The Pennsylvania State University

The Graduate School

Department of Counselor Education, Counseling Psychology, and Rehabilitation Services

A CLUSTER ANALYSIS OF CROSS RACIAL IDENTITY SCALE SCORES AND

THEIR USEFULNESS IN PREDICTING LEVELS OF ACCULTURATION AND

SOCIAL DISTANCE IN THE LIVES OF BLACK COLLEGE STUDENTS

A Thesis in

Counseling Psychology

by

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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

August 2007

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ABSTRACT

This study examined whether the six Cross Racial Identity Scale scores (CRIS; Vandiver et al., 2000) would be useful in predicting levels of acculturation and social distance in the lives of Black college students. Five hypotheses were used to guide the analyses: (a) differential construct validity was expected between the CRIS subscales and the African American Acculturation Scale – Revised (AAAS-R; Klonoff & Landrine, 2000); (b) differential construct validity was expected between the CRIS subscales and several cultural groups specified on a modified version of the Bogardus Social Distance Scale – Revised (BSDS-R; Bogardus, 1933); (c) four to six CRIS clusters, using cluster analysis, were expected to emerge and support the existing clusters found by Worrell et al. (2006); (d) CRIS cluster status were expected to differentially predict the level of acculturation preferred by the students; and (e) CRIS cluster status were expected to differentially predict the degree of social distance from different cultural groups. Participants were 360 college students attending a predominately White institution in the mid-Atlantic region of the U. S. who self-identified as being African American or Black (70% female; 30% male). Data for this study were collected as part of a larger project, in which only four of the eight measures were used: demographic questionnaire, CRIS, AAAS-R, and BSDS-R. For hypotheses one and two, the findings from the bivariate correlational analyses were consistent with and provided further support for the expanded nigrescence theory (Cross & Vandiver, 2001) and the construct validity of the CRIS. A negative correlation was found between Pre-Encounter Assimilation and the AAAS-R total score; a positive correlation was found between Internalization Afrocentricity and the AAAS-R total score; and a negative correlation was found between Immersion-Emersion Anti-White and BSDS-R *Whites* subscale.

Results of the cluster analysis supported hypothesis three in that six to seven clusters were identified: Assimilated, Self-Hating, Multiculturalist, Immersion, Afrocentric, Immersion – Intense Black Involvement, and Low Race Salience. Additionally, preliminary evidence was found for the existence of two new racial identity cluster patterns: Self-Hating and Immersion-Intense Black Involvement. Using the six-cluster solution, findings from a one-way ANOVA and Tukey HSD post hoc analysis provided preliminary support for CRIS cluster membership in predicting levels of acculturation. On average, individuals who were classified in the Assimilated cluster were likely to rate themselves as more acculturated than those who had been placed in the Afrocentric cluster or Immersion cluster. Those who were classified in the Self-Hating cluster on average were likely to rate themselves as more acculturated than those who had been placed in the Afrocentric cluster. Finally, findings from a MANOVA with a follow-up descriptive discriminant analysis provided preliminary support for hypothesis five that the CRIS clusters could be used to predict the degree of social distance from different cultural groups. The MANOVA was statistically significant for cluster status. Only the first discriminant variate was statistically and practically significant and therefore interpreted. Social distance with *Whites* had the highest correlation to the variate, followed by social distance with *Jews* and *Asians*. In contrast, *Other Blacks* had a negative correlation to the function. Thus, the function was named *dominant culture group preference.* On average, individuals in the Self-Hating and Assimilated clusters rated themselves higher on the discriminant function, whereas individuals in the Immersion - Intense Black Involvement, Afrocentric, and Immersion clusters rated themselves lower, and the Multiculturalist cluster fell in the middle. In conclusion, the findings from this study may be potentially informative for clinicians and researchers by providing a contextual

understanding for how sociocultural variables such as acculturation and social distance intersect with and are influenced by racial identity. The complexities of racial identity are important for clinicians and researchers to consider in order to more effectively develop interventions tailored to the needs of individuals with different racial identity attitudes.

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ACKNOWLEDGEMENTS

Pursuing my doctoral training at Penn State has been an incredible experience and one of the best decisions I've ever made; I feel very blessed and privileged to have had this opportunity. At this time, I would like to recognize and thank the many people who provided me encouragement, support, strength, and guidance during this challenging time; I could not have completed this doctoral degree without them. A big thank you to my family who unconditionally support me and all of my educational endeavors: My uncle Antonio Padilla Chavez and aunt Josephine Chavez, who raised me and my siblings and have been incredible role models of strength, resilience, perseverance, and faith; and my siblings Leanna Chavez Garcia, Madonna Chavez, Kevin Chavez Korell, and Netasha Chavez Korell who have always stood by my side and love me despite my idiosyncrasies. Gracias mi familia, te quiero mucho. Also, a special thanks to my partner Kevin Bastyr, who never stopped cheering for me to make it to this finish line. In addition, I also have an academic family to which I owe much gratitude. First, my advisor Dr. Beverly Vandiver who saw me through this process from beginning to end; thank you for believing in me and for teaching me to believe in myself. Thank you to my dissertation committee members Dr. W. Terrell Jones, Dr. Robert Slaney, Dr. Barbara Schaefer, Dr. Jacqueline Toribio, and again Dr. Beverly Vandiver; I appreciate all of the time and care that each of you put into seeing me through this process. A big thank you to Dr. Joe White who took me under his wing and always helped me "keep the faith." Thank you Dr. Sharon Bowman for giving me the pep talks I needed to graduate. Thank you Dr. Keith Wilson, Dr. Kathy Bieschke, and again Dr. W. Terrell Jones for letting me work with you; you have been tremendous role

models and I appreciate the many opportunities you have extended to me. Also, a special thanks

to each of the faculty members in the Counseling Psychology program for taking time and care

to work with me and teach me; Chris Andrus, Darla Homan, Pam Anderson, and Heather Homan

for being so kind and helpful; and to all the folks at CAPS who were always so supportive and

caring. Thank you to my dear friends who keep me grounded and bring so much richness to my

life: Kevin Bastyr, Elladean Lopez Moreno, Amy Cammack ("mi hermana de academica"),

Eleonora Odes, Bryce Aaron, Cody Williams, D'Andre Wilson, Leticia Leal, Margaret DiCocco,

Ray Rose, Debra Archuleta, Katina Gulotta, and Sunny Chi Toews. Finally, I would like to

acknowledge and thank the Africana Research Center at Penn State for awarding me a doctoral

dissertation research grant – Thank you.

DEDICATION

I dedicate this dissertation and all of my life accomplishments to the memory of my mother

Margarita Padilla Chavez.

CHAPTER 1

Introduction

The concept of identity is multifaceted, shaped by individual characteristics, family

dynamics, historical factors, and social and political contexts. Erik Erikson (1968) introduced the

notion that the social, cultural, and historical contexts are the foundation in which individual

identity is embedded. Though the foundation of identity is laid in the experiences of childhood,

younger children lack the physical and cognitive development needed to reflect on the self in this

abstract way (Cross, 1991). Triggered by the biological changes associated with puberty, the

maturation of cognitive abilities, and changing societal expectations, the self-creation of one's

identity is commonly experienced during the period of adolescence (Erikson, 1968; Roland,

1994). Integrating one's past, present, and future into a cohesive, unified sense of self is a

complex task that continues for a lifetime (Erikson, 1968; Levinson, 1978).

Racial identity, similar to other identity processes, plays a critical role in the evolution of

the self-concept. An individual's attitudes about his or her race can have a lasting effect on how

the individual views the self and therefore how the self is presented to others (e.g., levels of

assimilation and social preference). Racial identity attitudes are complex in that they can be

reflected in an individual's strong involvement in racially-related activities and positive feelings

of self-worth, or seen in another individual's self-loathing behaviors and intense feelings of

inferiority. Individuals from the same racial group can exhibit a great deal of variance with

respect to their racial identity (Cross, 1991; Cross & Vandiver, 2001); however, individual

differences in experiences and expressions of Blackness have not always been recognized within

the field of Black psychology (Cross, 1991).

Historically, much of the mainstream research on Black racial identity presumed that self-hatred and group rejection were predominant aspects of the Black self-concept (see Cross, 1991 for review). This perspective was supported by early research, which claimed that an unhealthy self-concept was a result of identification as a member of a stigmatized group (Clark & Clark, 1939, 1940, 1950). As research on Black racial identity evolved, assumptions of Black self-hatred and group rejection were countered by models of *nigrescence* (e.g., Cross, 1971; Jackson, 1976; Milliones, 1973; Thomas, 1971; Williams, 1975).

