | | | | | | | .05 | (.07) | -.02 | (.59) |
| Public Regard | | | | | | | -.12 | (.08) | -.03 | (.44) |
| Private Regard | | | | | | | -.96*** | (.06) | -.23*** | (.25) |
| Coping (2) | | | | | | | | | | |

| | Ethnic Attitudes | | Ethnic Behaviors(1) | | Coping (2- talked to someone) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|
| | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .10** | (.03) | -.01 | (.02) | .17** | (.03) | -.08 | (.20) |
| Ethnic Attitudes | | | | | .07 | (.05) | -.22** | (.34) |
| Ethnic Behaviors (1) | | | | | .04 | (.04) | .06 | (.25) |
| Coping (2) | | | | | | | .73** | (1.38) |

| | Racial Centrality | | Public Regard | | Private Regard | | Coping (3-acceptance) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Model 5** | B | SE | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .27*** | (.03) | -.24*** | (.03) | .08* | (.03) | | | | |
| Racial Centrality | | | | | | | -.11 | (.07) | .07 | (.23) |
| Public Regard | | | | | | | -.14+ | (.07) | -.04 | (.17) |
| Private Regard | | | | | | | -.34 | (.41) | -.21*** | (.25) |

| | Ethnic Attitudes | | Ethnic Behaviors(1) | | Coping (3) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|
| | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .11** | (.03) | -.02 | (.02) | ..08 | (.04) | .07** | (.10) |
| Ethnic Attitudes | | | | | .00 | (.05) | -.16*** | (.16) |
| Ethnic Behaviors (1) | | | | | -.03 | (.07) | .08 | (.18) |
| Coping (3) | | | | | | | -.10+ | (.31) |

| Summary Statistics | | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** |
|---|---|---|---|---|---|---|
| Latent $R^2$ | Racial Centrality | .11 | | .11 | .11 | .11 |
| Latent $R^2$ | Public Regard | .07 | | .07 | .07 | .07 |
| Latent $R^2$ | Private Regard | .02 | | .01 | .03 | .02 |
| Latent $R^2$ | Ethnic Attitudes | | .04 | .04 | .03 | .04 |
| Latent $R^2$ | Ethnic Behaviors (1) | | .07 | .08 | .09 | .09 |
| | Total Latent $R^2$ | .20 | .11 | .31 | .33 | .33 |

Note: all models controlled for age, gender and income to needs ratio (based on poverty index).
+p< .10. *p< .05. **p< .01. ***p<.001.

Table 4.6. Standardized Coefficients of Direct Effects for African Caribbeans

| African Caribbean | Dependent Variable: Racial Centrality | | Public Regard | | Coping (1) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|
| Independent Variables | B | SE | B | SE | B | SE | B | SE |
| **Model 1** | | | | | | | | |
| Racial/Ethnic Discrimination | .25** | (.09) | -.10 | (.09) | .29* | (.11) | -.27 | (9.61) |
| Racial Centrality | | | | | .13 | (.11) | .99 | (10.65) |
| Public Regard | | | | | -.10 | (.12) | -1.26 | (88.86) |
| Coping (1) | | | | | | | -.05 | (.88) |

| | Dependent Variable: Ethnic Attitudes | | Ethnic Behaviors(1) | | Ethnic Behaviors(2) | | Coping (1) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Model 2** | B | SE | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .06 | (.07) | .10 | (.07) | -.20** | (.07) | -.60 | (1.16) | .14 | (.64) |
| Ethnic Attitudes | | | | | | | -.65 | (.98) | -.28*** | (.53) |
| Ethnic Behaviors (1) | | | | | | | 4.92 | (6.19) | .11 | (.58) |
| Ethnic Behaviors (2) | | | | | | | -2.23 | (2.79) | .19 | (.86) |
| Coping (1) | | | | | | | | | .00 | (.08) |

| | Dependent Variable: Racial Centrality | | Public Regard | | Coping (1) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|
| **Model 3** | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .45** | (.18) | -.13 | (.10) | | | | |
| Racial Centrality | | | | | .47 | (.22) | .64+ | (1.65) |
| Public Regard | | | | | .06 | (.21) | .07 | (1.47) |

| | Ethnic Attitudes | | Ethnic Behaviors(1) | | Ethnic Behaviors(2) | | Coping (1- try to do) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|---|---|
| | B | SE | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .06 | (.08) | .10 | (.07) | -.20** | (.07) | -.10 | (.20) | -.22 | (1.11) |
| Ethnic Attitudes | | | | | | | .08 | (.19) | -.08 | (1.09) |
| Ethnic Behaviors (1) | | | | | | | .46* | (.24) | .04 | (1.65) |
| Ethnic Behaviors (2) | | | | | | | -.85** | (.29) | -.26 | (2.45) |
| Coping (1) | | | | | | | | | -.09 | (.79) |

| Summary Statistics | | **Model 1** | **Model 2** | **Model 3** |
|---|---|---|---|---|
| Latent $R^2$ | Racial Centrality | .19 | | .52 |
| Latent $R^2$ | Public Regard | .01 | | .02 |
| Latent $R^2$ | Ethnic Attitudes | | .02 | .02 |
| Latent $R^2$ | Ethnic Behaviors (1) | | .03 | .02 |
| Latent $R^2$ | Ethnic Behaviors (2) | | .06 | .08 |
| | Total Latent $R^2$ | .20 | .11 | .66 |

Note: all models controlled for age, gender and income to needs ratio (based on poverty index).
+p< .10. *p< .05. **p< .01. ***p<.001.

Table 4.6. Standardized Coefficients of Direct Effects for African Caribbeans (continued)

| African Caribbean | Racial Centrality | | Public Regard | | Coping (2) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|
| **Model 4** | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .26*** | (.07) | -.13 | (.10) | | | | |
| Racial Centrality | | | | | -.19 | (.21) | 1.01 | (29.66) |
| Public Regard | | | | | -.12 | (.13) | .03 | (129.79) |

Dependent Variable (Model 4, continued)

| | Ethnic Attitudes | | Ethnic Behaviors(1) | | Ethnic Behaviors(2) | | Coping (2- talk to) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|---|---|
| | B | SE | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .06 | (.08) | .10 | (.07) | -.20** | (.07) | .29** | (.09) | -.19 | (18.18) |
| Ethnic Attitudes | | | | | | | .03 | (.13) | -.09 | (20.93) |
| Ethnic Behaviors (1) | | | | | | | -.05 | (.17) | .03 | (23.99) |
| Ethnic Behaviors (2) | | | | | | | .04 | (.20) | -.22 | (8.37) |
| Coping (2) | | | | | | | | | -.08 | (.65) |

Dependent Variable

| | Racial Centrality | | Public Regard | | Coping (3) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|
| **Model 5** | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .27*** | (.07) | -.13 | (.10) | | | | |
| Racial Centrality | | | | | .46+ | (.24) | .81 | (13.59) |
| Public Regard | | | | | .20 | (.18) | -.43 | (69.84) |

| | Ethnic Attitudes | | Ethnic Behaviors(1) | | Ethnic Behaviors(2) | | Coping (3-acceptance) | | Depressive Symptoms | |
|---|---|---|---|---|---|---|---|---|---|---|
| | B | SE | B | SE | B | SE | B | SE | B | SE |
| Racial/Ethnic Discrimination | .02 | (.08) | .11 | (.07) | -.23** | (.07) | -.32+ | (.14) | -.19 | (9.58) |
| Ethnic Attitudes | | | | | | | .27 | (.17) | -.21 | (11.58) |
| Ethnic Behaviors (1) | | | | | | | .44 | (.29) | -.08 | (13.30) |
| Ethnic Behaviors (2) | | | | | | | -.49 | (.34) | -.18 | (4.23) |
| Coping (3) | | | | | | | | | .39** | (.87) |

| Summary Statistics | | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** |
|---|---|---|---|---|---|---|
| Latent $R^2$ | Racial Centrality | .19 | | .52 | .18 | .23 |
| Latent $R^2$ | Public Regard | .01 | | .02 | .02 | .02 |
| Latent $R^2$ | Ethnic Attitudes | | .02 | .02 | .02 | .01 |
| Latent $R^2$ | Ethnic Behaviors (1) | | .03 | .02 | .02 | .02 |
| Latent $R^2$ | Ethnic Behaviors (2) | | .06 | .08 | .07 | .08 |
| | Total Latent $R^2$ | .20 | .11 | .66 | .31 | .36 |

Note: all models controlled for age, gender and income to needs ratio (based on poverty index).
+p< .10. *p< .05. **p< .01. ***p<.001.

## SEM ANALYSES: RACIAL AND ETHNIC IDENTITY COMBINED MEDIATION MODELS

### AFRICAN AMERICANS

In order to examine whether dimensions of racial and ethnic identity simultaneously mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Americans, a model was tested in which three dimensions of racial identity (racial centrality, public regard, private regard) as well as two dimensions of ethnic identity (ethnic attitudes and Black American ethnic behaviors [1]) were added as mediators to the hypothesized model of lifetime racial discrimination, relevant coping and depressive symptoms. One of the two active coping variables, adaptive coping [1] (*'tried to do something'*), was used as the proximal outcome variable. Overall the model fit the data well, ($\chi 2$ (23) = 62.17, p≈.00, RMSEA=.03, WRMR=1.08, CFI=.92). These results are presented in Figure 4.9. The direct effects of the key study variables and variance explained (R-squared) by latent variables for African Americans are summarized in Table 4.5.

The paths from discrimination to racial centrality, discrimination to private regard, discrimination to ethnic attitudes, discrimination to coping and coping to depressive symptoms were found to be significantly positive. Additionally, paths from discrimination to public regard, private regard to depressive symptoms, and ethnic attitudes to depressive symptoms were found to be significantly negative. In brief, racial discrimination is positively related to ethnic attitudes and private regard which are both separately related to lower depressive symptoms, providing evidence for the hypothesized mediation of racial and ethnic identity on the relationship between racial discrimination and depressive symptoms for African Americans. At the same time

discrimination was related to increases in efforts to cope (by attempting to do something about the event) which increases depressive symptoms for African Americans. The cumulative variance explained by the latent variables in model 3 was ($R^2$=.31). Comparing the cumulative variance explained by models 1 and 2 (independent mediation models) for racial and ethnic identity ($R^2$=.20, $R^2$=.11 respectively) there is sufficient evidence to support the claim that the combined model explains more variance in the observed relationships. Notably this full model fit the data significantly better than the separate racial and ethnic identity models ($\chi 2$ difference= +15).

In order to examine whether dimensions of racial and ethnic identity differentially (based on coping strategy) mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Americans, alternative models 4 and 5 were tested in which three dimensions of racial identity (racial centrality, public regard, private regard) as well as two dimensions of ethnic identity (ethnic attitudes and Black American ethnic behaviors [1]) were added as mediators to the hypothesized model of lifetime racial discrimination, relevant coping and depressive symptoms. However, the second of two active coping variables, relevant coping [2] (*'talked to someone about it'*), and the passive coping variable, relevant coping [3] (*'acceptance'*), were used as proximal outcome variables in the alternative models 4 and 5 respectively. Overall the alternative model 4 fit the data well, ($\chi 2$ (23) = 69.95, p≈.00, RMSEA=.03, WRMR=1.17, CFI=.91). These results are presented in Figure 4.10. The direct effects of the key study variables and variance explained (R-squared) by latent variables for African Americans are summarized in Table 4.5. Notably this alternative model fit the data significantly better than the first full model 3 ($\chi 2$ difference= 7.78).

This alternative full model 4 (relevant coping [2- '*talked to someone*']) showed similar relationships in comparison to model 3 with significant mediation paths from discrimination through private regard, discrimination through ethnic attitudes, and discrimination through coping to depressive symptoms. In brief, this model showed a mediation path such that discrimination is positively related to private regard, which in turn was related to reduces in the use of coping (by talking to someone about it), subsequently related to fewer depressive symptoms. Thus this model lends credence to the protective nature of private regard in decreasing the use of the maladaptive coping strategy of talking to someone about it to diminish depressive symptoms; and also provides evidence for the hypothesized mediation of racial identity on the relationship between racial discrimination, adaptive relevant coping and depressive symptoms for African Americans, as well as the hypothesized mediation of racial and ethnic identity on the relationship between racial discrimination and depressive symptoms.

The final alternative model 5 also fit the data well, ($\chi 2$ (23) = 69.20, $p \approx .00$, RMSEA=.03, WRMR=1.16, CFI=.91). These results are presented in Figure 4.11. The direct effects of the key study variables and variance explained (R-squared) by latent variables for African Americans are summarized in Table 4.5. Notably this alternative model fit the data significantly better than the first full model 3 ($\chi 2$ difference= 7.03) but not better than model 4 ($\chi 2$ difference= .75).

This model 5 (relevant coping [3-'*acceptance*']) shows a similar pattern in comparison to models 3 & 4, with significant mediation paths from discrimination through private regard and discrimination through ethnic attitudes to depressive symptoms. In brief, this model showed mediation paths such that increased exposure to

discrimination is related to lower public regard, which in turn was related to increases in the use of acceptance coping, and subsequently related to decreasing depressive symptoms. With the expected significant negative path from coping to depressive symptoms, this model provides evidence for the hypothesized mediation of racial identity on the relationship between racial discrimination, adaptive relevant coping and depressive symptoms for African Americans, as well as the hypothesized mediation of racial and ethnic identity on the relationship between racial discrimination and depressive symptoms.

As stated earlier, the significant path relationships in both alternative models 4 and 5 replicated the significant paths in the model 3. Recall, the cumulative variance explained by the independent mediation models for racial identity (model 1), and ethnic identity (model 2) was, ($R^2$=.20 and $R^2$=.11) respectively. The cumulative variance explained by the latent variables in the original full model 3 was ($R^2$=.31). The cumulative variance explained by both alternative models 4 and 5 was ($R^2$=.33), providing additional evidence to support the hypothesis that the combined models explain more variance in the observed relationships. Both models 4 & 5 were significantly better fits than model 3.

AFRICAN CARIBBEANS

In order to examine whether dimensions of racial and ethnic identity simultaneously mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Caribbeans, a model was tested in which two dimensions of racial identity (racial centrality and public regard) as well as three dimensions of ethnic identity (ethnic attitudes, Black American ethnic behaviors [1] and

Caribbean ethnic behaviors [2]) were added as mediators to the hypothesized model of lifetime racial discrimination, relevant coping and depressive symptoms. One of the two active coping variables, relevant coping [1] (*'tried to do something'*), was used as the proximal outcome variable. Overall the model fit the data well, ($\chi 2$ (10) = 12.62, p≈.25, RMSEA=.02, WRMR=.68, CFI=.92). These results are presented in Figure 4.12. Notably this full model did not fit the data significantly better than the separate racial and ethnic identity models ($\chi 2$ difference= >2.75). The direct effects of the key study variables and variance explained (R-squared) by latent variables for African Caribbeans are summarized in Table 4.6.

The paths from discrimination to racial centrality, Black American ethnic behaviors [1] to coping (by trying to do something), and racial centrality to depressive symptoms were found to be significantly positive, while paths from discrimination to Caribbean ethnic behaviors [2] and coping were found to be significantly negative. In sum, for African Caribbeans in the sample, discrimination is positively related to racial centrality, which in turn is related to higher depressive symptom expression. These relationships point to negative consequences for African Caribbeans as they are given cues from experiences of discrimination that relate to their beliefs about the importance of Blackness in their life, which relates to increased depressive symptoms. The cumulative variance explained by the latent variables in model 3 was ($R^2$=.66). Comparing the cumulative variance explained by models 1&2 (independent mediation models) for racial and ethnic identity ($R^2$=.20, $R^2$=.11 respectively) there is sufficient evidence to support the claim that the hypothesized combined model explains more of the variance in the observed relationships.