Nigrescence is a French term that describes "the process of becoming Black" (Cross, 1991, p. 147); therefore, nigrescence models were used to identify the psychological stages associated with Black identity transformation as an individual moved from a self-hating to a self-healing and culturally affirming self-concept (Cross, 1971). With the introduction of nigrescence models in the 1970's (e.g., Cross, 1971; Jackson, 1976; Thomas, 1971; Williams, 1975), a shift in the conceptualization of Black identity occurred. Social science researchers began to question previous assumptions about negative self-concept. Researchers suggested that group identification might, in fact, positively influence mental health (Baldwin, 1984; White & Parham, 1990).

One of the prominent racial identity models has been Cross's (1971, 1991; Cross & Vandiver, 2001) model of nigrescence. This model (Cross, 1971) has been the most frequently used and cited model of Black identity due to its simplicity (Helms, 1984). Over time the original nigrescence model (Cross, 1971) has evolved into a comprehensive theory of nigrescence (Cross, 1991; Cross & Vandiver, 2001). Within the theory, the model is the conceptual framework of the stages and racial attitudes that an individual might experience during a Black identity transformation.

Cross's original nigrescence model (1971) has been the basis for a number of theoretical explications, such as feminist identity (Downing & Roush, 1985), gay and lesbian identity (Cass, 1979), Latino identity (Arce, 1981), Asian identity (Kim, 1981), and White racial identity (Helms, 1995). In addition to theoretical explications, the interest in and accessibility of the model for practical and research applications were increased by the development of the Racial Identity Attitude Scale (RIAS; Parham & Helms, 1981), an instrument designed to measure the original nigrescence model (Cross, 1971). The development of the RIAS resulted in a surge of empirical research on Black racial identity (e.g., Carter, 1990; Hood, 1998; Neville & Lily, 2000; Parham & Helms 1985; Plummer, 1995; Thomas & Speight, 1999).

Today, empirical research of racial identity has gone beyond an understanding of racial identity attitudes to a concern with the impact these attitudes might or may have on many aspects of daily functioning. Discerning individuals' racial identities may provide important information about a wide range of experiences, including affective states (Parham & Helms, 1985), psychosocial development (Pope-Davis, Liu, Ledesma-Jones, & Nevitt, 2000), and value orientations (Carter & Helms, 1987). As such, racial identity has been associated with a number of other human attributes typically linked to identity, including self-esteem (Hughes & Demo, 1989; Parham & Helms, 1985; Rowley, Sellers, Chavous, & Smith, 1998), academic performance (Baldwin, Duncan, & Bell, 1987; Sellers, Chavous, & Cooke, 1998; Taylor, Casten, Flickinger, Roberts, & Fulmore, 1994), preference for same-race counselor (Morten & Atkinson, 1983; Parham & Helms, 1981) and career aspirations (Helms & Piper, 1994; Parham & Austin, 1994).

The original nigrescence model (Cross, 1971) was critiqued by Cross (e.g., 1978, 1989, 1991) and other scholars (e.g., Akbar, 1989; Helms, 1989; Nobles, 1989; Parham, 1989; Smith,

1989), which eventually resulted in the revision of the model and theory. In the revised model

Cross (1991) proposed that multiple identities existed at each stage of nigrescence. The revised

theory provided the momentum for the development of the Cross Racial Identity Scale (CRIS;

Vandiver et al., 2000) which, in turn, resulted in another iteration of the nigrescence model

(expanded nigrescence model; Cross & Vandiver, 2001), and supported the possible existence of

multiple nigrescence attitudes (Cross & Vandiver, 2001). Six exemplars of Black racial identity

are measured with the CRIS: Pre-Encounter Assimilation, Pre-Encounter Miseducation, Pre-

Encounter Self-Hatred, Immersion-Emersion Anti-White, Internalization Afrocentricity, and

Internalization Multiculturalist Inclusive. Empirical evidence accumulated thus far support the

validity of the six CRIS subscale scores (see Cross & Vandiver, 2001; Vandiver, Cross, Worrell,

& Fhagen-Smith, 2002; Vandiver, Fhagen-Smith, Cokley, Cross, & Worrell, 2001), but more

research is needed to validate the scoring and interpretation of the CRIS.

As racial identity is considered a multivariate construct, its measurement and

interpretation must be treated as such (Burlew, 1998; Cross & Vandiver, 2001; Helms, 1995).

One multivariate method that has been recommended for use in examining racial identity scores

is cluster analysis, which aggregates cases with similar scores into the same group while

maximizing the distance from cases with dissimilar scores (Hair, Anderson, Tatham, & Black,

1995). In recent research, Worrell, Vandiver, Schaefer, Cross and Fhagen-Smith (2006) used

cluster analyses on three separate data sets of CRIS scores from Black college students. Four

consistent clusters emerged across these data sets: Assimilated, Immersion, Low Race Salience,

and Miseducated Variant. Worrell et al.'s (2006) use of cluster analyses in examining the CRIS

is considered groundbreaking research, in that cluster analysis on other racial identity measures

(e.g., Carter, 1996; Neville & Lily, 2000) have not resulted in the stability of clusters or the

emergence of clusters paralleling the number of attitudes. However, to date, the CRIS clusters have not been tested on whether individuals with a specific cluster status actually score differently on other measures (e.g., acculturation measures). For example, the expectation would be that someone classified into the Assimilated cluster would score higher on an acculturation scale than someone classified into the Afrocentric cluster.

Research on cultural identity measures has focused on bivariate correlational relationships between the cultural construct and other spheres of functioning constructs (e.g., achievement, mental health, socialization). However, this nomothetic and univariate approach to examining cultural measures has not resulted in any clear mechanism in the scoring, interpretation, and generalization of the scores to the idiographic level, namely, the day-to-day functioning of individual African Americans. Replicating Worrell et al.'s (2006) findings may give direction in establishing a mechanism for scoring, interpreting, and using the CRIS in the lives of African Americans. Examination of the clusters and their relationship to psychological variables could enhance the application and utility of the CRIS in evaluating racial identity in clinical settings, achievement, academic success, and retention.

The Present Study and Research Questions

The purpose of the study was (a) to replicate Worrell et al.'s (2006) clusters and, (b) to extend the CRIS (Vandiver et al., 2000) empirical research and nigrescence theory (Cross & Vandiver, 2001) literature by examining the predictive validity of cluster membership in relation to acculturation (as measured by the African American Acculturation Scale - Revised; Klonoff & Landrine, 2000) and social distance (as measured by a modified version of the Bogardus Social Distance Scale - Revised; Bogardus, 1933). Three goals guided this study: (1) Investigate whether the CRIS subscale scores correlate with the scores of other measures tapping

sociocultural aspects of acculturation and social distance as proposed in the expanded

nigrescence model (Cross & Vandiver, 2001); (2) Investigate whether the racial identity clusters

identified through cluster analysis are similar to the previous cluster solutions found by Worrell

et al. (2006); and (3) Investigate whether the racial identity clusters have predictive utility in the

delineation of acculturation and social preference.

CHAPTER 2

Literature Review

In this chapter, several sets of literature are reviewed to provide the theoretical and empirical foundation for the current study. The chapter is divided into the following four main sections: (a) a review of Cross's nigrescence theory (1971, 1991; Cross & Vandiver, 2001), and the historical context from which it derived; (b) a review of racial identity measurement; (c) a review of the literature on the usefulness of racial identity in predicting sociocultural aspects of functioning; and (d) details of the study. The first section begins with a brief account of the historical context that spurred the development of nigrescence theory. Next, Cross's original nigrescence model (1971) and its impact on the proliferation of similar social or cultural identity models are discussed. This section concludes with a review of the revised nigrescence theory and model (Cross, 1991), and the expanded theory and model (Cross & Vandiver, 2001). In the second section the history of scale development and measurement of racial identity as a construct is provided. This section includes a brief history of the RIAS (Parham & Helms, 1981) and the CRIS (Vandiver et al., 2000). In the third section the current status of the CRIS is reviewed, including research on the predictive usefulness of CRIS scores and a review of studies using cluster analyses on the RIAS and the CRIS. Finally, in the fourth section the purpose of the study is discussed and this section concludes with the objectives and hypotheses for the study.

History and Development of Cross's Nigrescence Model

Spanning from 1936 to 1967, social science research on *Negro identity* was based on the premise that self-hatred and group rejection were typical of Black psychological functioning (Cross, 1971). In fact, these negative premises, initially supported in Negro identity research (e.g., Clark & Clark, 1939, 1940, 1950), were used to support the United States Supreme Court's

1954 decision to desegregate schools (*Brown v. Board of Education, Topeka, Kansas*). For years thereafter, conventional wisdom stated that the average Black person suffered from low self-esteem and anti-Blackness (Cross, 1971). It was not until the Black Social Movement that these assumptions about Negro identity were challenged (Cross, 1991).

The Black Social Movement lasted from 1954 to 1975 and consisted of two phases, a Civil Rights phase and Black Power phase (Cross, 1991). During this movement, some social scientists (e.g., Cross, 1971; Milliones, 1973; Thomas, 1971) speculated that Black individuals started feeling better about being Black because of their political action. The Black identity change that accompanied the Black Social Movement was interpreted as a change in low self-esteem and anti-Blackness to the "new" Black identity characterized by self-acceptance and a preference for things Black (Cross, 1971). Social science researchers (e.g., Cross, 1971; Jackson, 1976; Milliones, 1973; Thomas, 1971) observed and described what they thought were the psychological stages associated with the "new" Black identity change. Their resulting models became known as models of *nigrescence*, a term coined by Cross (1978).

Early Nigrescence Models

Nigrescence is a French word that means the "process of becoming Black" (Cross, 1978); therefore, nigrescence models were used to describe the psychological stages associated with Black identity that accompanied an individual's experience of the Black Social Movement. Thus, social scientists traced the stages that Black individuals went through as they moved from a self-hating to a self-healing and culturally affirming self-concept (Cross, 1971). Between 1968 and 1976, many scholars (e.g., Cross, 1971; Jackson, 1976; Milliones, 1973; Nobles, 1976; Thomas, 1971; Williams, 1975) produced nigrescence models; however, the most popular models were developed by Thomas (1971) and Cross (1971).

Thomas (1971) detailed a five-step process, in which no names were assigned to each step or stage, that he deemed as a necessary condition for Black people to eradicate "Negromachy" (a confusion of self-worth and dependence on White society for self-definition). According to Thomas (1971), negromachy is overcome by the individual seeking a racial identity that in turn becomes a means for finding one's unity with humankind. Stage one is characterized by withdrawal from others. The person is releasing frustrations toward White society and also trying to gain insight into the dynamics of negromachy. The second stage requires testimonies and confessions about the personal struggle for a Black identity. Tensions and anxieties about the "new self" become apparent, and the individual expresses these feelings in congruence with what is appropriate "Black" behavior. The third stage is characterized by information processing and self-educating in regards to African history and the contributions of Africans to America. The fourth stage involves joining a social action group to help the individual find a connection to a larger Black experience. The final stage is transcendental; the individual internalizes the new Black identity and is now ready to renegotiate contacts with people from other racial groups (Thomas, 1971).

Also in 1971, Cross introduced the Negro-to-Black Conversion Experience, a depiction of the stages of individual Black consciousness development, associated with a Black person's experience of the Black Social Movement. Black identity development was described as a "re-socializing" experience from a series of circumstances and events that lead to transformation from a self-hatred identity into one that has a positive identification with being Black. Five stages make up Cross's (1971) original nigrescence model: Pre-Encounter, Encounter, Immersion-Emersion, Internalization, and Internalization-Commitment. Assumptions of Cross's 1971 model included (a) racial identity occurs in a sequential manner from one stage to the next;

(b) movement between stages is stimulated by people's response to socially oppressive events; and (c) progression through the stages reflects attitudinal changes from negative to positive self-awareness (Cross, 1971).

The Pre-Encounter stage is depicted as the old identity or the identity to be changed and is characterized by a self-hating identity. Black individuals in this stage are believed to be internalizing a "pro-White" identity that affirms Whiteness and negates non-White behavior (Cross, 1971). Black individuals who are pro-White are believed to be self-hating, which results in low self-esteem (Cross, 1971).

The Encounter stage is characterized by individuals experiencing one or more significant personal or social events that are inconsistent with their current frame of reference. For example, a Black person who views race as insignificant and wishes to be viewed simply as a "human being" is denied access to a social function because of skin color. Encounters such as these make the individual vulnerable to a new interpretation of self in relation to the world (Cross, 1971). Two steps must occur during the Encounter stage before progressing to the next stage: (a) the individual experiences an encounter, and (b) the individual begins to reinterpret the world as a consequence of personalizing the encounter (Cross, 1971).

Movement to stage three, Immersion-Emersion, occurs when an individual makes a decision to give up the old identity and takes on a newly emerging identity. The immersion phase of this stage depicts individuals that are preoccupied with embracing and glorifying all things Black (immersion into a Black frame of reference) and having a tendency to denigrate White people and White culture. The emersion phase represents emergence from this preoccupied behavior; the person's psychological defensiveness is replaced by affective and cognitive openness allowing for critical self-analysis (Cross, 1971).

The fourth stage, Internalization, represents the resolution of conflicts between the "old" and "new" worldviews. The individual internalizes and incorporates aspects of the immersion-emersion experience into his or her self-concept. Tension, emotionality, and defensiveness are replaced by a calm, secure demeanor. The individual is receptive to plans of sociopolitical activism. The fifth stage, Internalization-Commitment, is achieved only by those who internalize the new identity and are committed to continuing their involvement with social activism (Cross, 1971).

The Thomas (1971) and Cross (1971) models contain five stages, but are dissimilar in content. The Thomas model begins at the point where the person has already begun to change, whereas the original Cross model has two stages (Pre-Encounter and Encounter) which characterize the individual prior to change. The Thomas model has four transitional stages (stages 1 through 4); whereas the original Cross model has one transition stage (Immersion-Emersion). Nevertheless, there is a common frame of reference. Both models place importance on understanding the dynamics of a Black identity, and on the need for temporary immersion into Blackness (Cross, 1978). Both models end with the individual's internalization of their new Black identity. Despite the similarity in models, the Thomas model was not deemed as easy to use and comprehend as the 1971 Cross model (Helms, 1984, 1989; Parham, 1989; Ponterotto, 1989). Due to the impact of the 1971 Cross model on other areas of research and the extensive empirical research focusing on the Cross model, it has eventually become known as "the nigrescence model" (Cross, 1991).

Impact of Original Nigrescence Model

The original nigrescence model (Cross, 1971) has been the most frequently used and cited model of Black racial identity due to its simplicity (Helms, 1984). Over time the original

nigrescence model (Cross, 1971) has been expanded into a comprehensive theory of nigrescence. As its origin was based on the Black Power days of the 1970's, it emphasis was limited to describing the stages of identity change that accompanied an individual's involvement in the Black Power Movement. In the 1980's, the interest in and accessibility of the model for practical and research applications were increased by the development of the Racial Identity Attitude Scale (RIAS; Parham & Helms, 1981), an instrument designed to measure the original nigrescence model (Cross, 1971). The development of the RIAS resulted in a surge of empirical research on Black racial identity (e.g., Bagley & Copeland, 1994; Carter, 1990; Carter & Helms, 1988; Helms, 1990; Hood, 1998; Martin & Hall, 1992; Neville & Lily, 2000; Parham & Helms, 1985; Richardson & Helms, 1994; Sanchez, 2002; Taylor & Howard-Hamilton, 1995). Nigrescence research using the RIAS advanced nigrescence theory beyond the dynamics of a social movement to an analysis of Black identity in ordinary Black life.

In addition to empirical research, the original nigrescence model served as a catalyst and framework for guiding the examination and theorizing of other cultural identity development models, such as gender identity (Downing & Roush, 1985), sexual orientation (Cass, 1979), Latino identity (Arce, 1981), minority identity (Atkinson, Morten, & Sue, 1989), and White racial identity (Helms, 1995; Ponterotto, 1988). For example, Kim (1981) explored the implications of the nigrescence process for the construction of identity development models for Asian Americans. In a similar fashion, Downing and Roush (1985) applied the nigrescence paradigm to develop the stages of a feminist identity model. The increased use of the original nigrescence model (Cross, 1971) ultimately resulted in the model and theory being scrutinized and critiqued by Cross (e.g., 1978, 1989, 1991) and other scholars (e.g., Akbar, 1989; Helms, 1989; Nobles, 1989; Parham, 1989; Smith, 1989).

Critique of the Original Nigrescence Theory and Model

The empirical research and theoretical explications of the original nigrescence theory and model (Cross, 1971) led to the identification of three concerns: (a) personality features and mental health functioning seemed to be confounded with racial identity attitudes; (b) further clarification of Internalization and Internalization-Commitment (stages 4 and 5) were needed; and (c) Black nationalism was treated as a negative transitory identity. In response to critiques by others (e.g., Akbar, 1989; Helms, 1989; Nobles, 1989; Parham, 1989; Smith, 1989) and his own exhaustive analysis of the Black identity literature, Cross (1991) examined these concerns and offered a revised nigrescence theory and model as a solution. What follows is a brief delineation of the concerns that eventually led to theory and model revisions.