In order to examine whether dimensions of racial and ethnic identity differentially (based on coping strategy) mediate the relationship between racial discrimination, relevant coping and depressive symptoms for African Caribbeans, alternative models 4 and 5 were tested in which two dimensions of racial identity (racial centrality and public regard) and three dimensions of ethnic identity (ethnic attitudes, Black American ethnic behaviors [1] and Caribbean ethnic behaviors [2]) were added as mediators to the hypothesized model of lifetime racial discrimination, relevant coping and depressive symptoms. The second of two active coping variables, relevant coping [2] (*'talked to someone about it'*), and the passive coping variable, relevant coping [3] (*'acceptance*'), were used as separate proximal outcome variables in the alternative models 4 and 5 respectively. The alternative model 4 fit the data relatively well ($\chi2$ (10) = 12.63, p≈.25, RMSEA=.02, WRMR=.68, CFI=.92), however, no significant mediation paths were found. Notably this alternative model did not fit the data significantly better than the first full model 3 ($\chi2$ difference=.01). These results are presented in Figure 4.13.

The final alternative model 5 also fit the data well, ($\chi2$ (10) = 12.30, p≈.27, RMSEA=.02, WRMR=.66, CFI=.92). Notably this alternative model did fit the data significantly better than the first full model 3 or alternative model 4 ($\chi2$ difference= >.32). These results are presented in Figure 4.14. The direct effects of the key study variables and variance explained (R-squared) by latent variables for African Caribbeans are summarized in Table 4.6. Model 5 demonstrated a significant mediating path from discrimination through racial centrality and acceptance coping to depressive symptoms. Additionally, a positive effect path was observed from discrimination to coping to depressive symptoms, pointing to potential maladaptive consequences of acceptance

coping on the mental health of African Caribbeans. In short racial discrimination is positively related to the importance of race in one's life, and is related to increases in the likelihood of using maladaptive acceptance coping, which both are related in turn to increases in depressive symptoms for African Caribbeans in this sample. These results provide evidence to support the hypothesis that racial identity mediates the relationship between racial discrimination, maladaptive relevant coping and depressive symptoms for African Caribbeans.

Recall, that the cumulative variance explained by the independent mediation models for racial identity (model 1) and ethnic identity (model 2) was, ($R^2$=.20 and $R^2$=.11) respectively. The cumulative variance explained by the latent variables in model 3 was ($R^2$=.66). The cumulative variance explained by both alternative models 4 and 5 was, ($R^2$=.31 and $R^2$=.36) respectively. Thus there is additional evidence to support the hypothesis that the combined models explained more variance in the observed relationships for African Caribbeans.

> Hypothesis 2: It is expected that for both Black ethnic groups, there will be greater variance explained in the (combined) models which include both racial and ethnic identity mediating variables as compared to (independent) models which only include either racial or ethnic identity mediating variables.
>
> Hypothesis 3: It is expected that there will be differences between groups in the way racial and ethnic identity variables mediate the bivariate relationship across different adaptive coping strategies:
>
> > 3a-- Ethnic identity variables will be key mediators of the relationship between discrimination and adaptive coping for African Americans.
> >
> > 3b-- Racial identity variables will be key mediators of the relationship between discrimination and adaptive coping for African Caribbeans.

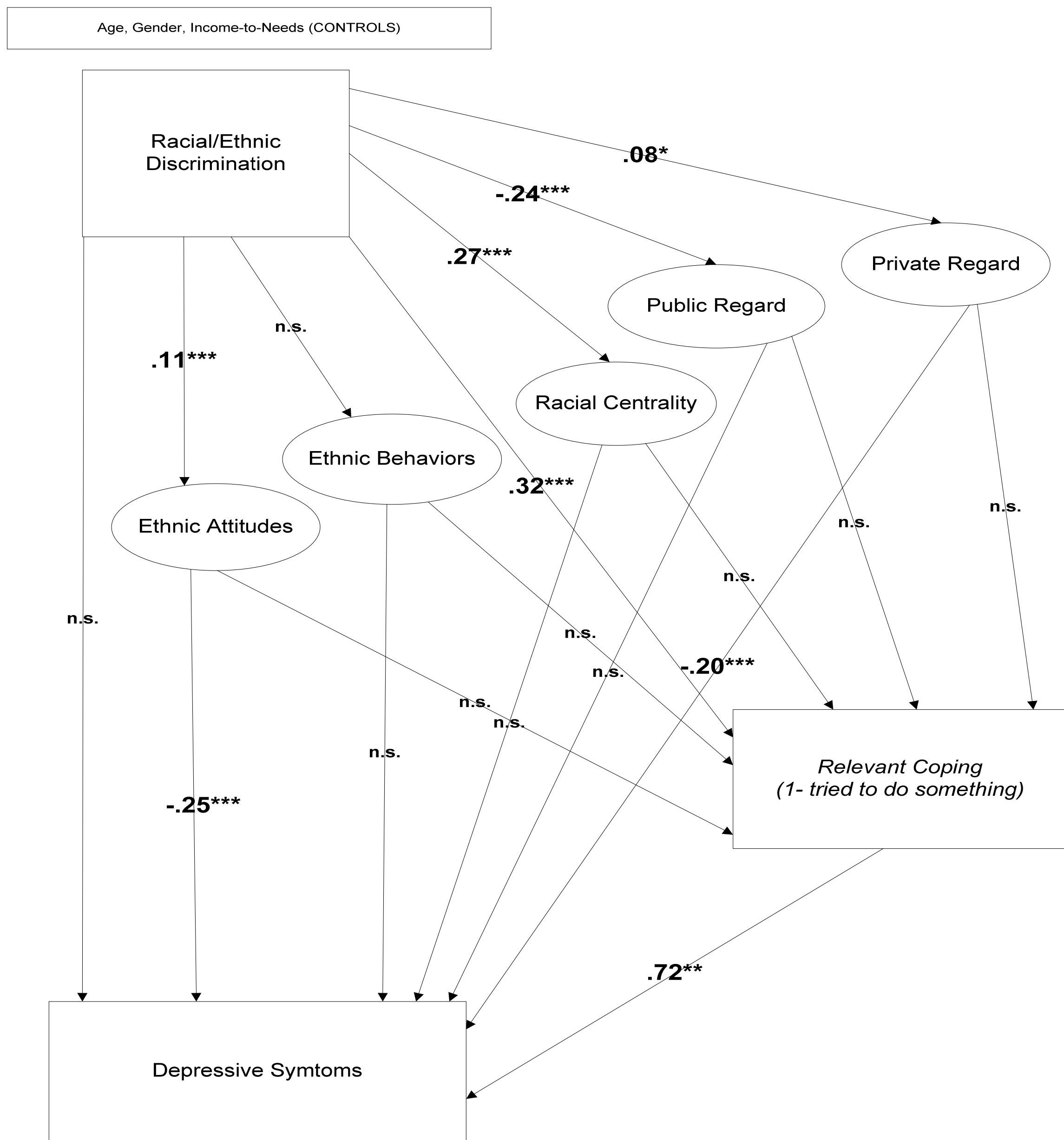
Lastly, the results presented for African Americans and African Caribbeans in models 3-5 presented in Figures 4.9 - 4.14 and Tables 4.5 & 4.6 provide evidence to

support hypotheses 3a & 3b: ethnic attitudes was the key mediator of the relationship between discrimination and adaptive coping for African Americans, while racial centrality was the key mediator of the relationship between discrimination and adaptive coping for African Caribbeans.

### Final Conclusions

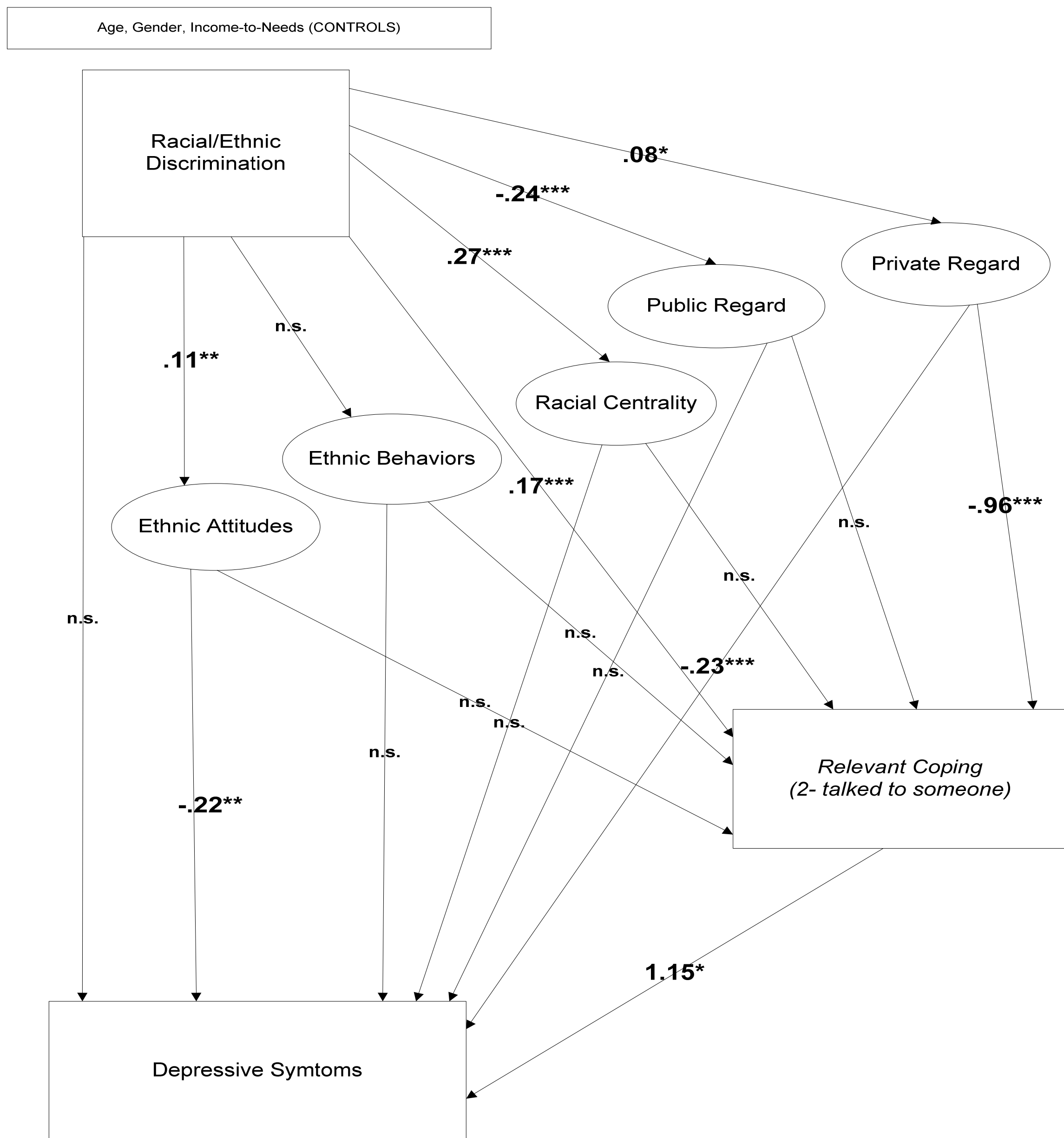
The results show that the African American and African Caribbeans samples used in these data analyses exhibit relationships between racial discrimination, relevant coping and depressive symptoms that are significantly mediated by varying dimensions of racial and ethnic identity, supporting hypothesis 1. In comparing variance explained in the independent models (1 & 2) versus the combined models (3-5), there is evidence supporting hypothesis 2 that the combined models explain greater variance than the independent models for both Black ethnic groups. Notably, in comparing better fitting models alternative models 4 & 5 proved best fits for African Americans, while there was no significant difference in fit across alternative full models 3-5 for African Caribbeans. Lastly, these findings provide evidence that the relationship between different methods of coping in the aforementioned stress and coping relationship can vary when taking into account the mediating effects of both racial and ethnic identity, supporting hypothesis 3. Specifically, for African Americans private regard and ethnic attitudes offer key protective mediation effects that are related to decreases depressive symptoms, whereas for African Caribbeans racial centrality is an unexpected key mediator for in relation to predicting increased depressive symptoms. Overall the findings in this chapter results demonstrate a myriad of complex relationships that exist for African Americans and

African Caribbeans within an intraracial and interethnic context of racial discrimination, adaptive coping and depressive symptoms.



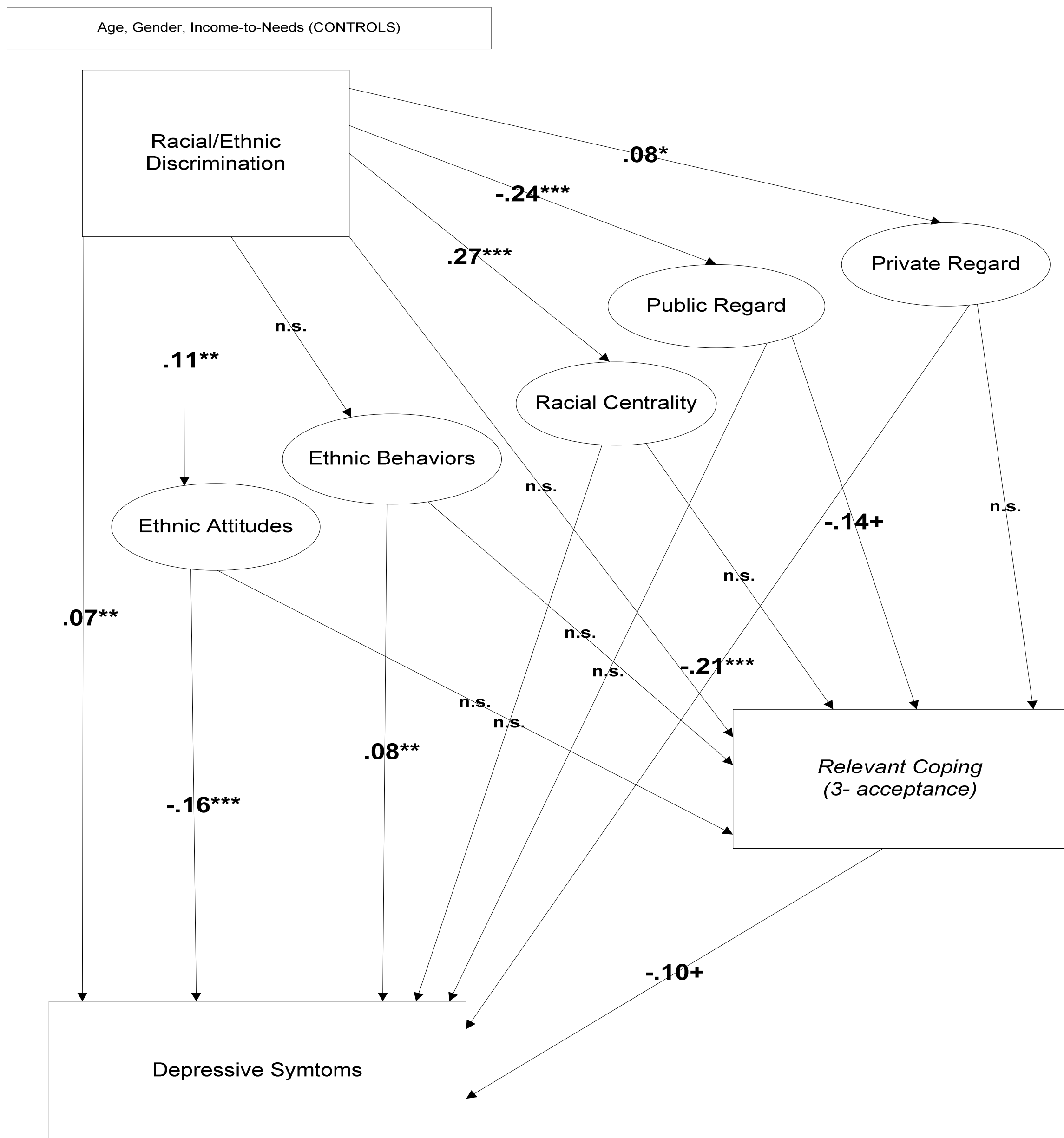

Model Fit Statistics: ($\chi 2$ (23) = 62.17, p≈.00, RMSEA=.03, WRMR=1.08, CFI=.92).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.9. Proposed full mediation model of independent effects of racial and ethnic identity for African Americans [with relevant coping (1- tried to do something)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).