Personality, mental health functioning, and racial identity. Cross (1971) contended that racial preference was a part of a Black person's personal identity and affected a person's mental health functioning. Individuals who accepted being Black were assumed to be psychologically healthy with high self-esteem. In contrast, individuals who accepted the values of White American culture were believed to suffer from self-hatred and thus, low self-esteem. The expectation was that a Black person's personal identity and mental health functioning would show positive improvement across the stages of nigrescence. Specifically, the Pre-Encounter stage (stage 1) was originally conceived to involve high anti-Black attitudes, in combination with neurotic to pathological mental health functioning (e.g., low self-esteem); the opposite was assumed to be true for the Internalization stages (stages 4 and 5). This premise was due to Pre-Encounter being conceptualized as a single construct composed of two polar traits assumed to be linked: pro-White and anti-Black.

Cross's (1991) measurement of the variables pro-White and anti-Black challenged this assumed relationship. Cross (1991) administered the RIAS (Parham & Helms, 1981) with additional pro-White and anti-Black items, and the Rosenberg Self-Esteem Scale (Rosenberg, 1965) to 64 African American college students. The composite Pre-Encounter score, consisting of pro-White and anti-Black, was significantly and negatively correlated with self-esteem ($r = -29$, $p < .01$). When the Pre-Encounter composite score was divided into pro-White and anti-Black, self-esteem was found to be related to the anti-Black score ($r = -.31$, $p < .007$), but not to the pro-White score ($r = .09$, $p > .05$). These findings along with the results from other studies (e.g., Gordon, 1980; Johnson, 1972; White & Parham, 1990) revealed a weak correlation between pro-White attitudes and self-esteem, and suggested a possible differential link between self-esteem and pro-White and anti-Black (Cross, 1991).

Cross (1991) concluded that the majority of Pre-Encounter individuals were not self-hating as previously assumed (Cross, 1971), but instead attributed limited (if any) importance to race and derived mental health benefits from group affiliations that are not necessarily connected to Black culture (e.g., sexual orientation, political affiliation, gender, etc.). Cross contended (1991) that a pro-White attitude is not related to self-esteem and is not a valid indicator of Black self-hatred. Cross (1991) proposed a revision of Pre-Encounter that gives low salience to race.

Self-esteem, Black Nationalism, and the internalization stages. The original conceptualization of Internalization (stages 4 and 5) depicted a person who has a pro-Black identity with a strong humanist-universal perspective (Cross, 1971). Two assumptions of the Internalization stages are (a) the attainment of self-healing and higher levels of mental health as a result of reconciliation with Black culture; and (b) ideological unity with other Black people who

have achieved internalization. Individuals in these advanced stages are said to be united and less prone to ideological disputes.

In the original nigrescence model (Cross, 1971), nigrescence involved "total" change to an individual's self-concept, resulting in the enhancement of personality attributes and a positive group identity. Cross (1991) reviewed the racial preference literature and realigned nigrescence theory with that of the social identity literature in that the self-concept is composed of an individual identity and a social identity. Cross (1991) re-evaluated data from past empirical studies and discovered that most change during the process of nigrescence occurred in an individual's social identity, and little if any change occurred in the individual identity (e.g., self-esteem) component of the self-concept. Cross concluded that unique personality traits should be treated as a minor variable in Black identity, as Blackness is a social identity, and not an individual trait (Cross, 1991).

Furthermore, critics (e.g., Nobles; 1989; Parham, 1989; Smith, 1989) argued that Internalization in the original nigrescence model favored a person who was pro-Black and Multicultural. Thus, implicitly at least, there was a tendency to underestimate the continuance of a Black Nationalist identity and humanistic beliefs. In the original nigrescence model (Cross, 1971) Black Nationalism was exclusively associated with the immersion phase of the Immersion-Emersion stage. Black Nationalism was conceptualized as an intense, emotional and cognitively irrational state about being Black and was considered a negative transitory identity. Black Nationalists were theorized to have a "pseudo" Black identity because of the focus on the hatred and negation of White people rather than on the affirmation of a pro-Black perspective; therefore, their development ceased in the Immersion stage (Cross, 1971).

Cross's characterization of Black Nationalism was challenged as being limited and pejorative, and underestimated the role Black Nationalism played in the lives of many who achieved Internalization (e.g., Akbar, 1989; Nobles, 1989; Parham, 1989; Smith, 1989). Rather than atrophying, many Black Nationalists showed sustained growth; consequently, advanced identity development may be associated with nationalism, as it is with a humanistic worldview (Cross, 1991; Parham, 1989; Parham & Helms, 1985).

Revised Nigrescence Theory

Cross, in his 1991 publication *Shades of Black*, details his exhaustive review of the racial identity literature and his further investigation into the three areas of concern described above. He concludes the review by offering a revised nigrescence theory and model as a solution. Substantive revisions were made to the original nigrescence theory. These changes fall into two broad categories: (a) the delineation between personal and group identities and their influence on self-esteem, and (b) revisions to the stages and identities within those stages.

Personal and group identities and self-esteem. In the revised nigrescence theory, Cross proposed that self-concept is composed of two components: personal identity (PI) and reference group orientation (RGO). PI refers to general personality features such as those measured in personality inventories (e.g., Minnesota Multiphasic Personality Inventory [MMPI]; Dahlstrom, Welsh, & Dahlstrom, 1972; Big Five Inventory [BFI]; John, Donahue, & Kentle, 1991; Rosenberg Self-Esteem Scale [RSES]; Rosenberg, 1965), whereas RGO is based on social affiliations (e.g., religion, race, gender, sexual orientation). Most change during the process of Nigrescence occurs in the individual's RGO, and little if any change occurs in the PI component of the self-concept. In addition, RGO also reflects the importance or salience of race in the life of an individual as well as the valence given to race. Individuals may view race as having (a) no

importance (low salience) with neutral valence, (b) singular importance (high salience) with a positive valence, or (c) singular importance (high salience) with a negative valence (Cross, 1991).

The delineation between PI and RGO led to the reevaluation of the assumed relationship between self-esteem and racial identities. Cross (1991) concluded that this relationship is no longer assumed because PI largely remains consistent from the beginning of the nigrescence process to advanced stages of the process. Black identity change occurs on the RGO level, not on the PI; therefore, personality at the beginning of nigrescence may likely be the same at the end of nigrescence. In addition, low self-esteem is solely related to those identities that have a high negative race salience, which is symbolic of a merger between a negative RGO and PI. In summation, the key factors that separate Pre-Encounter individuals from those who are in the advanced stages of nigrescence is not personality characteristics (e.g., self-esteem), but value orientation, historical perspective, and world view (Cross, 1991, 1995).

Internalization and Black Nationalism. In the revised nigrescence theory, Cross (1991) made two changes in the Internalization stages. First, he uncoupled the assumed relationship between Black self-acceptance and mental health. Second, Internalization would no longer be synonymous with a humanist view about relationships among diverse cultural groups. Instead, internalized individuals could differ in their acceptance of members from diverse cultural groups, and rather than becoming unified, people with internalized identities are divergent in their ideological perspectives (Cross, 1991).

In addition, Cross (1991) addressed the role of Black Nationalism and concluded only a specific type of Black Nationalism (i.e., *vulgar* Black Nationalism) would be associated with the Immersion-Emersion stage; otherwise, Black Nationalism would be conceptualized as an

internalized identity, serving a positive role in the lives of many individuals who reach the Internalization stages.

Revised nigrescence model. In the revised nigrescence theory, Cross (1991) retained the five stage model: Pre-Encounter, Encounter, Immersion-Emersion, Internalization, and Internalization-Commitment. The names of the stages in the revised model do not represent identities as they did in the original model; instead, the names describe the overarching theme of the stage. Cross delineated exemplars that characterized unique racial identities at the Pre-Encounter, Immersion-Emersion, and Internalization stages (Cross, 1991, 1995).

The Pre-Encounter stage is characterized by two identities: Assimilation and Anti-Black (Cross, 1991, 1995). Individuals with an Assimilation identity have a pro-American RGO, and view race as non-salient. Those with an Anti-Black identity view race as a problem or stigma (negative valence); the only meaning aligned with race is social discrimination and thus being Black is experienced more as a problem. An Anti-Black identity is composed of two aspects: miseducation and self-hatred. Miseducation describes the negative stereotypical mindset a Black person has about the Black community in general. Pre-Encounter Anti-Black individuals suffer from the type of extreme miseducation, which results in self-hatred. Self-hatred is the individual's negative views about being Black (Cross, 1991, 1995).

As in the original nigrescence model, the focus of the Encounter stage is on circumstances or events that are likely to serve as a catalyst to identity transformation. Encounters are social experiences that result in the individual questioning their current world view and RGO. During the Immersion-Emersion stage, the individual begins to demolish the old perspective and simultaneously tries to construct what will become the new frame of reference (Cross, 1991, 1995). The individual first experiences an immersion into Blackness and liberation

from Whiteness. This stage is characterized by two identities: Anti-White and Intense Black Involvement. Anti-White individuals reject everything White, to the point of demonizing White people and White culture. Intense Black Involvement describes a Black person's immersion into the Black experience where superiority is declared for everything Black. The second part of this stage is an emersion from the emotionality and oversimplified ideological aspects of the immersion experience. The individual is able to recognize that the immersion process was a period of transition rather than an end state. The end of this transition stage has been reached when the individual recognizes the need for continued growth and maintenance of the new identity (Cross, 1991, 1995).