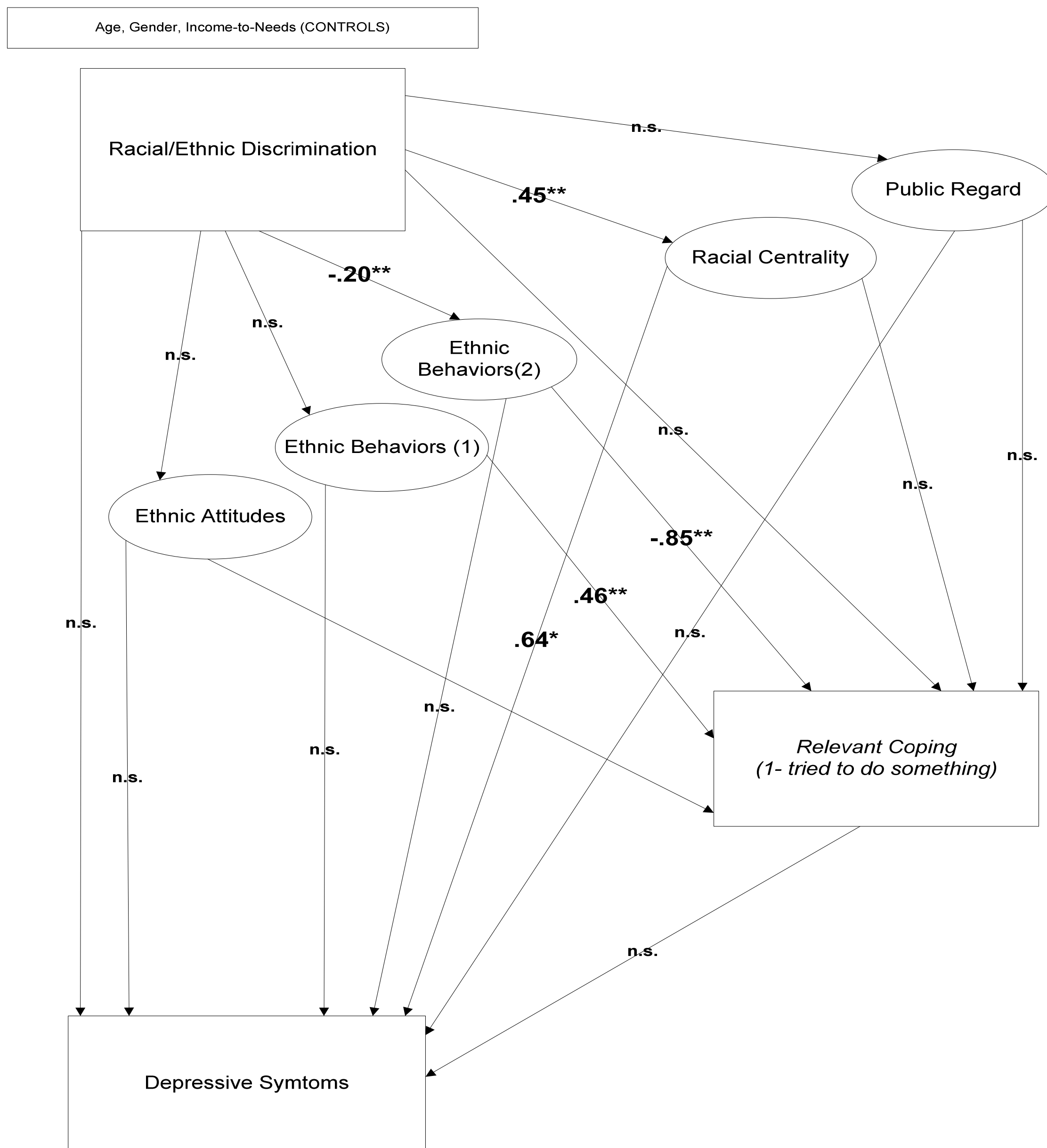

Model Fit Statistics: ($\chi2$ (23) = 69.95, p≈.00, RMSEA=.03, WRMR=1.17, CFI=.91).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.10. Proposed full mediation model of independent effects of racial and ethnic identity for African Americans [with relevant coping (2- talked to someone)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).



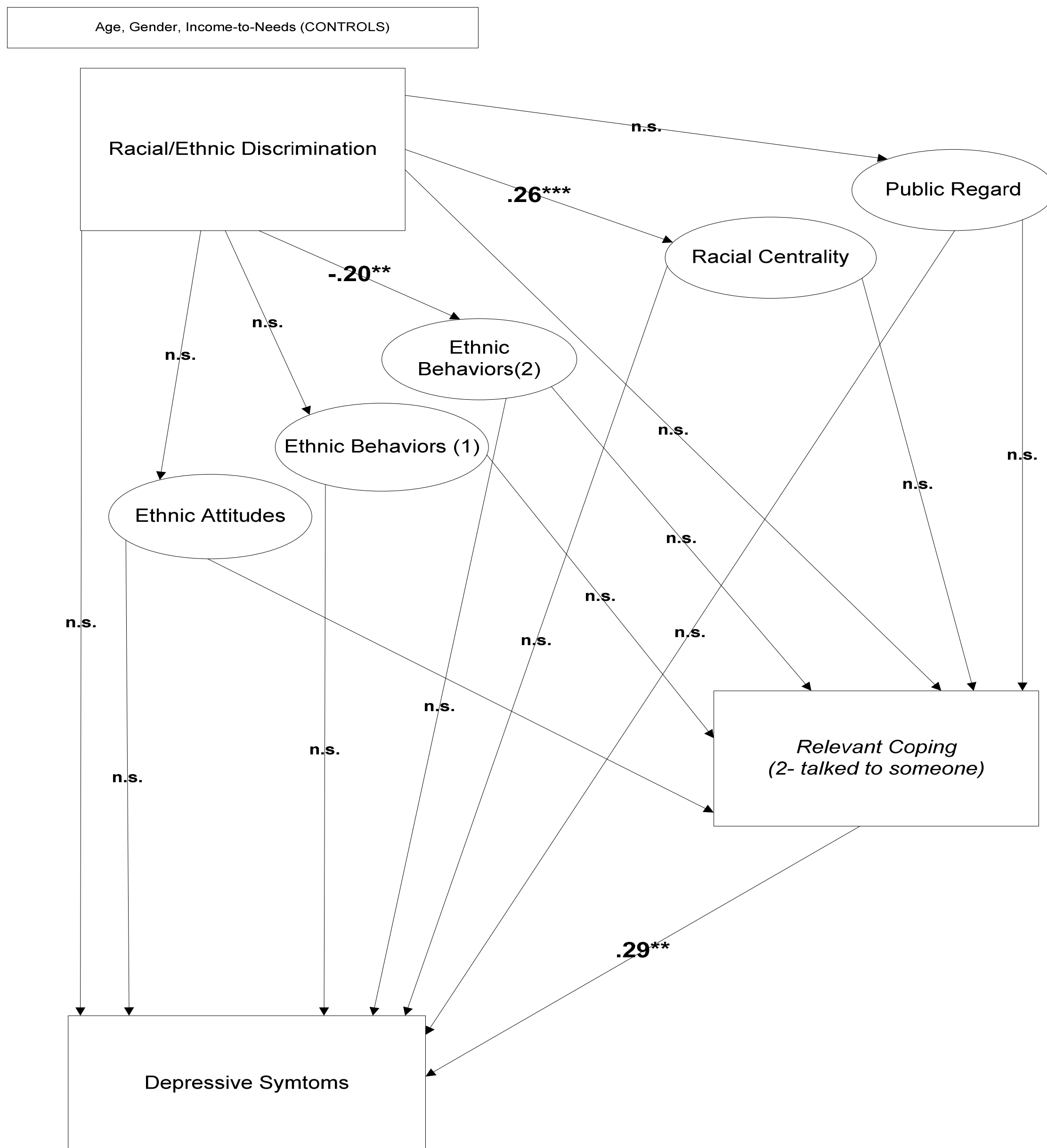

Model Fit Statistics: ($\chi$2 (23) = 69.20, p≈.00, RMSEA=.03, WRMR=1.16, CFI=.91).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.11. Proposed full mediation model of independent effects of racial and ethnic identity for African Americans [with relevant coping (3- acceptance)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).



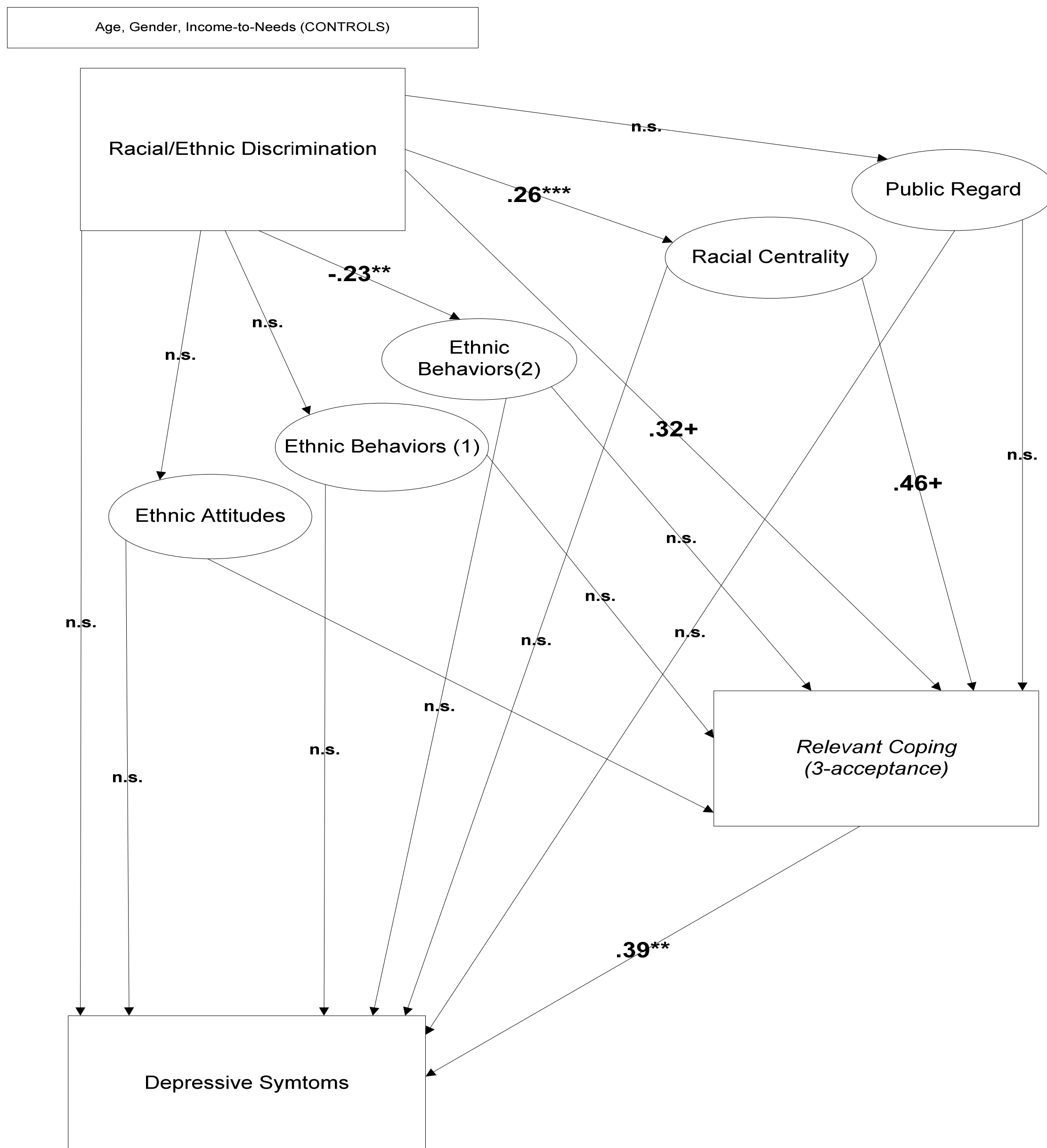

Model Fit Statistics: ($\chi2$ (10) = 12.62, p≈.25, RMSEA=.02, WRMR=.68, CFI=.92).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.12. Proposed full mediation model of independent effects of racial and ethnic identity for African Caribbeans [with relevant coping (1- tried to do something)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).




Model Fit Statistics: ($\chi 2$ (10) = 12.63, p≈.25, RMSEA=.02, WRMR=.68, CFI=.92).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.13. Proposed full mediation model of independent effects of racial and ethnic identity for African Caribbeans [with relevant coping (2- talked to someone)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).




Model Fit Statistics: ($\chi 2$ (10) = 12.30, p≈.27, RMSEA=.02, WRMR=.66, CFI=.92).
*+p< .10, *p< .05, **p< .01, ***p<.001*

Figure 4.14. Proposed full mediation model of independent effects of racial and ethnic identity for African Caribbeans [with relevant coping (3- acceptance)] (note: model controlled for the effects of age, gender, education and income-to-needs ratio).

**Discussion**

The results provide evidence of the diversity that exist in the meaning Black Americans ascribe to their racial and ethnic identification (see Table 4.7 for summary of results). Furthermore, these findings add to the depth of understanding of how racial and ethnic identities act as potential stress and coping mediators. Specifically the results speak to the complex nature that social conceptions of self in relation to race and ethnicity may impact outcomes of stress directed at personal characteristics and social categorization.

Interestingly, the results show interesting effects of racial identity for African Americans: racial centrality, private regard and public regard were all identified as direct mediators that are related to decreases in depressive symptoms in the context of discrimination and coping. Additionally public regard was identified as having a protective relationship with coping as a mediator. These results also shed light on the nature of coping strategies and direct relationships of coping (adaptive vs. maladaptive) on depression. Acceptance coping was identified as an adaptive coping strategy, due to its relationship to decreased depressive symptoms, whereas more active strategies such as 'trying to do something about it' and 'talking to someone about it' proved to be maladaptive in their relationship by increasing depressive symptoms for African Americans. In contrast, for African Caribbeans racial centrality was the only racial identity dimension identified as having a positive relationship with a maladaptive coping mediator; such that experiences of discrimination are related to increased importance of race in their lives and increases with acceptance coping, which both are in turn related to increases in depressive symptoms. So, in a sense African Caribbeans in this sample have

a strong relationship between their ‘Blackness’ (as measured via racial centrality) and increased depressive symptoms

The results also show how the effects of ethnic identity vary by ethnicity. For African Americans, ethnic identity relates to direct effects on depressive symptoms. Specifically more positive ethnic attitudes about Black ethnic groups (American, Caribbean, African) is related to direct protective effects in relation to decreasing depressive symptoms irrespective of the coping strategy used, positing ethnic attitudes as an independent protective mechanism. For African Caribbeans ethnic identity only relates directly to coping strategies, such that experiences of discrimination are related to decreases in Caribbean specific ethnic behaviors, which relates to increases in ‘trying to do something about it’ as a coping strategy. It is important to note that this strategy was found to be maladaptive for African Americans.

It is essential to note that the results are limited for numerous reasons, beginning with the imprecise measurement of context and the need for more established causality. Additionally the temporal order of the variables may be questionable due to the cross-sectional nature of the data. Also, both the African American and African Caribbean samples exhibited relatively low depressive symptomatology, suggesting that the results may be markedly different given a sample with greater variation of depressive symptom expression. It is additionally difficult to account for full exposure to experiences of racial discrimination (i.e. intensity, additive lifecourse effects and immediate causal impact). Thus, relationships and processes explored in this chapter may differ with exposure to acute instances of discrimination versus chronic exposure. The need to control for other potential confounding covariates such as racial socialization, self-esteem, paranoia, and

mental disorders is also apparent. Finally, more detailed measures of racial identity, ethnic identity salience and direct coping strategies that are event and context specific to a given experience of discrimination would provide more evidence to the cognitive process of coping with discrimination and the utility of social identity in assisting coping and subsequent better mental health outcomes.

What is evident from the results of the current research is that discrimination continues to have psychological associations with how Black Americans view themselves in the world as well as the stress they are exposed to that places them at disproportionate risk for mental and physical health problems. Continued empirical understandings of the complex relationship between race, ethnicity, stress and coping should prove useful in the development of more sustainable stress ameliorating interventions at the individual and community level. Longitudinal data as well as acute experimental data will assist in this grand social task. Research focusing on precise measurement of race and ethnicity, while accounting for comprehensive sociocultural variables and building off of conceptual frameworks focusing on processes that may diminish racial and ethnic health disparities, needs to be translated into interventions with measurable evaluation criteria that can inform policy level changes.

Culture and cultural processes will remain a Pandora’s box to research, social justice advocates and policy makers so long as understandings of the concepts remains incongruent, hegemonic, self serving and reifying. The meaning that people gather from social categories is related to cultural underpinnings and thus as culture informs society, society informs culture. Culture should not be reduced to pathology but celebrated and

revered for its continued impact on human survival. Harnessing culture may be the greatest tool public health has in diminishing psychosocial health disparities.

Hypotheses:

1. (H1) It is expected that the bivariate relationship between racial discrimination and depressive symptoms will be mediated by racial identity, ethnic identity and coping variables for both Black ethnic groups; and that there will be differences between groups in way these variables operate to mediate the bivariate relationship.

2. (H2) It is expected that for both Black ethnic groups, there will be greater variance explained in the (combined) models which include both racial and ethnic identity mediating variables as compared to (independent) models which only include either racial or ethnic identity mediating variables.

3. (H3) It is expected that there will be differences between groups in the way racial and ethnic identity variables mediate the bivariate relationship across different adaptive coping strategies:

    (H3a)-- Ethnic identity variables will be key mediators of the relationship between discrimination and adaptive coping for African Americans

    (H3b)-- Racial identity variables will be key mediators of the relationship between discrimination and adaptive coping for African Caribbeans

Table 4.7. Summary Table for Overall SEM results for Key Study Variables

| Key Study Variable | African American | African Caribbean | Hypothesis |
|---|---|---|---|
| | Important Finding/ Significance | Important Finding/ Significance | (Supported: Yes/No/Partial) |
| <u>**Racial Identity**</u> | | | |
| **Racial Centrality** | | Significant combined mediator (directly [w/coping 1],and thru coping [3]); risk | H1: Yes<br>H3b: Yes |
| **Private Regard** | Significant independent mediator (directly and thru coping); significant combined mediator (directly [w/ coping 1&3], indirectly thru coping [2]); protective | | H1: Yes |
| **Public Regard** | Significant combined coping mediator (thru coping [3]); protective | | H2: Yes |

Table 4.7. Summary Table for Overall SEM results for Key Study Variables (con't)

| Key Study Variable | African American | African Caribbean | Hypothesis |
|---|---|---|---|
| | Important Finding/ Significance | Important Finding/ Significance | (Supported: Yes/No/Partial) |
| **<u>Ethnic Identity</u>** | | | |
| **Attitudes** | Significant independent mediator (directly and thru coping); significant combined mediator; protective | | H1: Yes<br>H3a: Yes |
| **Behaviors (Black American)** | | | |
| **Behaviors (Caribbean)** | | Significant combined mediator (to coping [1]); decreases coping | H1: Yes<br>H2: Yes |
| **<u>Coping with Discrimination Strategy</u>** | | | |
| **Tried Do Something (coping [1])** | Maladaptive= related to increased depressive symptoms | | |
| **Talked to Someone (coping [2])** | Maladaptive= related to increased depressive symptoms | Maladaptive= related to increased depressive symptoms | |
| **Acceptance (coping [3])** | Adaptive= related to decreased depressive symptoms | Maladaptive= related to increased depressive symptoms | H3: Yes |

Table 4.8. Descriptive Statistics of African American Adult Latent Variable Items

| Variable | Range | M | SE | Standardized Loadings |
|---|---|---|---|---|
| **<u>Racial Identity</u>** | | | | |
| **Racial Centrality** | | | | |
| (G22) How often do you think about being Black? [r] | 1-5 | 2.94 | .06 | .35*** |
| (G24a) Being a Black person is a large part of how I think of myself. [r] | 1-4 | 2.84 | .03 | .41*** |
| (G24d) What happens in my life is largely the result of what happens to other Black people in this country. [r] | 1-4 | 2.30 | .02 | .78*** |
| (G24g) I <u>do not</u> feel strongly tied to other Black people. | 1-4 | 2.96 | .03 | |
| (G24j) Being Black is <u>not</u> an important part of who I am as a person. | 1-4 | 2.43 | .04 | |
| **Private Regard** | | | | |
| (G24b) I feel good about other Black people. [r] | 1-4 | 3.37 | .01 | |
| (G24e) I am <u>not</u> happy that I am Black. | 1-4 | 3.77 | .01 | .38*** |
| (G24h) I am proud to be Black. [r] | 1-4 | 3.81 | .01 | .57*** |
| (G24k) Black people have made important contributions to the development of this country. [r] | 1-4 | 3.79 | .02 | .36*** |
| **Public Regard** | | | | |
| (G24c) White people in this country <u>do not</u> respect Black people. | 1-4 | 2.33 | .03 | .84*** |
| (G24f) Other racial and ethnic groups in this country are positive about Black people. [r] | 1-4 | 2.23 | .02 | |
| (G24i) White people in this country <u>do not</u> think of Black people as important contributors to this country. | 1-4 | 2.15 | .02 | .60*** |
| (G24l) Other racial and ethnic groups in this country <u>do not</u> think of Blacks as intelligent and competent. | 1-4 | 2.12 | .02 | .51*** |
| | | | | |
| **<u>Ethnic Identity</u>** | | | | |
| **Attitudes** | | | | |
| Now I am going to ask you some questions about how close you feel in your ideas and feelings about things to different groups of people. [for G3a,f,g] | | | | |
| (G3a) Please tell me if you feel closeness to Blacks (in America). [r] | 1-4 | 3.43 | .03 | 1.00 (ns) |
| (G3f) Please tell me if you feel closeness to Black Caribbeans. [r] | 1-4 | 2.64 | .03 | .36*** |
| (G3g) Please tell me if you feel closeness to Blacks in Africa. [r] | 1-4 | 2.66 | .03 | .39*** |
| (G11) Do you think what happens generally to Black people in this country will have something to do with what happens in your life? [r] | 1-4 | 1.32 | .04 | |

Table 4.8. Descriptive Statistics of African American Adult Latent Variable Items (con't)

| | | | | |
|---|---|---|---|---|
| **Behaviors** | | | | |
| (G1G2) 1) People use different words to refer to people whose original ancestors came from Africa. What word best describes what you like to be called? / 2) Which would you say is more important to you--being (response to question 1) or (being American, or are both equally important to you)? | 1-3 | 1.14 | .02 | .13*** |
| In an average week, how often do you do the following things? [for J11a-J11i] | | | | |
| (J11a) How often do you listen to Black radio? | 1-4 | 3.38 | .02 | .59*** |
| (J11b) Listen to Caribbean radio? | 1-4 | 1.40 | .02 | |
| (J11c) Watch Black TV shows? | 1-4 | 3.25 | .03 | .74*** |
| (J11d) Read Black newspapers? | 1-4 | 2.42 | .03 | .49*** |
| (J11e) Read Caribbean newspapers? | 1-4 | 1.30 | .02 | |
| (J11f) Read Black magazines? | 1-4 | 2.93 | .03 | .65*** |
| (J11g) Read Black literature? | 1-4 | 2.77 | .03 | .54*** |
| (J11h) Watch Black movies? | 1-4 | 3.21 | .02 | .83*** |
| (J11i) Listen to Rap music? | 1-4 | 2.33 | .04 | |
| | | | | |
| **Coping with Discrimination Strategy** | | | | |
| How did you respond to this/these experience(s) [of discrimination]? Please tell me if you did each of the following things. | | %Yes | | |
| (G21a) Tried to do something about it. | **Yes/No** | 29 % | -- | |
| (G21b) Accepted it as a fact of life. | **Yes/No** | 64 % | -- | |
| (G21e) Talked to someone about how you were feeling. | **Yes/No** | 48 % | -- | |

Table 4.9. Descriptive Statistics of African Caribbean Adult Latent Variable Items

| Variable | Range | M | SE | Standardized Loadings |
|---|---|---|---|---|
| **Racial Identity** | | | | |
| **Racial Centrality** | | | | |
| (G22) How often do you think about being Black? [r] | 1-5 | 2.93 | .22 | .46*** |
| (G24a) Being a Black person is a large part of how I think of myself. [r] | 1-4 | 2.74 | .13 | .68*** |
| (G24d) What happens in my life is largely the result of what happens to other Black people in this country. [r] | 1-4 | 2.19 | .07 | .60*** |
| (G24g) I do not feel strongly tied to other Black people. | 1-4 | 2.83 | .10 | |
| (G24j) Being Black is not an important part of who I am as a person. | 1-4 | 2.29 | .14 | .16 (ns) |
| **Private Regard** | | | | |
| (G24b) I feel good about other Black people. [r] | 1-4 | 3.40 | .07 | |
| (G24e) I am not happy that I am Black. | 1-4 | 3.82 | .03 | |
| (G24h) I am proud to be Black. [r] | 1-4 | 3.84 | .04 | |
| (G24k) Black people have made important contributions to the development of this country. [r] | 1-4 | 3.78 | .06 | |
| **Public Regard** | | | | |
| (G24c) White people in this country do not respect Black people. | 1-4 | 2.35 | .09 | .61*** |
| (G24f) Other racial and ethnic groups in this country are positive about Black people. [r] | 1-4 | 2.23 | .09 | |
| (G24i) White people in this country do not think of Black people as important contributors to this country. | 1-4 | 2.11 | .10 | .81*** |
| (G24l) Other racial and ethnic groups in this country do not think of Blacks as intelligent and competent. | 1-4 | 2.06 | .06 | .73*** |
| | | | | |
| **Ethnic Identity** | | | | |
| **Attitudes** | | | | |
| (G1G2) 1) People use different words to refer to people whose original ancestors came from Africa. What word best describes what you like to be called? / 2) Which would you say is more important to you--being (response to question 1) or (being American, or are both equally important to you)? | 1-3 | 1.20 | | .12 (ns) |
| Now I am going to ask you some questions about how close you feel in your ideas and feelings about things to different groups of people. [for G3a,f,g] | | | | |
| (G3a) Please tell me if you feel closeness to Blacks (in America). [r] | 1-4 | 3.26 | .06 | .76*** |
| (G3f) Please tell me if you feel closeness to Black Caribbeans. [r] | 1-4 | 3.39 | .06 | .84*** |
| (G3g) Please tell me if you feel closeness to Blacks in Africa. [r] | 1-4 | 2.94 | .06 | .62*** |
| (G11) Do you think what happens generally to Black people in this country will have something to do with what happens in your life? [r] | 1-4 | 1.36 | .13 | |

Table 4.9. Descriptive Statistics of African Caribbean Adult Latent Variable Items (con't)

| | | | | |
|---|---|---|---|---|
| **Behaviors** | | | | |
| (G3f) Please tell me if you feel closeness to Black Caribbeans. [r] | 1-4 | 3.39 | .06 | -.40*** |
| In an average week, how often do you do the following things? [for J11a-J11i] | | | | |
| (J11a) How often do you listen to Black radio? | 1-4 | 3.00 | .07 | .78*** |
| (J11c) Watch Black TV shows? | 1-4 | 3.04 | .09 | .83*** |
| (J11d) Read Black newspapers? | 1-4 | 2.28 | .11 | .74*** |
| (J11f) Read Black magazines? | 1-4 | 2.75 | .08 | .77*** |
| (J11g) Read Black literature? | 1-4 | 2.58 | .08 | .71*** |
| (J11h) Watch Black movies? | 1-4 | 2.87 | .09 | .72*** |
| (J11i) Listen to Rap music? | 1-4 | 2.07 | .14 | |
| (J11b) Listen to Caribbean radio? | 1-4 | 2.63 | .07 | .79*** |
| (J11e) Read Caribbean newspapers? | 1-4 | 2.36 | .11 | .77*** |
| | | | | |
| **Coping with Discrimination Strategy** | | | | |
| How did you respond to this/these experience(s) [of discrimination]? Please tell me if you did each of the following things. | | %Yes | | |
| (G21a) Tried to do something about it. | **Yes/No** | 30 % | -- | |
| (G21b) Accepted it as a fact of life. | **Yes/No** | 61 % | -- | |
| (G21e) Talked to someone about how you were feeling. | **Yes/No** | 52 % | -- | |

## References

Allen, R. L., & Bagozzi, R. P. (2001). Consequences of the Black sense of self. *Journal of Black Psychology, 27*(1), 3-28.

Avison, W., & Gottlieb, B. H. (Eds.). (1994). *Stess and Mental Health*. New York: Plenum.

Bagley, C. A., & Copeland, E. J. (1994). African and African American graduate students' racial identity and personal problem-solving strategies. *Journal of Counseling & Development, 73*(2), US American Counseling Assn; 1994, 1167-1171.

Baldwin, J. A., & Bell, Y. R. (1985). The African self-consciousness scale: An Africentric personality questionnaire. *Western Journal of Black Studies, 9*(2), 61-68.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238-246.

Bollen, K. (1989). *Structural equation modeling with latent variables*. New York: John Wiley.

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality & Social Psychology, 77*(1), 135-149.

Brown, T. N., Sellers, S. L., Brown, K. T., & Jackson, J. S. (1999). Race, ethnicity, and culture in the sociology of mental health. In *Handbook of sociology of mental health* (pp. 167-182 Handbook of sociology and social research.). New York, NY, US: Kluwer Academic/Plenum Publishers.

Byrne, B. M. (1998). *Structural equationn modeling with LISREL, PRELIS and SIMPLIS: Basic concepts, applications and programming*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Caldwell, C. H., Zimmerman, M. A., Bernat, D. H., Sellers, R. M., & Notaro, P. C. (2002). Racial identity, maternal support, and psychological distress among African American adolescents. *Child Development, 73*(4), 1322-1336.

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist, 54*(10), 805-816.

Fernando, S. (1984). Racism as a cause of depression. *International Journal of Social Psychiatry, 30*(1-2), 41-49.

Foner, N. (2001). West Indian migration to New York: An Overview. In N. Foner (Ed.), *Islands in the city: West Indian migration to New York* (pp. 1-22). Berkley, CA: University of California Press.