Progression to the fourth stage, Internalization, occurs when the individual commits to the continued growth and maintenance of the new identity. Once an individual works through the transition period at the end of stage 3 and enters stage 4, the person internalizes the new identity, which now expresses itself naturally in the day-to-day life of the individual. Internalized individuals feel calmer and are more at ease with themselves. There is a sense of confidence in their personal standards of Blackness. In moving from Pre-Encounter to Internalization, the person has moved from a frame of reference in which race and culture had low salience to one characterized by high salience of Blackness in everyday life. During the process of nigrescence, a single dimension of the person's identity (race) is isolated for the purpose of examination, revitalization, and transformation, and then at Internalization, reintegrated into the person's overall identity (Cross, 1991).

The Internalization stage includes Black Nationalist, Biculturalist, and the Multiculturalist. Individuals with identities in this stage have a high positive race salience. Black Nationalists focus their efforts on empowering the Black community. A Biculturalist identity is

characterized by Black self-acceptance and an active focus on one other cultural identity (e.g., gender, religion, sexual orientation). A Multiculturalist identity is characterized by Black self-acceptance and an active focus on two or more cultural identities. The fifth and final stage of the revised nigrescence model is Internalization-Commitment. The defining factor that differentiates stage 4 from stage 5 is the individual's sustained interest and commitment to Black issues.

In the revised nigrescence theory, Cross (1991) identifies three functions of a Black identity that apply to all of the identity stages: defensive function, reference group function, and bridging function. The defensive function defends the individual from the negative psychological stress associated with living in a society that can be racist. The reference group function provides a sense of purpose, meaning, and affiliation with other Black people and the Black community. The bridging (or transcendent) function provides psychological mechanisms that facilitate social intercourse with people, cultures, and human situations outside the boundaries of Blackness.

The final revision to the revised nigrescence theory (Cross, 1991, 1995) is the inclusion of the concept "recycling" (Parham, 1989). Nigrescence was originally conceptualized to be a one-time occurrence in the life of a person and involved a complete cycle through all five stages (Cross, 1971). However, Cross (1991) acknowledges that the Internalization phase does not permanently conclude the nigrescence process for all individuals. Therefore, "recycling" was incorporated into the revised theory and is used to describe when an individual returns to certain stages of nigrescence as a result of challenges (encounter experiences) in their life specific to circumstances or a phase (middle age or late adulthood). Recycling may or may not involve a return to the Pre-Encounter stage. In recycling, a person works toward continued growth in his or her thinking about what it means to be Black.

Expanded Nigrescence Theory and Model

The expanded nigrescence theory and model (Cross & Vandiver, 2001) emerged as a result of the development of the Cross Racial Identity Scale (CRIS; Vandiver et al., 2000), which was initially intended to measure the revised nigrescence model (Cross, 1991; Vandiver, 2001; Vandiver et al., 2001; Worrell, Cross, & Vandiver, 2001). The five stages in the revised model (Cross, 1991) and the multiple identity types associated with each stage are present in the expanded model (Cross & Vandiver, 2001). The changes in the expanded model are in the delineation of the identity exemplars and the change from a developmental stage model to one that addresses racial identity attitudes instead of racial identities.

Six areas of racial identity are addressed in the expanded nigrescence theory (Cross & Vandiver, 2001): (1) the differentiation of personal identity from reference group orientation in the structure of the self-concept; (2) the array of Black identity types; (3) identity socialization spanning from infancy through adolescence and early adulthood; (4) adult identity conversions or re-socializations; (5) identity recycling; and (6) identity functions. The levels (2, 3, and 4) that underwent substantive changes in the expanded nigrescence theory are summarized; all other levels remain consistent with how they were conceptualized in the revised nigrescence theory.

Level 2: Nigrescence and the universe of Black identity types. The existence of a spectrum of Black identities is first introduced in the expanded nigrescence theory (Cross & Vandiver, 2001). A set of eight identity types are presented as exemplars of this spectrum and permeates each level of the expanded nigrescence model. The eight identified social attitudes or identity exemplars are Assimilation, Miseducation, Self-Hatred, Anti-White, Intense Black Involvement, Black Nationalist, Bicultural, and Multicultural. Assimilation refers to attitudes

that are pro-American with limited significance given to racial group identity. Miseducation defines attitudes accepting of negative stereotypes about Black people and the Black experience. Self-Hatred attitudes reflect the acceptance and personalizing of negative views of Black people. Anti-White attitudes are strong negative attitudes toward White people. Intense Black Involvement attitudes reflect the embracement of Blackness where a blind-faith attachment is made to all things related to Black people and Black culture. Black Nationalist attitudes have a strong singular focus on the Black community. Bicultural attitudes indicate a fusion of pro-Black values with one other salient cultural identity (e.g., gender, religion, sexual orientation). Finally, Multicultural attitudes indicate a positive racial sense of self with a fusion between three or more social categories or frames of reference (Cross & Vandiver, 2001).

The eight identity exemplars are grouped into three thematic categories: Pre-Encounter, Immersion-Emersion, and Internalization. Pre-Encounter themes refer to those identities that have low or negative salience to race and Black culture, and include the three identity exemplars Assimilation, Miseducation, and Self-Hatred. Immersion-Emersion themes refer to a state of identity transition, and include the identity exemplars Anti-White and Intense Black Involvement. Internalization themes reflect a sense of reconciliation with being Black in a diverse world, and the exemplars in this category (Black Nationalist, Bicultural, and Multicultural) are characterized by moderate to high importance to race and Black cultural issues. As indicated in the expanded nigrescence theory (Cross & Vandiver, 2001), individuals can have differing levels of the various attitudes at the same time, although one attitude or theme may be more salient.

When the nigrescence model is applied to the study of Black identity development of a reference group orientation, the categories Pre-Encounter, Encounter, Immersion-Emersion,

Internalization, and Internalization-Commitment are viewed as *stages*. However, when the focus is on the socialization experiences of adolescence through adulthood, which may result in the production of the exemplars described above, then the exemplars are treated as the prevailing attitudes of Black identity or reference group orientation (Cross & Vandiver, 2001).

Level 3: Nigrescence theory and traditional socialization. Cross and Fhagen-Smith (2001) traced the development of Black social identities across the phases of infancy, childhood, adolescence, and early adulthood. They concluded that Black individuals, who enter adult life with a Black Nationalist, Biculturalist, or Multiculturalist type of Black identity, may not undergo nigrescence because their upbringing and socialization typically result in self-concepts that are already race and Black culture sensitive (Cross & Fhagen-Smith, 2001).

Level 4: Nigrescence as resocialization or conversion experience. Individuals who reach late adolescence without the traditional socialization experience (described in level three) and have an Assimilation, Miseducation, or Self-Hatred attitude, are likely to experience conversion (Cross & Fhagen-Smith, 2001). Assimilation individuals are at risk of a conversion because their low race salience orientation will likely fail to explain highly charged racial experiences. Miseducation individuals may experience nigrescence as a corrective process for internalized negative stereotypes about Black people and Black culture. Self-Hatred individuals may benefit from a positive shift in frame of reference possibly due to increased self-worth and decreased self-hatred which might result from a conversion experience (Cross & Fhagen-Smith, 2001; Cross & Vandiver, 2001).

Regardless of the identity type with which an individual enters nigrescence (e.g., Pre-Encounter Assimilation, Pre-Encounter Miseducation, Pre-Encounter Self-Hatred), the result of the conversion experience will match the range of reference group orientations that are achieved

by individuals who experienced a formative socialization process (Cross & Fhagen-Smith, 2001). For example, no difference is expected between an individual with a socialized Black Nationalist identity and an individual with a Black Nationalist identity that resulted from a conversion experience (Cross & Vandiver, 2001).

In summation, the expanded nigrescence theory (Cross & Vandiver, 2001) differs from the original (Cross, 1971) and revised (Cross, 1991) theories in several ways. Perhaps most important is the change from a developmental-stage theory to one that focuses on racial identity attitudes. The existence of a spectrum of Black identity attitudes underscores a central theme of the expanded nigrescence theory (level 2). Individuals can manifest differing levels of various attitudes. In addition, the socialization of Black attitudes across the life span (level 3) and the multiple ways that Black identities are enacted in everyday life (level 4) are highlighted in the expanded theory (Cross & Fhagen-Smith, 2001; Cross & Vandiver, 2001). Six of the eight racial identity attitudes described in the expanded nigrescence model are measured on the CRIS (Vandiver et al., 2000).