Hall, S. P., & Carter, R. T. (2006). The relationship between racial identity, ethnic identity, and perceptions of racial discrimination in an Afro-Caribbean descent sample. *Journal of Black Psychology, 32*(2), 155-175.

Holahan, C. J., & Moos, R. H. (1990). Life stressors, resistance factors, and improved psychological functioning: An extension of the stress resistance paradigm. *Journal of Personality and Social Psychology, 58*(5), 909-917.

Holahan, C. J., & Moos, R. H. (1991). Life stressors, personal and social resources, and depression: A 4-year structural model. *Journal of Abnormal Psychology, 100*(1), 31-38.
House, J. S., & Williams, D. R. (2000). Understanding and reducing socioeconomic and racial/ethnic disparities in health. In *Institute of Medicine, Promoting Health: Intervention Strategies from Social and Behavioral Research* (pp. 81-124). Washington, D.C.: National Academy Press.
Jackson, J. S., Knight, K. M., Schaie, K. W., & Carstensen, L. L. (2006). *Race and self-regulatory health behaviors: The role of the stress response and the HPA axis in physical and mental health disparities*. New York, NY, US: Springer Publishing Co.
Jackson, J. S., McCullough, W. R., Gurin, G., & Broman, C. L. (1991). Race identity. In *Life in black America* (pp. 238-253). Thousand Oaks, CA, US: Sage Publications, Inc.
James, S. A. (1994). John Henryism and the health of African-Americans. *Culture, Medicine & Psychiatry, 18*(2), 163-182.
Kaplan, B. H. (1996). *Perspectives on psychosocial stress. Psychosocial stress: Perspectives on structure, theory, life-course, and methods*. San Diego, CA: Academic Press, Inc.
Karlsen, S., & Nazroo, J. Y. (2002). Agency and structure: the impact of ethnic identity and racism on the health of ethnic minority people. *Sociology of Health and Illness, 24*(1), 1-20.
Krause, N. (2001). Social Support. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences*. San Diego: Academic Press.
Krieger, N., Sidney, S., & Coakley, E. (1998). Racial discrimination and skin color in the CARDIA study: Implications for public health research. *American Journal Of Public Health, 88*(9), 1308-1313.
LaVeist, T. A. (1994). Beyond dummy variables and sample selection: what health services researchers ought to know about race as variable. *Health Services Research, v29*(1), 1-16.
LaVeist, T. A. (2005). *Minority Populations and Health: Introduction to Health Disparities in the United States* (1st ed.). San Francisco, CA: Jossey-Bass.
LaVeist, T. A., Sellers, R., & Neighbors, H. W. (2001). Perceived racism and self and system blame attribution: consequences for longevity. *Ethnicity & Disease, 11*(4), 711-721.
Lazarus, R. S. (1992). Four reasons why it is difficult to demonstrate psychosocial influences on health. *Advances, 8*(3), 5-45.
Lazarus, R. S., Cohen, J. B., & Levi, L. (1987). *Theory and method in the study of stress and coping in ageing individuals*. New York, NY, US: Oxford University Press.
Lazarus, R. S., & Folkman, S. (1991). The concept of coping. 189-206.
Lazarus, R. S., Folkman, S., Monat, A., & Lazarus, R. S. (1991). *The concept of coping*. New York, NY, US: Columbia University Press.
Levitt, P., & Waters, M. C. (Eds.). (2002). *The Changing face of home: the Transnational lives of the second generation*. New York, NY: Russell Sage Foundation.
Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health & Social Behavior. Spec No*.

Lynch, J., Kaplan, G., & Salonen, J. (1997). Why do poor people behave poorly? Variation in adult health behaviors and psychosocial characteristics by stages of the socioeconomic lifecourse. *Social Science & Medicine, 44*(6), 809-819.

Massey, D. S., & Fischer, M. (2000). How segregation concentrates poverty. *Ethnic and Racial Studies, 23*(4), 670-691.

McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine, 338*(3).

McEwen, B. S., & Lasley, E. N. (2002). *The End of Stress as We Know It*. Washington, DC: Joseph Henry Press.

McEwen, B. S., & Seeman, T. (1999). Protective and damaging effects of mediators of stress: Elaborating and testing the concepts of allostasis and allostatic load. In N. E. Adler, M. Marmot & et al. (Eds.), *Socioeconomic status and health in industrial nations: Social, psychological, and biological pathways* (pp. 30-47). New York, NY: New York Academy of Sciences.

Miller, D. B., & MacIntosh, R. (1999). Promoting resilience in urban African American adolescents: Racial socialization and identity as protective factors. *Social Work Research, 23*(3), US National Assn of Social Workers; 1999, 1159-1169.

Monat, A., & Lazarus, R. S. (1991). Stress and coping: An anthology (3rd ed ). In. New York, NY: Columbia University Press.

Moos, R. H. (1997a). Assessing approach and avoidance: Coping skills and their determinants and outcomes. In (Vol. 24, pp. 58-64): IndiaUniv of Rajasthan.

Moos, R. H. (1997b). Coping Responses Inventory: A measure of approach and avoidance coping skills. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 51-65). Lanham, MD: Scarecrow Education.

Muthen, B. O., & Satorra, A. (1995). Complex sample data in stuctural equation modeling. *Sociological Methodology, 25*, 267-316.

Muthen, L. K., & Muthen, B. O. (1998-2007). *Mplus User's Guide: Statistical analysis with latent variables* (4.2 ed.): Muthen & Muthen.

Neighbors, H. W. (1991). Mental health. In *Life in black America* (pp. 221-237). Thousand Oaks, CA, US: Sage Publications, Inc.

Neighbors, H. W., Braithwaite, R. L., & Thompson, E. (1995). Health promotion and African-Americans: From personal empowerment to community action. *American Journal of Health Promotion: Special Issue: Underserved populations, 9*(4), 281-287.

Neighbors, H. W., Jackson, J. S., Broman, C. L., & Thompson, E. (1996). Racism and the mental health of African Americans: the role of self and system blame. *Ethnicity & Disease, 6*(1-2), 167-175.

Neighbors, H. W., Njai, R., & Jackson, J. S. (2007). Race, ethnicity, John Henryism, and depressive symptoms: The national survey of American life adult reinterview. *Research in Human Development, 4*(1&2), 71-87.

Pearlin, L. I. (1996). Some Conceptual Perspectives On the Origins and Prevention of Social Stress Unpublished Unpublished conference paper presentation. National Institute of Mental Health.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health & Social Behavior, 19*(1), 2-21.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*(3), 499-514.
Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156-176.
Phinney, J. S. (2000). Ethnic and racial identity: Ethnic identity. 254-259.
Phinney, J. S., Arnett, J. J., & Tanner, J. L. (2006). *Ethnic Identity Exploration in Emerging Adulthood*. Washington, DC, US: American Psychological Association.
Phinney, J. S., Lochner, B. T., & Murphy, R. (1990). Ethnic identity development and psychological adjustment in adolescence. In *Ethnic issues in adolescent mental health* (pp. 53-72). Thousand Oaks, CA, US: Sage Publications, Inc.
Schulz, A., & Northridge, M. E. (2004). Social determinants of health: implications for environmental health promotion. *Health Education & Behavior, 31*(4), 455-471.
Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress among African American Young Adults. *Journal of Health and Social Behavior, 43*(3), 302-317.
Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. H. (2006). Racial Identity Matters: The Relationship between Racial Discrimination and Psychological Functioning in African American Adolescents. *Journal of Research on Adolescence, 16*(2), 187-216.
Sellers, R. M., Rowley, S. J., Chavous, T. M., Shelton, N. J., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and constuct validity. *Journal of Personality & Social Psychology, 73*(4), US American Psychological Assn.; 1997, 1805-1815.
Sellers, R. M., & Shelton, N. J. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality & Social Psychology, 84*(5), 1079-1092.
Sellers, R. M., Smith, M., Shelton, N., Rowley, S., & Chavous, T. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality & Social Psychology Review, 2*(1), 18-39.
Shelton, J. N., & Sellers, R. M. (2000). Situational stability and variability in African American racial identity. *Journal of Black Psychology: Special Issue: African American culture and identity: Research directions for the new millennium., 26*(1), US Sage Publications Inc; 2000, 2027-2050.
Spencer, M. B., Dupree, D., & Hartmann, T. (1997). A phenomenological variant of ecological systems theory (PVEST): A self-organization perspective in context. *Development and Psychopathology, 9*(4), 817-833.
Stephan, C. W., & Stephan, W. G. (2000). The measurement of racial and ethnic identity. *International Journal of Intercultural Relations, 24*(5), 541-552.
Thoits, P. (1991). On merging identity theory and stress research. *Social Psychology Quarterly, 54*(2), 101-112.
Utsey, S. O., Ponterotto, J. G., Reynolds, A. L., & Cancelli, A. A. (2000). Racial discrimination, coping, life satisfaction, and self-esteem among African Americans. *Journal of Counseling & Development, 78*(1), 72-80.
Waters, M. C. (1994). Ethnic and racial identities of second-generation Black immigrants in New York City. *International Migration Review, 28*(4), 795-820.

Waters, M. C. (1999). *Black identities: West Indian immigrant dreams and American realities*. New York, NY: Russell Sage Foundation.
Waters, M. C. (2001). Growing up West Indian and African American: Gender and class differences in the second generation. In N. Foner (Ed.), *Islands in the city: West Indian Migration to New York*. Berkley, CA: University of California Press.
Williams, D. R. (1997). Race and health: basic questions, emerging directions.[see comment]. *Annals of Epidemiology, 7*(5), 322-333.
Williams, D. R., & Collins, C. (2001). Racial residential segregation: a fundamental cause of racial disparities in health. *Public Health Reports, 116*(5), 404-416.
Williams, D. R., Haile, R., GonzÃlez, H., Neighbors, H., Baser, R. E., & Jackson, J. S. (2007). The Mental health of Black Caribbean immigrants: Results from the National Survey of American Life. *American Journal of Public Health, 97*(1), 52-59.
Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/Ethnic Discrimination and Health: Findings From Community Studies. *American Journal of Public Health, 93*(2), 200-208.
Williams, D. R., & Rucker, T. (1996). Socioeconomic status and the health of racial minority populations. In *Handbook of diversity issues in health psychology* (pp. 407-423 The Plenum series in culture and health.). New York, NY, US: Plenum Press.
Williams, D. R., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity & Health, 5*(3-4), 243-268.
Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial Differences in Physical and Mental Health: Socio-economic Status, Stress and Discrimination. *Journal of Health Psychology, 2*(3), 335-351.
Zimmerman, M. A., Ramirez-Valles, J., Zapert, K. M., & Maton, K. I. (2000). A longitudinal study of stress-buffering effects for urban African-American male adolescent problem behaviors and mental health. *Journal of Community Psychology, 28*(1), 17-33.

# CHAPTER V

# CONCLUSION

## Introduction

Discrimination remains a widespread psychosocial stressor and has been recognized as a social determinant of health that, in part, drives the relationship between racial and ethnic minority status and persistent racial and ethnic health disparities (Williams & Neighbors, 2001; Williams et al., 2003). Racial discrimination in particular is linked to racial and ethnic social categorization, identification, and variant stress exposures. Epidemiological and community studies have found racial discrimination to be a risk factor for poor health through directly increasing stress and psychobiological risk (Krieger et al., 1998; Williams et al., 2003).

In the preceding chapters I present a synergy and a progression of parallel fields of knowledge about the mental health of Black Americans in the face of perceptions of racially and ethnically attributed discrimination. More specifically, the concepts of racial and ethnic identity were measured and tested within the context of existing models of sociocultural stress and coping from social psychology and other related disciplines. Moreover, this dissertation provides evidence for the intraracial and interethnic heterogeneity that exists within Black Americans concerning racialized stress and relevant coping.

## Summary and Discussion of Results

The conceptual chapter (chapter 2) outlines independent yet related contributions to racialized stress and coping theory from sociology, psychology and epidemiology.

Importantly, it is argued that the contributions of race and ethnicity in stress and coping models may be underutilized in current health disparities research. Furthermore it is asserted that the concepts of racial and ethnic identity will more accurately measure the meaning which individuals place on their race and ethnicity beyond simplistic self categorization or researcher assignment into racial and/or ethnic categories. The sociocultural model of racialized stress and adaptive coping introduced in chapter 2 allows for three over-arching hypotheses:

1-higher levels of racial centrality and private regard, and lower levels of public regard will be related to adaptive coping and fewer depressive symptoms in the face of racial discrimination;

2-higher levels of positive ethnic attachment (as demonstrated through behaviors and attitudes) will also be related to adaptive coping and fewer depressive symptoms in the face of racial discrimination;

3-in concert, both racial and ethnic identity will be strongly related to the most effective adaptive coping efforts subsequently leading to decreased depressive symptoms in the face of racial discrimination.

The measurement chapter (chapter 3) presents findings of significant differences in the meaning that African Americans and African Caribbeans in the NSAL re-interview sample ascribe to the concepts of racial identity and ethnic identity. The chapter represents an empirical test of intraracial and interethnic variability in the meaning of race and ethnicity as it relates to a more comprehensive self-determined conceptualization of the self. Specifically, findings for African Americans show the constructs of racial centrality, public and private regard to be consistent with how they

were conceptualized in the Multidimensional Inventory of Black Identity's scale development (Sellers et al., 1997). However, findings for African Caribbeans show the constructs of racial centrality and public regard to have meaning similar to their African American counterparts, whereas private regard was not apparent in this sample of Caribbean adults. For ethnic identity, African Caribbeans displayed three dimensions of ethnic identity: ethnic attitudes, black ethnic behaviors and Caribbean ethnic behaviors. African Americans on the other hand only displayed two ethnic identity dimensions: ethnic attitudes and black ethnic behaviors. These results show that within the black racial category there are conceptually different meanings that are placed on the concepts of race and ethnicity. Importantly, as hypothesized for African Americans there is a significant use of intraracial ethnic attitudes in relation to mediating the negative mental impacts of discrimination, whereas for African Caribbeans who draw from experiences of discrimination to inform the importance of race in their everyday life this is related to increased depressive symptoms. These facts point to the importance of ethnic identity to African Americans who may typically be considered a monolithic Black racial group in the U.S. as well as point to the mental health consequences of Black ethnic immigrant groups (e.g. African Caribbeans) understanding the meaning of race in the American context.

The final empirical chapter (chapter 4) of this dissertation tests the conceptualization of the aforementioned sociocultural model of racialized stress and adaptive coping. Recall, that the hypothesized relationship of 'adaptive coping' refers to a coping strategy that has a direct negative effect on depressive symptom expression. Building on the results from the measurement of racial and ethnic identity dimensions in

chapter 3, this chapter offers evidence for the mediation abilities of dimensions of racial and ethnic identity in the context of racial discrimination, and relevant coping and depressive symptom outcomes. Tests of the conceptual model were run separately (for African Americans and African Caribbeans) based on the conceptual and measurement incongruence results for the concepts of racial and ethnic identity. The results indicate similar protective effects for dimensions of racial identity and ethnic identity in relation to racial discrimination and coping strategies and depressive symptoms. Interestingly, the conceptualization of adaptive coping was challenged the most by the results. The results indicate that coping efforts based in acceptance of discrimination proved most beneficial in protecting one's depressive symptoms. The relationship between identity and relevant coping perhaps was conceptually mislead, in that the results implicate racial and ethnic identity as protective in relation to decreasing the use of contextually maladaptive coping strategies (such as active approach based coping efforts) as well as in relation to increasing the use of contextually adaptive coping (such as passive acceptance based coping efforts.).

Sociocultural personal resources, such as social identity (i.e. racial and ethnic identity), have been established in prior research as effect modifiers of the relationship between experiences of racial discrimination and poorer health outcomes (Phinney, 1990; Phinney & Ong, 2007; Sellers et al., 2003; Sellers et al., 2006). Specific dimensions of racial and ethnic identity modulate the harmful effects of chronic racial and ethnic-specific stressors on mental health, and may do so via cognitive coping. The current research in this dissertation verifies that dimensions of racial and ethnic identity directly, and indirectly via coping methods, are related to diminishing the negative effects of racial

discrimination on depressive symptoms for Black American adults. This work helps to inform the, Affirming Identity Model (AIM), conceptual model of stress and coping that integrates racial and ethnic identity constructs as mediators between racial discrimination, relevant coping and depressive symptoms.

As the AIM relates to increases in racial and ethnic identity linking to protective mental health processes this appears to hold true for African Americans. Furthermore it appears as African Caribbeans become “racialized” to the American experience through discrimination they may enlist different protective identity processes that African Americans employ. However, as intraracial attitudes remain a protective stress and coping mediating identity component for African Americans it will be important that intraracial ethic attitudes remain positive for other Black immigrant groups as they also gain understanding of the utility of how increased notions of Blackness can benefit them mentally.

**Limitations and Extensions of Research**

Although the findings of this dissertation were informative to theory and conceptual development, there inevitably exist limitations of the current research. These limitations were taken into consideration throughout the development of the conceptual model and will likely be dealt with in future conceptual model revisions. Some of the ethnic variation seen in the stress and coping processes may be attributed to unobserved ethnic and cultural variables (such as racial socialization, social support, acculturative stress and other acculturative processes) that were not accounted for in these analyses. In addition, it is possible that some of this ethnic and cultural variation may be accounted for by adding the effects of social support to the proposed model. The effects of race on

social support and coping may be manifested through cultural variations in interpretations and responses to stress. In the case of African Americans religious participation and the use of non-formal help from ministers may also help buffer the increased chronic stressors attributed to race. For many African Americans religion and spirituality is the first line of defense in enlisting coping efforts against life stressors, buffering deleterious effects by increasing social support networks and resources (Chatters, 2000). There is further evidence detailing social support (specifically emotional) as a coping strategy used by African Americans in managing the stressful effects of racism. The results from Utsey, et al., indicated that for African Americans as a whole, seeking social support and racial socialization were the best predictors of buffering racism-related stress (Utsey et al., 2000). Social support due to its potential confounding and impending diminishing returns for Black Americans was not included in this study in order to support parsimony for the generated model. Specifically because social support received has the potential to bolster coping efforts, while social support provided may decrease the providers' personal coping efforts and resources, as well as methodological difficulty in determining whether tangible, emotional, or perceived support contribute to deeper conceptual complexity and may muddle empirical clarity. The limitation of not including social support and racial socialization has been recognized and in the opinion of the author has been proximally accounted for in these analyses through racial and ethnic identity and coping strategies. As social support may relate to identity and processes of coping, and racial socialization has an obvious derivative in racial identity.

Racial identity and ethnic identity may relate to communal coping in that communal coping takes place when one or more persons identify racial discrimination as

‘our’ issue. Blacks with higher racial centrality may be inclined to exhibit an affinity toward communal coping. This may also bolster greater Black cohesiveness in being proactive about relating to racial discrimination. Leading African Caribbeans and native African Americans to a discourse about racial discrimination should prove beneficial in developing more effective strategies for all Blacks’ dealing with racism because “regardless of whether the stressor produces similar consequences for all, communal coping involves thinking and acting as if a stressor is shared (Lyons, Mickelson, Sullivan, & Coyne, 1998) [p. 413].” These ‘racism specific coping responses’ should vary from passive to active with passive response being related to poorer mental health (Clark, Anderson, Clark, & Williams, 2002). In fact the results presented in this dissertation are counter to this point. Indeed, passive coping showed adaptive or protective effects by decreasing depressive symptoms, while active coping strategies exhibited maladaptive or deleterious effects by increasing depressive symptoms. These results may differ due to the inclusion of racial and ethnic identity in the broader context of racialized stress and coping.

Emotional support from a shared identity perspective has been speculated to be useful for African Americans (Geronimus, 2003). Additionally, support that is spontaneous, due to increased shared group (Black) identity, should be most helpful in buffering negative stress effects of racism and diminish threats to the self-esteem of individuals faced with chronic discrimination (Eckenrode & Wethington, 1990). Higher racial and ethnic identity can increase group identity and increase feelings of perceived support for individuals for informal (family and friends) social networks and increase enacted social support, whereas formal social networks should be useful for informational

and tangible support to overcome racialized social obstacles (McCreary, Slavin, & Berry, 1996). In this way racial socialization via racial identity and social support intertwine to offer mental health protecting capacities.

From the evidence provided in the literature, it is logical that further revisions of the conceptual model presented and tested in this research should include measures of social support, the modifying abilities of various dimensions of social support and their effects on coping efforts and subsequent depressive symptom expression. It may also be necessary to include more expansive measures of ethnic identity, such as those that capture more acculturative group processes and behaviors. Not only more specific measures of identity are needed, but measures that offer contextual relevance to coping with specific experiences of discrimination. In addition it is apparent that the concept of racial socialization would also be another relevant construct to be considered for inclusion in the model, although racial identity may be viewed as a resultant personality factor based on racial socialization experiences from both within and outside the individuals' racial and ethnic group.

Of equal importance to this research is the measurement of discrimination, racial and ethnic identity as well as relevant coping. These concepts all deserve critical scrutiny in continued efforts to develop reliable and conceptually valid measures of psychosocial phenomena. Also consideration must be given to the possibility that the AIM could be tweaked by exploration of other conceptual models of stress and coping, such as transactional models that take into stress transactions, account for appraisal and event specific coping (Lazarus, 2000; Lazarus et al., 1991). The role of coping as well as a more thorough examination the effect modification potentials' of racial and ethnic

identity would be necessary to confirm buffering abilities of identity dimensions as well as to further explore potential mediation relationships. Lastly the inclusion of more culturally specific variables may need exploration within the model, specifically acculturative variables that account for acculturative stress and intergroup contact as well as variables that account for immigrant specific variables such as nativity and generational status. Any additions to the model should be done carefully so as not to diminish parsimony altogether.

**Discussion of Results in the Context of Informing Public Health Interventions**

Overall the results in this dissertation present remarkable and interesting findings on the methods Black American use to adaptively cope with discrimination. Interestingly the most effective coping strategy exhibited within this sample was acceptance that discrimination was going to occur. This may be due to the uncontrollable nature of the stressor or racialized stress. Specifically, for African Americans the current analyses show that as the importance of race in one's life increases (racial centrality) and as negative perceptions of Blacks are attributed to racial out-group members (public regard), individuals are more likely to enlist acceptance coping. This acceptance that discrimination will and does occur appears to have protective effects on depressive symptom expression and presumably mental health. Complementary to these findings is evidence that efforts to actively approach experiences of discrimination appear to have more deleterious impacts. Individuals who either attempted to do something about the discrimination or talk to others about the experience showed greater depressive symptoms: this seemingly insults mental health. However, given chronic exposure to discrimination over time it could be argued that initial efforts to avert discriminatory

experiences by approaching the perpetrator or actively speaking to someone about the experience will prove to be maladaptive. These maladaptive strategies may send the individual in alternative directions to decrease stress (Jackson et al., 2006). These strategies may include overeating, smoking cigarettes, drug use, or other risky health behaviors. These risk behaviors may compound the stress of discrimination with other poor health outcomes such as diabetes, hypertension, as well as other stress related comorbidities. This cascade of stress effects may continue until the individual reaches a 'threshold' of stress that may either make them give up or resign themselves to the experiences of discrimination which will prove to be most adaptive in dealing with racism. In this way the relationship between dimensions of racial identity and ethnic identity and efforts to adaptively cope with discrimination is important.

Intervention efforts that focus on personal empowerment, generation of healthy identities and coping strategies through awareness and mindfulness interventions as well as stress and coping based behavior modification interventions are all avenues that this studies' results could inform. Contextual interventions such as anti-racism workshops could prove more beneficial if they are grounded in advisement of racial and ethnic variability to dissuade prejudice based on skin color or racial presumptions. Lastly, interventions that focus on potential perpetrators as well as targets of discrimination based on historical appreciation of race and ethnicity could break important grounds in diminishing racially based social divides.

As we determine which components of identity, such as centrality, public regard and ethnic attitudes, relate to effective coping methods, the ability to prevent a negative stress cascade from discrimination over the lifecourse may be averted earlier in one's life.

Intervention efforts to engage in and explore one's racial and ethnic identity early in the lifecourse should be proliferated to help individuals develop a personal survival strategy to navigate the sometimes toxic social environment of life in America. An identity profile of high racial centrality and public regard, low public regard and high intraracial ethnic group attitudes may be healthy coping profile to attempt to shape for communities of color in the context of the current results.

**Future Directions**

Importantly the findings presented here are a call to action for continued scientific inquiry regarding the measurement and confounding nature of race and ethnicity in the context of intraracial and interethnic heterogeneity among all American racial and ethnic groups. The continued revision of the conceptual model of sociocultural stress and coping is aimed at moving towards a more specifically defined method of self-categorization in relation to personal stress resiliency efforts. It is also apparent from these results that there are other dimensions of social identity (i.e. socioeconomic, educational, gender, as well political and sexual orientations) that may explain variability in coping and depressive symptom outcomes.

Future directions of the research explicated in this dissertation are far reaching and must be systematic. First, the conceptual model that has been generated needs to scrutinized and tested with multiple sampling strategies within various national and community level catchment areas. Additionally multiple conceptual variations, that eliminate non significant paths should be tested within SEM data analysis methods. Also there is an apparent need to study whether the constructs of racial and ethnic identity operate as stress and coping buffers rather than simply mediators. Unfortunately there

remains a dearth of data sets that would avail themselves to the richness found in the NSAL data. Thus a logical first step is to understand at a community level the impetus that the conceptual model can generate through survey data as well as interventions aimed at ameliorating stress and providing alternative healthy coping strategies. These efforts should be undertaken in the context of the communities they are derived from and close attention should be paid to authenticate the findings of survey or intervention research to be certain that they in fact represent accurately the true meaning of race and ethnicity in individuals' lives as well as how they use these understandings to overcome unequal psychosocial stressors such as discrimination via adaptive coping mechanisms and strategies. There also remains a need to study modulators of racialized stress, like racial and ethnic identity, in mechanistic laboratory models, as mechanisms of modulation may be particularly informative about buffering factors and intervention development. However a necessary step is to develop more concrete ways to study the proximal links between discrimination stress and specific psychological and biological impacts at the individual and community level. Ultimately, the goal is to use conceptual understandings of social identity theory to develop identity enhancing interventions that will be able to moderate the impact of discrimination stress on psychobiological variables relevant to health.

The current research findings show that having an informed and/or realistic view of how race and ethnicity affect one's life, one's expectations of how they will be received by the broader society, as well attitudes and behaviors they exhibit, all contribute to how a person is socially categorized. Whether societal perceptions match with an individuals' own interpretations may be the crux of the issue. Simply put

Blackness may be a physical reality as much as a psychological one based on exposures, perceptions, attitudes and behaviors.

The inclusion of racial and ethnic identity in intervention strategies aimed at reducing racial stress is important, in that racial identity development has been found to raise consciousness about racism on both individual and societal levels while at the same time providing the individual and community with a shared sense of community history and experience that can mediate the harmful effects of racism by active coping (Sellers et al., 2003). Using the informed knowledge of the Affirming Identity Model (AIM) explicated and tested in this dissertation, a conceptually informed intervention might focus on racial and ethnic identity exploration among emerging African American adults as well as Black American immigrant groups. Such an intervention could focus on development of racial centrality as well as foster realistic perspectives of public regard, private regard and ethnic attitudes in the context of stress and health perceptions. If interventions can promote an exploration and subsequent achievement of useful identities, personal efforts to cope with everyday stressors such as racial discrimination will be more successful. Intervention and similar empirical endeavors including racial and ethnic identity are a key next step in attempting to understand how to ameliorate the myriad of poorer health consequences Black Americans and other racially and ethnically disparaged groups are exposed to from race-specific psychosocial stressors (Williams & Williams-Morris, 2000).

**Conclusion**

This dissertation challenges health disparities research to pay closer attention to the constructs of race and ethnicity as they relate to providing meaning and sociocultural

resources to everyday stressors. What is important to the findings offered by this research is that they do not simply relate to a Black American experience per say. That is, this country was founded and has prospered due to an amalgamation of many different ethnic groups, although a social hierarchy has been historically based on categorizing these ethnicities by race and socioeconomic position. In order to effectively deal with social inequalities a necessary step is to break down and reshape America's social conscious to effectively deal with historical misuses and abuses of race and to a lesser extent ethnicity. Neither race nor ethnicity should be used out of convenience, but rather demand inclusion into any discussion in America pertaining to racial, ethnic and socioeconomic disparities in health. Ultimately, race and ethnicity have a pronounced impact in the lives of many Americans and individuals who have an awareness of this impact will be better prepared to cope with American society as a whole.

This dissertation carves out an important conceptual question as it relates to minority group identity, minority group psychosocial exposures and efforts to cope. It provides clarity while simultaneously highlighting the obscure nature that race and ethnicity are given meaning by individuals within racial categories and between co-racial ethnic group members. Although the focal point of this study is Americans of African descent, many of the aforementioned concerns are tangible and meaningful for all American racial and ethnic groups and health disparities research broadly. The study is a call to action for more specific and sophisticated conceptual, measurement, and empirical analysis of the concepts of race and ethnicity and the importance they have in American life. In fact the increased knowledge of race and ethnicity may benefit all Americans and perhaps begin providing more healthy implications for race and ethnicity in the lives of

disparaged groups and communities. Race and ethnicity will always be Americas' historical social ailment, until we can be clear about what they mean to the lives and historical memories of individuals we will remain unsure how to absolve problems caused by and in relation to race and ethnicity. The conscious of many Americans may like us to forget or at least minimize the magnitude of race and ethnicity. However, the fact is that race and ethnicity will have an important place in the lives of all Americans whether they know it or not. Regardless of how comfortable we are with the conversation, due to the historical legacy and influence race and ethnicity have on the social psyche of America it is imperative that understanding and awareness are promoted. This could eventually lead us to a place wherein race and ethnicity may be abandoned or at least restrained as the "usual suspects" of health and other social inequalities.

## References


Adebimpe, V. R. (2003). Constraints on the Validity of Black/White Differences in Epidemiologic Measurements. *Journal of the National Medical Association, 95*(8), 743-745.

Agyemang, C., Bhopal, R., & Bruijnzeels, M. (2005). Negro, Black, Black African, African Caribbean, African American or what? Labelling African origin populations in the health arena in the 21st century. *Journal of Epidemiology & Community Health, 59*(12), 1014-1018.

Akom, A. A., Weis, L., & Fine, M. (2000). *The house that race built: Some observations on the use of the word nigga , popular culture, and urban adolescent behavior*. New York, NY, US: Teachers College Press.

Alba, R., Rumbaut, R. n. G., & Marotz, K. (2005). A Distorted Nation: Perceptions of Racial/Ethnic Group Sizes and Attitudes Toward Immigrants and Other Minorities. *Social Forces, 84*(2), 901-909.

Allen, R. L., & Bagozzi, R. P. (2001). Consequences of the Black sense of self. *Journal of Black Psychology, 27*(1), 3-28.

Allport, G. W. (1954). *The nature of prejudice*. Cambridge, MA: Addison Wesley.