Measurement of Black Racial Identity

The work of social scientists (e.g., Cross, 1971; Milliones, 1973; Thomas, 1971) in the early seventies provided the theoretical underpinnings leading to the development of measures tapping Black identity (Burlew & Smith, 1991). Several measures of Black racial identity have been developed (e.g., African Self Consciousness Scale; Baldwin & Bell, 1985; Black Group Identification Index; Davidson, 1975; Black Identity Development; Jackson, 1976; Developmental Inventory of Black Consciousness; Milliones, 1980; Multidimensional Inventory of Black Identity; Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Black Personality

Questionnaire; Williams, 1981); however, only two have used Cross's nigrescence model as the basis for the scales: the RIAS (Parham & Helms, 1981) and the CRIS (Vandiver et al., 2000).

RIAS

The first quantitative measure of racial identity was the RIAS (Parham & Helms, 1981). The RIAS was developed to measure attitudes associated with the various stages of Black identity, as described in Cross's (1971) original nigrescence model, and was adapted from Hall, Freedle, and Cross's (1972) Q-sort items. The development of the RIAS is significant in the history of nigrescence research in that the scale made the original nigrescence model (Cross, 1971) accessible for research. However, the RIAS is now dated, considering that the nigrescence model has been revised twice (Cross, 1991; Cross & Vandiver, 2001) and is only applicable to the original nigrescence model (Cross, 1971).

CRIS

The CRIS (Vandiver et al., 2000) was developed in six phases over a 5-year span (Cross & Vandiver, 2001; Vandiver et al., 2001, 2002; Worrell, Vandiver, Cross, & Fhagen-Smith, 2004) and was initially designed to measure the revised nigrescence model. In Phase 1 the initial item development and content validation of the scale was developed from a pool of items and was evaluated by expert judges. Phases 2 through 4 involved the initial scale development of the CRIS with three independent samples of African American college students. Findings from these phases resulted in movement from the revised nigrescence model (Cross, 1991) to the expanded nigrescence model (Cross & Vandiver, 2001).

Descriptive statistics of CRIS. The reliability estimates for the subscales of CRIS scores ranged from .59 to .90 and improved across the phases (Vandiver et al., 2002). At the conclusion of phase 6, all of the reliability estimates for the CRIS scores, except for PM (.78), were above

.80. Correlations between the subscales ranged from |.51| to |.63|, with a majority of the values below |.30| from Phase 2 to Phase 6 as the items were revised. At the end of Phase 6, intercorrelations between IEAW and IA, and IMCI were .41 and .37, respectively (Vandiver et al., 2002). Worrell et al. (2004) replicated the previous psychometric properties of the CRIS scores (Vandiver et al., 2002) in an adult sample of 105 African Americans. Reliability estimates for the CRIS scores ranged from .70 to .85, and the median subscale intercorrelation was |.23| (Worrell et al., 2004).

Structural validity. Exploratory factor analyses (EFA) were conducted on the scores of three samples, two college samples (Cross & Vandiver, 2001; Vandiver et al., 2001, 2002) and an adult sample (Worrell et al., 2004). All EFAs resulted in a 6-factor solution of the CRIS items, providing support for the current item placement on the six subscales. Findings from confirmatory factor analysis (CFA), conducted on the scores of one college sample, also supported the six-factor structure of the CRIS (comparative fit index > .90), which was parsimonious in contrast to the other competing models tested (Vandiver et al., 2002).

Convergent validity. Convergent validity for the CRIS has been supported (Helm, 2001; Vandiver et al., 2002) with selected subscales on the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997), another measure of Black racial identity. Correlations between subscale scores on both instruments were in the appropriate directions (|.30| r |.59|, *Mdn* = .34; see Helm, 2001; Vandiver et al., 2002).

Discriminant validity. Discriminant validity for the CRIS has been supported by low intercorrelations between CRIS subscales and measures of social desirability, personality, and global self-esteem (Vandiver et al., 2002). A premise of the revised (Cross, 1991) and expanded nigrescence models (Cross & Vandiver, 2001) is that Black racial identities are not markers of

personal identity (PI; i.e., personality traits, self-esteem, etc.) but are instead related to a reference group orientation (RGO; i.e., social identity or group membership); however, the exception is that self-esteem is negatively affected if an individual scores high on Pre-encounter Self-Hatred (PSH). In keeping with the expanded nigrescence model (Cross & Vandiver, 2001), a significant correlational relationship was found between PSH and self-esteem ($r = -.34$), while no other CRIS subscale was related to self-esteem (Vandiver et al., 2002). In addition, CRIS subscales were not related to any of the Big Five Inventory personality traits and had very low correlations (no CRIS subscales obtained correlations above $|.30|$ with social desirability; Vandiver et al., 2002).

The Usefulness of CRIS Scores in Predicting Other Sociocultural Constructs

Evidence for the CRIS seems to provide support that the scores reflect a psychometrically sound scale measuring the expanded nigrescence model (Vandiver et al., 2001, 2002; Worrell et al., 2004); however, a psychometrically strong measure is necessary but not sufficient unless the scores, guided by theory, are useful in predicting other aspects of an individual's psychosocial functioning. Current empirical research on Black racial identity has advanced beyond simply understanding racial identity attitudes to investigating the impact of these attitudes on many aspects of daily functioning. This section of the paper focuses on recent studies that extend CRIS research by examining the predictive validity of the CRIS scores, as would be expected on the expanded nigrescence theory (Cross & Vandiver, 2001) in relation to other areas of psychosocial functioning.

Predictive Outcomes Using the CRIS

Helm (2001). Helm examined the relationship between the CRIS and acculturation, as measured by the African American Acculturation Scale - Revised (AAAS-R; Klonoff &

Landrine, 2000). Participants were 388 Black/African Americans with the majority of the sample being college students from a southern historically Black university and two Midwestern predominantly White universities.

The IEAW subscale scores had statistically significant correlations with the total score on the AAAS-R ($r = .21$; $p < .01$), with the author contending that a person who actively experienced anti-White attitudes was also likely to reflect a traditional Black cultural orientation (immersed in Black culture). In addition, the PA subscale scores negatively correlated with the total score on the AAAS-R ($r = -.16$; $p < .01$), meaning that a person who endorses assimilated attitudes about White American culture would also likely be non-accepting of traditional Black culture.

Hierarchical multiple regressions were performed to examine the value of scores on the CRIS subscales for predicting scores on the AAAS-R (with higher AAAS-R scores indicative of high endorsement of traditional Black cultural values). In the first hierarchical multiple regression, after controlling for relevant background variables that had been identified as significant predictors of acculturation (i.e., racial composition of the university, importance of religion, and racial composition of community), CRIS subscales accounted for 11.3% of the variance in acculturation scores. All of the CRIS subscales were predictive of acculturation except the IMCI subscale. PA and PSH subscales scores were found to be negative predictors of the total score on the AAAS-R, with Helm concluding that the higher participants scored on assimilated and self-hating attitudes the less likely they were to be accepting of traditional Black culture. PM, IEAW, and IA scores were all found to be positive predictors of the total score on the AAAS-R, with Helm again contending that the higher participants scored on these CRIS subscales, the more likely they were to embrace a traditional Black cultural orientation.

A second hierarchical regression analysis was conducted to examine whether CRIS scores contributed to predicting acculturation after controlling for the significant demographic variables (i.e., racial composition of the university, importance of religion, and racial composition of community) and another identity measure (i.e., MIBI). Once the scores on the MIBI were controlled for, the CRIS subscale scores contribution to predicting acculturation was reduced from 11% of the variance (distributed across five subscales) to 4%. Recall that in the first hierarchical regression, five of the six CRIS subscale scores collectively accounted for significant variance in acculturation when the CRIS was the only identity measure predicting AAAS-R scores. When the variance accounted for by the MIBI subscales was controlled; however, four of the five original subscale predictors for the CRIS no longer accounted for significant variance in acculturation, an indication that the MIBI and CRIS are measuring similar racial identity constructs. Only the IEAW subscale scores remained a significant predictor of AAAS-R total scores.

Helm's (2001) interpretations regarding acculturation scores and CRIS subscale scores appear to be somewhat congruent with Vandiver et al.'s (2002) descriptions of these subscales, and are relatively consistent with the expanded nigrescence theory (Cross & Vandiver, 2001). First, it is inconclusive to assume that persons with high scores on the IEAW subscale are likely to reflect a traditional Black cultural orientation, because the IEAW subscale only measures hatred of Whites, which is not the same as Black immersion. This finding highlights the importance of using the CRIS subscales in tandem to be able to draw adequate conclusions about the patterns of Black identity. Second, the author's conclusions about the relationship between PA and acculturation are consistent with the expanded nigrescence theory in that PA individuals are described as having a pro-American identity with low race salience (Cross & Vandiver,

2001). A limitation of this study was the small effect sizes reported for the bivariate correlations; although the correlations were statistically significant they were not practically significant ($r =$ .21 and $r = -.16$). An additional shortcoming was in the sequence of administering measures. The measures were administered in the same order to each participant; therefore, order effect was not taken into account.