Anderson, N. B., & Jackson, J. S. (1987). Race, ethnicity, and health psychology: The example of essential hypertension. In *Health psychology: A discipline and a profession* (pp. 264-283). Chicago, IL, US: The University of Chicago Press.

Andujo, E. (1988). Ethnic identity of transethnically adopted Hispanic adolescents. *Social Work, 33*(6), 531-535.

Anglin, D. M., & Whaley, A. L. (2006). Racial/Ethnic Self-Labeling in Relation to Group: Socialization and Identity in African-Descended Individuals. *Journal of Language and Social Psychology, 25*(4), 457-463.

Avison, W., & Gottlieb, B. H. (Eds.). (1994). *Stess and Mental Health*. New York: Plenum.

Azibo, D. A. (1991). Towards a metatheory of the African personality. *Journal of Black Psychology, 17*(2), 37-45.

Azibo, D. A. (2006). An African-centered rudimentary model of racial identity in African descent people and the validation of projective techniques for its measurement. *Humboldt Journal of Social Relations, 30*(1), 145-176.

Azibo, D. A., Jackson, A. L., & Slater, S. (2004). A Test of Theoretical Propostitions about Psychological Defense Mechanism Functioning in Contemporary African Descent People. *Humboldt Journal of Social Relations, 28*(1), 83-108.

Bagley, C. A., & Copeland, E. J. (1994). African and African American graduate students' racial identity and personal problem-solving strategies. *Journal of Counseling & Development, 73*(2), US American Counseling Assn; 1994, 1167-1171.

Bagozzi, R. P. (1993). Assessing construct validity in personality research: Applications to measures of self-esteem. *Journal of Research in Personality, 27*(1), 49-87.

Bagozzi, R. P., & Yi, Y. (1991). Multitrait-multimethod matrices in consumer research. *Journal of Consumer Research, 17*(4), 426-439.

Baker, F. M. (2001). Diagnosing depression in African Americans. *Community Mental Health Journal, 37*(1), 31-38.
Baldwin, J. A., & Bell, Y. R. (1985). The African self-consciousness scale: An Africentric personality questionnaire. *Western Journal of Black Studies, 9*(2), 61-68.
Baldwin, J. A., Duncan, J. A., & Bell, Y. R. (1987). Assessment of African self-consciousness among Black students from two college environments. *Journal of Black Psychology, 13*(2), 27-41.
Belgrave, F. Z., & Allison, K. W. (Eds.). (2006). *African American Psychology: From Africa to America*. Thousand Oaks, CA: Sage Publications.
Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238-246.
Bhopal, R. S. (2004). Glossary of terms relating to ethnicity and race: For reflection and debate. *Journal of Epidemiology & Community Health, 58*(6), 441-445.
Bhopal, R. S. (2007). *Ethnicity, race, and health in multicultural societies: Foundations for better epidemiology, public health, and health care*. New York, NY, US: Oxford University Press.
Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: The National Comorbidity Survey. *American Journal of Psychiatry, 151*(7), 979-986.
Bollen, K. (1989). *Structural equation modeling with latent variables*. New York: John Wiley.
Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality & Social Psychology, 77*(1), 135-149.
Breslau, J., Aguilar-Gaxiola, S., Kendler, K. S., Su, M., Williams, D., & Kessler, R. C. (2006). Specifying race-ethnic differences in risk for psychiatric disorder in a USA national sample. *Psychological Medicine, 36*(1), 57-68.
Broman, C. L., Jackson, J. S., & Neighbors, H. W. (1989). Sociocultural context and racial group identification among Black adults. *Revue Internationale de Psychologie Sociale, 2*(3), 367-378.
Brookins, C. C. (1994). The relationship between Afrocentric values and racial identity attitudes: Validation of the Belief Systems Analysis Scale on African American college students. *Journal of Black Psychology, 20*(2), 128-142.
Brown, T. N., Sellers, S. L., Brown, K. T., & Jackson, J. S. (1999). Race, ethnicity, and culture in the sociology of mental health. In *Handbook of sociology of mental health* (pp. 167-182 Handbook of sociology and social research.). New York, NY, US: Kluwer Academic/Plenum Publishers.
Byrne, B. M. (1998). *Structural equationn modeling with LISREL, PRELIS and SIMPLIS: Basic concepts, applications and programming*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
Caldwell, C. H., Kohn-Wood, L. P., Schmeelk-Cone, K. H., Chavous, T. M., & Zimmerman, M. A. (2004). Racial Discrimination and Racial Identity as Risk or Protective Factors for Violent Behaviors in African American Young Adults. *American Journal of Community Psychology, 33*(1), 91-105.

Caldwell, C. H., Zimmerman, M. A., Bernat, D. H., Sellers, R. M., & Notaro, P. C. (2002). Racial identity, maternal support, and psychological distress among African American adolescents. *Child Development, 73*(4), 1322-1336.
Chatters, L. M. (2000). Religion and health: public health research and practice. *Annual Review of Public Health, 21*, 335-367.
Clark, R., Anderson, N., Clark, V., & Williams, D. (2002). Racism as a Stressor for African Americans. In T. A. LaVeist (Ed.), *Race, Ethnicity, and Health* (1st ed., pp. 319-339). San Francisco, CA: Jossey-Bass.
Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist, 54*(10), 805-816.
Cokley, K. O. (2005). Racial(ized) Identity, Ethnic Identity, and Afrocentric Values: Conceptual and Methodological Challenges in Understanding African American Identity. *Journal of Counseling Psychology, 52*(4), 517-526.
Coll, C. G., & Magnuson, K. (1997). The psychological experience of immigration: A developmental perspective. In *Immigration and the family: Research and policy on U.S. immigrants* (pp. 91-131). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
Constantine, M. G., Donnelly, P. C., & Myers, L. J. (2002). Collective self-esteem and africultural coping styles in African American adolescents. *Journal of Black Studies, 32*(6), 698-710.
Cooper, R., & David, R. (1986). The biological concept of race and its application to public health and epidemiology. *Journal of Health Politics, Policy & Law, 11*(1), 97-116.
Cross, W. E. (1991). *Shades of black: Diversity in African-American identity*. Philadelphia, PA, US: Temple University Press.
Cross, W. E. (1994). Nigrescence theory: Historical and explanatory notes. *Journal of Vocational Behavior, 44*(2), 119-123.
Cross, W. E. (1995a). In search of Blackness and Afrocentricity: The psychology of Black identity change. In *Racial and ethnic identity: Psychological development and creative expression* (pp. 53-72). Florence, KY, US: Taylor & Francis/Routledge.
Cross, W. E. (1995b). The psychology of nigrescence: Revising the Cross model. In *Handbook of multicultural counseling* (pp. 93-122). Thousand Oaks, CA, US: Sage Publications, Inc.
Cross, W. E. (1998). Black psychological functioning and the legacy of slavery: Myths and realities. In *International handbook of multigenerational legacies of trauma* (pp. 387-400 The Plenum series on stress and coping.). New York, NY, US: Plenum Press.
Cross, W. E., Parham, T. A., & Helms, J. E. (1991). The stages of Black identity development: Nigrescence models. In *Black psychology (3rd ed.)* (pp. 319-338). Berkeley, CA, US: Cobb & Henry Publishers.
Cross, W. E., Ponterotto, J. G., Casas, J. M., Suzuki, L. A., & Alexander, C. M. (1995). *The psychology of nigrescence: Revising the Cross model*. Thousand Oaks, CA, US: Sage Publications, Inc.

Cummings, C. M., & DeHart, D. D. (1995). Ethnic minority physical health: Issues and interventions. In J. F. Aponte & R. Y. Rivers (Eds.), *Psychological interventions and cultural diversity.* (pp. 234-249): Allyn & Bacon.

DHHS. (2001). *Mental health: Culture, Race, and ethnciity- a supplement to mental health: a report of the Surgeon General Executive Summary*. Rockville, MD: US Department of Health and Human Sevice, Office of the Surgeon General.

Dilworth-Anderson, P., Goodwin, P. Y., & Williams, S. W. (2004). Can Culture Help Explain the Physical Health Effects of Caregiving Over Time Among African American Caregivers? *Journals of Gerontology: Series B: Psychological Sciences & Social Sciences, 59*(3), S138-S145.

Diop, C. A. (1989). *The cultural unity of Black Africa: The domains of matriarchy and of Patriarchy in Classical Antiquity*. London: Karnak House.

Dunlop, D. D., Song, J., Lyons, J. S., Manheim, L. M., & Chang, R. W. (2003). Racial/Ethnic Differences in Rates of Depression Among Preretirement Adults. *American Journal of Public Health, 93*(11), 1945-1952.

Eckenrode, J., & Wethington, E. (1990). The process and outcome of mobilizing social support. In S. Duck & R. Silver (Eds.), *Personal Relationships and Social Support* (pp. 83-103). London: Sage Publications.

Evans, K. M., & Herr, E. L. (1994). The influence of racial identity and the perception of discrimination on the career aspirations of African American men and women. *Journal of Vocational Behavior, 44*(2), 173-184.

Fanon, F. (1967). *Black skin, White masks*. New York: Grove Press.

Fernando, S. (1984). Racism as a cause of depression. *International Journal of Social Psychiatry, 30*(1-2), 41-49.

Folkman, S., & Lazarus, R. S. (1986). Stress processes and depressive symptomatology. *Journal of Abnormal Psychology, 95*(2), 107-113.

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology, 54*(3), 466-475.

Ford, M. E., & Kelly, P. A. (2005). Conceptualizing and Categorizing Race and Ethnicity in Health Services Research. *Health Services Research, 40*(5), 1658-1675.

George, L., & Lynch, S. M. (2003). Race Differences in Depressive Symptoms: A Dynamic Perspective on Stress Exposure and Vulnerability. *Journal of Health & Social Behavior, 44*(3), 353-369.

Geronimus, A. T. (2000). To mitigate, resist, or undo: addressing structural influences on the health of urban populations.[see comment]. *American Journal of Public Health, 90*(6), 867-872.

Geronimus, A. T. (2003). Damned if you do: culture, identity, privilege, and teenage childbearing in the United States. *Social Science & Medicine, 57*(5), 881-893.

Geronimus, A. T., & Thompson, J. P. (2004). To denigrate, ignore, or disrupt: Racial inequality in health and the impact of a policy-idnuced breakdonw of African American communities. *Du Bois Review, 1*(2), 247-279.

Greenberg, P. E., Kessler, R. C., Birnbaum, H. G., Leong, S. A., Lowe, S. W., Berglund, P. A., et al. (2003). The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry, 64*(12), 1465-1475.

Gregorich, S. E. (2006). Do self-report instruments allow meaningful comparisons across diverse population groups? Testing measurement invariance using the confirmatory factor analysis framework. *Medical Care, 44*(11), 78-94.

Hahn, R. A., & Stroup, D. F. (1994). Race and ethnicity in public health surveillance: criteria for the scientific use of social categories. *Public Health Reports, 109*(1), 7-15.

Hall, S. P., & Carter, R. T. (2006). The relationship between racial identity, ethnic identity, and perceptions of racial discrimination in an Afro-Caribbean descent sample. *Journal of Black Psychology, 32*(2), 155-175.

Helms, J. E. (Ed.). (1994). *The conceptualization of racial identity and other 'racial' constructs*. San Francisco, CA,US: Jossey-Bass.

Helms, J. E., Jernigan, M., & Mascher, J. (2005). The Meaning of Race in Psychology and How to Change It: A Methodological Perspective. *American Psychologist, 60*(1), 27-36.

Helms, J. E., Ponterotto, J. G., Casas, J. M., Suzuki, L. A., & Alexander, C. M. (1995). *An update of Helm's White and people of color racial identity models*. Thousand Oaks, CA, US: Sage Publications, Inc.

Holahan, C. J., & Moos, R. H. (1987). Personal and contextual determinants of coping strategies. *Journal of Personality and Social Psychology, 52*(5), 946-955.

Holahan, C. J., & Moos, R. H. (1990). Life stressors, resistance factors, and improved psychological functioning: An extension of the stress resistance paradigm. *Journal of Personality and Social Psychology, 58*(5), 909-917.

Holahan, C. J., & Moos, R. H. (1991). Life stressors, personal and social resources, and depression: A 4-year structural model. *Journal of Abnormal Psychology, 100*(1), 31-38.

House, J. S., & Williams, D. R. (2000). Understanding and reducing socioeconomic and racial/ethnic disparities in health. In *Institute of Medicine, Promoting Health: Intervention Strategies from Social and Behavioral Research* (pp. 81-124). Washington, D.C.: National Academy Press.

Jackson, J. S., Knight, K. M., Schaie, K. W., & Carstensen, L. L. (2006). *Race and self-regulatory health behaviors: The role of the stress response and the HPA axis in physical and mental health disparities*. New York, NY, US: Springer Publishing Co.

Jackson, J. S., McCullough, W. R., Gurin, G., & Broman, C. L. (1991). Race identity. In *Life in black America* (pp. 238-253). Thousand Oaks, CA, US: Sage Publications, Inc.

Jackson, J. S., & Neighbors, H. W. (1996). Changes in African American resources and mental health: 1979 to 1992. In *Mental health in Black America* (pp. 189-212). Thousand Oaks, CA, US: Sage Publications, Inc.

Jackson, J. S., Neighbors, H. W., Nesse, R. M., Trierweiler, S. J., & Torres, M. (2004). Methodological innovations in the National Survey of American Life. *International Journal of Methods in Psychiatric Research, 13*(4), 289-298.

James, S. A. (1994). John Henryism and the health of African-Americans. *Culture, Medicine & Psychiatry, 18*(2), 163-182.

Jefferson, S. D., & Caldwell, R. (2002). An exploration of the relationship between racial identity attitudes and the perception of racial bias. *Journal of Black Psychology, 28*(2), 174-192.

Karlsen, S., & Nazroo, J. Y. (2002). Agency and structure: the impact of ethnic identity and racism on the health of ethnic minority people. *Sociology of Health and Illness, 24*(1), 1-20.

Kawachi, I., Daniels, N., & Robinson, D. E. (2005). Health disparities by race and class: why both matter. *Health Affairs, 24*(2), 343-352.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R., et al. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *JAMA: Journal of the American Medical Association, 289*(23), 3095-3105.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 593-602.

Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, Severity, and Comorbidity of 12-Month DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 617-627.

Kessler, R. C., Demier, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., et al. (2005). Prevalence and Treatment of Mental Disorders, 1990 to 2003. *New England Journal of Medicine, 352*(24), 2515-2523.

Kessler, R. C., Price, R. H., & Wortman, C. B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology, 36*, 531-572.

Krause, N. (2001). Social Support. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences*. San Diego: Academic Press.

Krieger, N., Sidney, S., & Coakley, E. (1998). Racial discrimination and skin color in the CARDIA study: Implications for public health research. *American Journal Of Public Health, 88*(9), 1308-1313.

Landrine, H., & Klonoff, E. A. (1996). *African American acculturation: Deconstructing race and reviving culture*. Thousand Oaks, CA, US: Sage Publications, Inc.

LaVeist, T. A. (1994). Beyond dummy variables and sample selection: what health services researchers ought to know about race as variable. *Health Services Research, v29*(1), 1-16.

LaVeist, T. A. (2005a). *Minority Populations and Health: Introduction to Health Disparities in the United States* (1st ed.). San Francisco, CA: Jossey-Bass.

LaVeist, T. A. (Ed.). (2002). *Race, Ethnicity, and Health: A Public Health Reader* (1st ed.). San Francisco, CA: Jossey-Bass.

LaVeist, T. A. (Ed.). (2005b). *Minority populations and health: Introduction to health disparities in the United States* (1st ed.). San Francisco, CA: Jossey-Bass.

LaVeist, T. A., Sellers, R., & Neighbors, H. W. (2001). Perceived racism and self and system blame attribution: consequences for longevity. *Ethnicity & Disease, 11*(4), 711-721.

Lazarus, R. S. (1992). Four reasons why it is difficult to demonstrate psychosocial influences on health. *Advances, 8*(3), 5-45.

Lazarus, R. S. (2000). Toward better research on stress and coping. *American Psychologist, 55*(6), 665-673.
Lazarus, R. S., Cohen, J. B., & Levi, L. (1987). *Theory and method in the study of stress and coping in ageing individuals*. New York, NY, US: Oxford University Press.
Lazarus, R. S., & Folkman, S. (1991). The concept of coping. 189-206.
Lazarus, R. S., Folkman, S., Monat, A., & Lazarus, R. S. (1991). *The concept of coping*. New York, NY, US: Columbia University Press.
Levitt, P., & Waters, M. C. (Eds.). (2002). *The Changing face of home: the Transnational lives of the second generation*. New York, NY: Russell Sage Foundation.
Lewin, K. (1948). *Resolving social conflicts*. New York: Harper.
Lopez, A. M. (2003). Collecting and tabulating race/ethnicity data with diverse and mixed heritage populations: A case-study with US high school students. *Ethnic and Racial Studies, 26*(5), 931-961.
Lyons, R., Mickelson, K., Sullivan, M., & Coyne, J. (1998). Coping as a communal process. *Journal of Social and Personal Relationships, 15*, 579-605.
Makabe, T. (1979). Ethnic identity scale and social mobility: The case of Nisei in Toronto. *The Canadian Review of Sociology and Anthropology, 16*, 136-145.
Massey, D. S., & Fischer, M. (2000). How segregation concentrates poverty. *Ethnic and Racial Studies, 23*(4), 670-691.
Mayfield, W. G. (1972). Mental health in the black community. *Social Work, Vol. 17*(3), 106-110.
Mays, V. M., Ponce, N. A., Washington, D. L., & Cochran, S. D. (2003). Classification of race and ethnicity: implications for public health. *Annual Review of Public Health, 24*, 83-110.
McCowan, C. J., & Alston, R. J. (1998). Racial identity, African self-consciousness, and career decision making in African American college women. *Journal of Multicultural Counseling and Development, 26*(1), 28-38.
McCreary, M. L., Slavin, L. A., & Berry, E. J. (1996). Predicting problem behavior and self-esteem among African American adolescents. *Journal of Adolescent Research, 11*(2), US Sage Publications, Inc.; 1996, 1216-1234.
McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine, 338*(3).
McEwen, B. S., & Lasley, E. N. (2002). *The End of Stress as We Know It*. Washington, DC: Joseph Henry Press.
McEwen, B. S., & Seeman, T. (1999). Protective and damaging effects of mediators of stress: Elaborating and testing the concepts of allostasis and allostatic load. In N. E. Adler, M. Marmot & et al. (Eds.), *Socioeconomic status and health in industrial nations: Social, psychological, and biological pathways* (pp. 30-47). New York, NY: New York Academy of Sciences.
McLoyd, V. C. (2004). Linking race and ethnicity to culture: Steps along the road from inference to hypothesis testing. *Human Development, 47*(3), 185-191.
Monat, A., & Lazarus, R. S. (1991). Stress and coping: An anthology (3rd ed ). In. New York, NY: Columbia University Press.
Moos, R. H. (1997a). Assessing approach and avoidance: Coping skills and their determinants and outcomes. In (Vol. 24, pp. 58-64): IndiaUniv of Rajasthan.

Moos, R. H. (1997b). Coping Responses Inventory: A measure of approach and avoidance coping skills. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 51-65). Lanham, MD: Scarecrow Education.

Muthen, B. O., & Satorra, A. (1995). Complex sample data in stuctural equation modeling. *Sociological Methodology, 25*, 267-316.

Muthen, L. K., & Muthen, B. O. (1998-2007). *Mplus User's Guide: Statistical analysis with latent variables* (4.2 ed.): Muthen & Muthen.

Neighbors, H. W. (1991). Mental health. In *Life in black America* (pp. 221-237). Thousand Oaks, CA, US: Sage Publications, Inc.

Neighbors, H. W., Jackson, J. S., Bowman, P. J., & Gurin, G. (1983). Stress, coping, and Black mental health: Preliminary findings from a national study. *Prevention in Human Services, 2*(3), 5-29.

Neighbors, H. W., Jackson, J. S., Broman, C. L., & Thompson, E. (1996). Racism and the mental health of African Americans: the role of self and system blame. *Ethnicity & Disease, 6*(1-2), 167-175.

Neighbors, H. W., Jackson, J. S., Campbell, L., & Williams, D. (1989). The influence of racial factors on psychiatric diagnosis: A review and suggestions for research. *Community Mental Health Journal, 25*(4), 301-311.

Neighbors, H. W., Njai, R., & Jackson, J. S. (2007). Race, ethnicity, John Henryism, and depressive symptoms: The national survey of American life adult reinterview. *Research in Human Development, 4*(1&2), 71-87.

Neville, H. A., Heppner, P. P., & Wang, L.-f. (1997). Relations among racial identity attitudes, perceived stressors, and coping styles in African American college students. *Journal of Counseling & Development, 75*(4), US American Counseling Assn; 1997, 1303-1311.

Okazaki, S., Sue, S., & Kazdin, A. E. (2003). *Methodological issues in assessment research with ethnic minorities*. Washington, DC, US: American Psychological Association.

Pearlin, L. I. (1996). Some Conceptual Perspectives On the Origins and Prevention of Social Stress Unpublished Unpublished conference paper presentation. National Institute of Mental Health.

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health & Social Behavior, 22*(Dec), 337-356.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health & Social Behavior, 19*(1), 2-21.

Perreira, K. M., Deeb-Sossa, N., Harris, K. M., & Bollen, K. (2005). What Are We Measuring? An Evaluation of the CES-D Across Race/Ethnicity and Immigrant Generation. *Social Forces, 83*(4), 1567-1602.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*(3), 499-514.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156-176.

Phinney, J. S. (1996). Understanding ethnic diversity: The role of ethnic identity. *American Behavioral Scientist, 40*(2), 143-152.

Phinney, J. S. (2000). Ethnic and racial identity: Ethnic identity. 254-259.

Phinney, J. S., Arnett, J. J., & Tanner, J. L. (2006). *Ethnic Identity Exploration in Emerging Adulthood*. Washington, DC, US: American Psychological Association.
Phinney, J. S., Kohatsu, E. L., Schulenberg, J., Maggs, J. L., & Hurrelmann, K. (1997). *Ethnic and racial identity development and mental health*. New York, NY, US: Cambridge University Press.
Phinney, J. S., Lochner, B. T., & Murphy, R. (1990). Ethnic identity development and psychological adjustment in adolescence. In *Ethnic issues in adolescent mental health* (pp. 53-72). Thousand Oaks, CA, US: Sage Publications, Inc.
Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271-281.
Roberts, R. E., & Sobhan, M. (1992). Symptoms of depression in adolescence: A comparison of Anglo, African, and Hispanic Americans. *Journal of Youth & Adolescence, 21*, 639-651.
Schulz, A., & Northridge, M. E. (2004). Social determinants of health: implications for environmental health promotion. *Health Education & Behavior, 31*(4), 455-471.
Sellers, R. M. (1993). A call to arms for researchers studying racial identity. *Journal of Black Psychology, 19*(3), US Sage Publications Inc; 1993, 1327-1332.
Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial Identity, Racial Discrimination, Perceived Stress, and Psychological Distress among African American Young Adults. *Journal of Health and Social Behavior, 43*(3), 302-317.
Sellers, R. M., Chavous, T. M., & Cooke, D. Y. (1998). Racial ideology and racial centrality as predictors of African American college students' academic performance. *Journal of Black Psychology, 24*(1), US Sage Publications Inc; 1998, 1998-1927.
Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. H. (2006). Racial Identity Matters: The Relationship between Racial Discrimination and Psychological Functioning in African American Adolescents. *Journal of Research on Adolescence, 16*(2), 187-216.
Sellers, R. M., Rowley, S. J., Chavous, T. M., Shelton, N. J., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and constuct validity. *Journal of Personality & Social Psychology, 73*(4), US American Psychological Assn.; 1997, 1805-1815.
Sellers, R. M., & Shelton, N. J. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality & Social Psychology, 84*(5), 1079-1092.
Sellers, R. M., Smith, M., Shelton, N., Rowley, S., & Chavous, T. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality & Social Psychology Review, 2*(1), 18-39.
Shelton, J. N., & Sellers, R. M. (2000). Situational stability and variability in African American racial identity. *Journal of Black Psychology: Special Issue: African American culture and identity: Research directions for the new millennium., 26*(1), US Sage Publications Inc; 2000, 2027-2050.
Sigelman, L., Tuch, S. A., & Martin, J. K. (2005). What's in a Name? Preference for 'Black' versus 'African-American' among Americans of African Descent. *Public Opinion Quarterly, 69*(3), 429-438.

Simic, A. (1987). Ethnicity as a career for the elderly: The Serbian-American case. *Journal of Applied Gerontology, 6*(1), 113-126.

Smedley, A., & Smedley, B. D. (2005). Race as Biology Is Fiction, Racism as a Social Problem Is Real: Anthropological and Historical Perspectives on the Social Construction of Race. *American Psychologist, 60*(1), 16-26.

Spencer, M. B., & Depree, D. (1996). African American youths' ecocultural challenges and psychosocial opportunities: An alternative analysis of problem behavior outcomes. In *Adolescence: Opportunities and challenges* (pp. 259-282 Rochester symposium on developmental psychopathology, Vol. 257.). Rochester, NY, US: University of Rochester Press.

Spencer, M. B., Dupree, D., & Hartmann, T. (1997). A phenomenological variant of ecological systems theory (PVEST): A self-organization perspective in context. *Development and Psychopathology, 9*(4), 817-833.

Stephan, C. W., & Stephan, W. G. (2000). The measurement of racial and ethnic identity. *International Journal of Intercultural Relations, 24*(5), 541-552.

Stephenson, E., & Chin, J. L. (2004). *The African Diaspora and culture-based coping strategies*. Westport, CT, US: Praeger Publishers/Greenwood Publishing Group.

Tajfel, H. (1978). *The social psychology of minorities* New York: Minority Rights Group.

Thoits, P. (1991). On merging identity theory and stress research. *Social Psychology Quarterly, 54*(2), 101-112.

Triandis, H. C. (1964). Exploratory factor analyses of the behavioral component of social attitudes. *The Journal of Abnormal and Social Psychology, 68*(4), 420-430.

Ullah, P. (1987). Self-definition and psychological group formation in an ethnic minority. *British Journal of Social Psychology, 26*(1), 17-23.

Üstün, T. B., Ayuso-Mateos, J. L., Chatterji, S., Mathers, C., & Murray, C. J. L. (2004). Global burden of depressive disorders in the year 2000. *British Journal of Psychiatry, 184*(5), 386-392.

Utsey, S. O., Chae, M. H., Brown, C. F., & Kelly, D. (2002). Effect of ethnic group membership on ethnic identity, race-related stress and quality of life. *Cultural Diversity & Ethnic Minority Psychology, 8*(4), 366-377.

Utsey, S. O., Ponterotto, J. G., Reynolds, A. L., & Cancelli, A. A. (2000). Racial discrimination, coping, life satisfaction, and self-esteem among African Americans. *Journal of Counseling & Development, 78*(1), 72-80.

Wade, J. C. (1996). African American men's gender role conflict: The significance of racial identity. *Sex Roles, 34*(1), 17-33.

Waters, M. C. (1994). Ethnic and racial identities of second-generation Black immigrants in New York City. *International Migration Review, 28*(4), 795-820.

Waters, M. C. (1999). *Black identities: West Indian immigrant dreams and American realities*. New York, NY: Russell Sage Foundation.

Waters, M. C. (2001). Growing up West Indian and African American: Gender and class differences in the second generation. In N. Foner (Ed.), *Islands in the city: West Indian Migration to New York*. Berkley, CA: University of California Press.

Watts, R. J. (1992). Racial identity and preferences for social change strategies among African Americans. *Journal of Black Psychology, 18*(2), 1-18.

WHO. (2004). Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys (from World Mental Health Survey Consortium). *JAMA, 29*, 2581-2590.
Williams, D. R. (1997). Race and health: basic questions, emerging directions.[see comment]. *Annals of Epidemiology, 7*(5), 322-333.
Williams, D. R. (1999). Race, socioeconomic status, and health: The added effects of racism and discrimination. In *Socioeconomic status and health in industrial nations: Social, psychological, and biological pathways* (pp. 173-188 ). New York, NY, US: New York Academy of Sciences.
Williams, D. R. (2005). Race/Ethnicity and Socioeconomic Status: Measurement and Methodological Issues. In N. Krieger (Ed.), *Embodying Inequality: Epidemiologic perspectives* (pp. 159-181). Amityville, NY: Baywood Publishing Company.
Williams, D. R., GonzÃlez, H., Neighbors, H., Nesse, R., Abelson, J. M., Sweetman, J., et al. (2007). Prevalence and distribution of major depressive disorder in African Americans, Caribbean Blacks, and Non-Hispanic Whites: Results from the National Survey of American Life. *Archives of General Psychiatry, 64*(3), 305-315.
Williams, D. R., Haile, R., GonzÃlez, H., Neighbors, H., Baser, R. E., & Jackson, J. S. (2007). The Mental health of Black Caribbean immigrants: Results from the National Survey of American Life. *American Journal of Public Health, 97*(1), 52-59.
Williams, D. R., & Jackson, J. S. (2000). Race/ethnicity and the 2000 census: recommendations for African American and other Black populations in the United States. *American Journal of Public Health, 90*(11), 1728-1730.
Williams, D. R., & Neighbors, H. W. (2001). Racism, Discrimination and Hypertension: Evidence and Needed Research. *Ethnicity & Disease, 11*(suppl.), 800-816.
Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/Ethnic Discrimination and Health: Findings From Community Studies. *American Journal of Public Health, 93*(2), 200-208.
Williams, D. R., Neighbors, H. W., Stein, D. J., Kupfer, D. J., & Schatzberg, A. F. (2006). *Social Perspectives on Mood Disorders*. Washington, DC, US: American Psychiatric Publishing, Inc.
Williams, D. R., & Rucker, T. (1996). Socioeconomic status and the health of racial minority populations. In *Handbook of diversity issues in health psychology* (pp. 407-423 The Plenum series in culture and health.). New York, NY, US: Plenum Press.
Williams, D. R., Spencer, M. S., & Jackson, J. S. (1999). Race, stress, and physical health: The role of group identity. In *Self, social identity, and physical health: Interdisciplinary explorations* (pp. 71-100 Rutgers series on self and social identity, Vol. 102.). New York, NY, US: Oxford University Press.
Williams, D. R., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity & Health, 5*(3-4), 243-268.
Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial Differences in Physical and Mental Health: Socio-economic Status, Stress and Discrimination. *Journal of Health Psychology, 2*(3), 335-351.

X-Shabazz, M. (1967). *Malcolm X on Afro-American history*. New York: Pathfinder Press.
Yu, Y., & Williams, D. R. (1999). Socioeconomic status and mental health. In *Handbook of sociology of mental health* (pp. 151-166 Handbook of sociology and social research.). New York, NY, US: Kluwer Academic/Plenum Publishers.
Yung, B. R., & Hammond, W. R. (1997). Community-based interventions. In D. K. Wilson & J. R. Rodrigue (Eds.), *Health-promoting and health-compromising behaviors among minority adolescents.* (pp. 269-297): American Psychological Association.