Redden (2003). Redden examined the relationship between Black racial identity as measured by the CRIS, and acculturative stress measured by the Acculturative Stress Scale (high scores being indicative of increased psychological discomfort during interactions with White people and White culture; Williams-Flournoy & Anderson, 1996) using 150 African American college women attending a predominately White university. Data were collected from participants through an on-line survey. The Acculturative Stress Scale had a statistically significant positive correlation with IA ($r = .35$) and IEAW ($r = .40$). Higher acculturative stress scores were associated with higher levels of Afrocentricity and anti-White sentiments. In contrast, PA attitudes were negatively correlated to acculturative stress ($r = -.40$). Participants who endorsed a pro-American attitude reported less acculturative stress. No significant statistical relationships were found between the CRIS subscales of PM, PSH, and IMCI and the Acculturative Stress Scale.

The relationships between CRIS subscale scores and the racial composition of the participants' high schools were examined using one-way ANOVAs. Only PSH scores were different as a result of racial composition of the high schools. The PSH mean score was higher (2.55) for students from schools with less than 5% African Americans than for students from high schools that were more than 50% African Americans (1.57). The relationships between

CRIS subscale scores and the participants' year in college was examined using Pearson's correlation; no significant differences were found.

The results of this study provide support for the expanded nigrescence theory (Cross & Vandiver, 2001) and raise some new connections about its relationship to acculturative stress. First, participants with high cultural awareness who expressed an internalized Afrocentric identity (as described by Cross & Vandiver, 2001) experienced more acculturative stress (i.e., psychological discomfort when interacting with Whites) than participants who were either more culturally inclusive in their worldviews (e.g., IMCI) or less concerned with issues of race (e.g., PA). This relationship between Afrocentric attitudes and acculturative stress is not explicitly discussed in the expanded nigrescence theory; however, it seems likely that a person who is Afrocentric in orientation would be more immersed in Black culture with a singular focus on the Black community and thus may experience heightened stress due to necessary interactions with majority culture as a student on a predominately White university campus. In addition, one might assume that a person who has strong anti-White feelings (as described by Cross & Vandiver, 2001) experiences more acculturative stress than someone with less anti-White feelings, when interacting with White people, institutions, and systems. Second, the more a person endorsed assimilated attitudes, the less likely they were to experience acculturative stress which is likely because issues of race and Black culture were not salient. Lastly, a predominately White racial composition in high school had a positive correlation with PSH attitudes. For these students, being Black had a negative valence and may have likely been experienced as a social barrier for them within their predominately White high school environments. A possible limitation of this study might be the on-line administration of the CRIS. To date, no validity work has been

conducted to assess the structural and construct equivalence of paper and pencil administration to an on-line administration of the CRIS.

Townes (2003). Townes examined whether racial identity attitudes, as measured by the CRIS; cultural mistrust levels, as measured by the Cultural Mistrust Inventory (CMI; Terrell & Terrell, 1981); and help-seeking attitudes, as measured by the Attitudes Toward Seeking Professional Psychological Help (ATSPPH; Fischer & Farina, 1995) could predict preference for counselor race on the Client Preference Scale (CPS; Townes, Cunningham, & Petrosko, 2003). The sample consisted of 204 participants (94 males and 110 females) of African American descent from a large urban-southern city. Some of the participants (*n* = 128) were enrolled as college students at a predominantly White university and the remainder of the participants (*n* = 76) were recruited from two community churches, an inner city community center, and a local barber shop facility frequented by African American males. The mean age of the participants was 26.85 years (*SD* = 11.73), ranging from age 18 to 77 years.

Correlations were used to examine the relationship between counselor race preference and level of cultural mistrust, attitude toward seeking professional psychological help, and racial identity attitudes. A statistically significant positive correlation was found between scores on the CPS and the scores on the IEAW subscale (*r* = .30, *p* < .01), indicating that participants who preferred a Black counselor also had higher anti-White attitudes. A statistically significant positive correlation was found between scores on the CPS and the scores on the IA subscale (*r* = .27, *p* < .01), indicating that those who preferred a Black counselor also reported higher Afrocentric attitudes. A statistically significant negative correlation was found between scores on the CPS and the PA subscale (*r* = -.23, *p* < .01), indicating that those who preferred a Black counselor also had lower assimilation attitudes.

Stepwise regression analysis was used to examine the relationships between preference for counselor race and the predictor variables of cultural mistrust, the six CRIS subscale scores, and attitudes toward seeking professional psychological help. Prior therapy experience was entered into the regression equation on step 1 (R^2 = .04). The remainder of the variables were mathematically assessed by forward inclusion to determine their contribution to the prediction of preference for counselor race. Three variables met the entry requirement to be included in the regression equation (i.e., Cultural Mistrust, PA, and IA). On step 2, cultural mistrust met the entry requirement and accounted for a statistically significant amount of the variability in predicting preference for a Black counselor (R^2 = .14; ΔR^2 = .10). On step 3, PA was the next best predictor (behind Cultural Mistrust) to enter the equation and accounted for a statistically significant amount of the variability in predicting preference for a Black counselor (R^2 = .16; ΔR^2 = .02). On step 4, the next best predictor to enter the equation was Internalization Afrocentricity, and accounted for a significant increase in the variability to the prediction of a Black counselor (R^2 = .19; ΔR^2 = .03). Variables that did not predict a preference for counselor race were PM, PSH, IEAW, and IMCI. The results of the stepwise regression analysis indicated that level of Afrocentric racial identity attitudes and Assimilation racial identity attitudes predicted preference for counselor race. Participants with lower scores on the PA subscale and higher scores on the IA subscale showed a greater preference for a Black counselor.

In summation, statistically significant relationships were found between CRIS subscale scores and preferences for counselor's race, providing further support for the expanded nigrescence theory and the concurrent validity of the CRIS. The results of this study show five statistically significant relationships between CRIS subscale scores and preference for counselor's race; all of these relationships are consistent with the description of an individual's

reference group orientation as described in the expanded nigrescence theory (Cross & Vandiver, 2001). However, these findings should be considered with caution due to statistical shortcomings in the study. First, using stepwise regression is problematic because it is mathematically driven instead of being theoretically driven (Singer, 1988). Second, the largest effect size noted in the stepwise regression was associated with cultural mistrust at step 2 ($R^2 = .14$; $\Delta R^2 = .10$); the racial identity effect size at steps 3 and 4 ($R^2 = .16$ and $.19$ respectively; $\Delta R^2 = .02$ and $.03$ respectively) were small if not negligible. Third, CRIS subscales were examined in individual steps as opposed to putting all of the subscales in a block at the same time.

Another limitation of this study included the lack of equivalence in sample size across demographics of the study participants. More specifically, the majority of the participant sample (62.7%) consisted of college students; however, the remainder of the participant sample (37.3%) was collected across three different settings (i.e., local barbershop, community churches, and community center), without sample equivalence established.

Wright (2003). Wright examined the Rape Myth Acceptance Scale scores (RMAS; Burt, 1980) with a sample of 181 African American women. Sociocultural variables, such as Black racial identity, attitudes toward women's gender roles, religiosity, rape experience, and knowledge of rape survivors were also examined to determine their possible influence on Black women's attitudes about rape. Measures utilized in this study were the RMAS; the Attitudes Toward Women Scale (25-item form; ATWS; Spence, Helmreich, & Stapp, 1973); the Sexual Experiences Survey (SES; Koss & Oros, 1982); the Personal Religiosity Inventory (PRI; Lipsmeyer, 1984); and the CRIS. Only the findings that included the CRIS are reported here.

A positive correlation was found between the RMAS subscale Blaming and the CRIS subscale PM ($r = .32$, $p < .01$), meaning that participants who were likely to negatively

stereotype other African Americans were as likely to accept myths about rape victims. Standard multiple regression analyses were conducted on the RMAS subscales, Credible and Blaming, with the six CRIS subscales as predictors. CRIS subscales in relation to the Blaming subscale were statistically significant (adjusted R^2 = .18). An examination of the individual CRIS scores revealed that PM, PA, and IEAW were statistically significant. The percent of variance in Blaming that was explained by each of the CRIS subscales was less than 10%. African American women who scored higher on PM, IEAW, and PA tended to score higher on the Blaming subscale of RMAS. African American women who were likely to negatively stereotype other African Americans, who reported an intense hatred of Whites and White culture, or who identified with the broader American culture were also likely to accept rape myths. CRIS subscales in relation to the Credible subscale were not statistically significant (adjusted R^2 = .03).

In summation, statistically significant relationships were found between the RMAS subscale Blaming and racial identity as measured by the CRIS subscales PM, IEAW, and PA. Findings of this study provide additional support for the concurrent validity of the CRIS PM subscale in that it measures negative stereotyping of Blacks and the RMAS, which taps negative stereotypes of rape victims. In addition, discriminant validity of the CRIS was also supported, in that the other CRIS subscales (i.e., PSH, IEAW, IA, or IMCI) were not related to RMAS. Both sets of findings support the expanded nigrescence theory. One limitation to this study is the limited psychometric information reported on the RMAS. It is difficult to interpret the findings when the RMAS scores have yet to be established as being psychometrically strong.

Anglin (2003). Anglin examined the interrelationships among racial socialization, racial identity, and African self-consciousness, and their predictive influence on college adjustment for Black college students. Psychological defenses were also examined as an indicator of

psychosocial functioning. The sample consisted of 145 Black college students from two New York City colleges. Measures used in this study were the CRIS (Vandiver et al., 2000); the Teenager Experience of Racial Socialization (TERS; Stevenson, Cameron, Herrero-Taylor, & Davis, 2002), the African Self-Consciousness Scale (ASCS; Baldwin & Bell, 1985); the Defense Style Questionnaire (DSQ-40; Andrews, Singh, & Bond, 1993); and the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1984).

Bivariate correlation and a multiple regression equation analyses were conducted. There was a significant positive correlation found between scores on the TERS and the IMCI ($r = .16$, $p = .03$) and the IA subscales scores ($r = .34$, $p = .01$); thus, individuals who were socialized about race earlier in life tended to have internalized racial identity attitudes at early adulthood. Scores on the IA subscale positively correlated with the total score on the ASCS ($r = .31$; $p = .01$); thus, individuals with an internalized identity that was Afrocentric in nature were likely to have a high level of African self-consciousness. Scores on the ASCS significantly negatively correlated with PA ($r = -.37$, $p = .01$), and PM scores ($r = -.27$, $p = .01$); thus, individuals with assimilated or miseducated racial identity attitudes were likely to have low levels of African self-consciousness. Scores on the IEAW subscale positively correlated with scores on the Immature scale of the DSQ-40 ($r = .22$, $p = .01$), suggesting that individuals who racially defined themselves with strong emphasis on negative emotions tended to utilize immature psychological defenses. A significant positive correlation was found between the total score on the SACQ and IMCI subscale scores ($r = .17$, $p = .02$). IMCI subscale scores also significantly positively correlated with academic college adjustment ($r = .15$, $p = .04$), social college adjustment ($r = .18$, $p = .02$), and institutional attachment ($r = .23$, $p = .01$). Findings that were not hypothesized included, a significant negative correlation was found between total score on the SACQ and IA scores ($r = -$

.20, p = .01), and with the SACQ subscales measuring social college adjustment (r = -.20, p = .01) and institutional attachment (r = -.21, p = .01). Thus, it appears that having a more inclusive racial identity (i.e., Multiculturalist Inclusive) may make it easier to adjust to college in predominately White or racially mixed settings. On the contrary, but for the same reason, having a more focused racial identity (i.e., Afrocentric) may make it more difficult to adjust to college in a predominately White or racially mixed school.

The six CRIS subscales, the TERS, and the ASCS were entered as predictors in a multiple regression equation. The total score on the SACQ was entered as the dependent variable. The overall model was statistically significant and the adjusted R^2 for the overall model was .16. PM and IA were statistically significant negative predictors of college adjustment. The results of the multiple regression suggest that together racial variables (racial identity, racial socialization, and African self-consciousness) are predictive of overall college adjustment in Black college students; however, not all racial aspects significantly contributed to the model. Specifically, low levels of miseducation and Afrocentric racial identity attitudes significantly predicted better college adjustment for Black college students.

Anglin (2003) concluded that students with less developed and more negative racial belief systems about the self, who believe negative stereotypes about Black people, may have some difficulty in adjusting to college, and may use immature psychological defenses to cope. Additionally, students with an internalized Afrocentric identity, which is proposed to be a more developed sense of self, may also have some difficulty adjusting to college at predominately White or multiethnic universities. By comparison, students with an internalized multicultural identity may have an easier time adjusting to college at predominately White or multiethnic universities. The results from the multiple regression analyses in this study provide some support

for the expanded nigrescence model and the utility of CRIS scores in predicting Black students'

adjustment to college, as measured by the SACQ. Limitations to this study involve sample size

and the small effect sizes reported for several of the findings. A larger sample size may have

increased power, improved the chances of finding significant results, and would have allowed for

the examination of more complex relationships between the independent and dependent variables

(i.e., canonical analysis or structural equation modeling). Another limitation is the reporting of

numerous "significant" relationships with only two of the findings having an effect size equal to

or greater than 9%. Thus, conclusions drawn must be accepted with caution and considered

preliminary.

Wester, Vogel, Wei, and McLain (2006). Wester et al. (2006) examined which aspects of

racial identity mediated the relationship between male gender role conflict and psychological

distress with a sample of 130 African American/Black male college students. Racial identity was

measured by the CRIS (Vandiver et al., 2000), male gender role conflict was measured by the

Gender Role Conflict Scale (GRCS; O'Neil, Helms, Gable, David, & Wrightsman, 1986), and

psychological distress was measured by the Brief Symptom Inventory (BSI; Derogatis, 1993).

All of the CRIS subscales were used separately as mediators.

A test of the measurement and structural models resulted in a relatively good fit

(comparative fit index = .95, standardized root mean square residual = .06). A comparison of the

fully (i.e., the structural model without a direct path) and the partially (i.e., the structural model

with a direct path) mediated models indicated that the fully mediated model provided a

reasonably good fit to the data (comparative fit index = .95 vs. .95, standardized root mean

square residual = .09 vs. .06, respectively). The significant difference between the two models

for direct path was from gender role conflict to psychological distress found in the partially

mediated model. Only the indirect effect from gender role conflict to Self-Hatred to psychological distress was statistically significant. Thirty percent of the variance in psychological distress was explained by gender role conflict through PSH.

The fact that self-hatred accounted for the mediation effect seems consistent with expanded nigrescence theory in that the only connection between RGO and PI (e.g., psychological distress) is at PSH. A limitation of this study was the small sample size ($N = 130$). Although, the study had a multivariate design, Black identity was treated as a unidimensional construct as the CRIS scale was pulled apart and subscales were treated as separate indicators.

Nigrescence and Cluster Analyses

To date, three studies have used cluster analyses to examine Black racial identity based on the nigrescence models. Carter (1996) and Neville and Lily (2000) examined clusters based on the original nigrescence theory (Cross, 1971) as measured by the RIAS (Parham & Helms, 1981). Worrell et al. (2006) is the only study to examine clusters based on the expanded nigrescence theory (Cross & Vandiver, 2001), as measured by the CRIS (Vandiver et al., 2000).

Original nigrescence model. Carter (1996) used a sample of 557 African Americans, between the ages of 16 to 66, and accepted a three-cluster solution after examining 2-, 3-, 4-, and 5-cluster solutions. The clusters were named Pro-White (high scores on Pre-encounter and Immersion-Emersion), Racial Confusion (high scores on all subscales), and Racial Pride (high score on Internalization). Neville and Lily (2000) explored the relationship between racial identity clusters and psychological distress in a sample of 182 African American undergraduates from two predominately White institutions. They accepted a 5-factor solution, after examining a 3-, 4-, 5-, and 6-cluster solutions: (a) Engaged Internalization (high Internalization and Encounter scores), (b) Undifferentiated Racial Identity (elevation on all four subscales), (c)

Committed Internalization (moderate-to-high score on Internalization), (d) the Dormant Racial

Identity (the highest Internalization mean score), and (e) Dissonance Internalization (a high

Internalization score and elevated Encounter score).

 Expanded nigrescence model. Worrell et al. (2006) used cluster analysis to identify stable

clusters of Black racial identity based on the expanded nigrescence model (Cross & Vandiver,

2001), using three different samples across two studies. In study 1, the sample consisted of 333

African American undergraduates from a predominately White institution (PWI). A 6-factor

solution was accepted after examining 3-, 4-, 5-, and 6-cluster solutions. Clusters were

interpreted and named on the basis of the dispersion of scores around the *T*-score mean and in

keeping with the expanded nigrescence model (Cross & Vandiver, 2001; Vandiver & Worrell,

2001). Based on the specific elevation of CRIS scores below and above the *T* score of 50, six

clusters were named: (a) the Afrocentric cluster had primary elevations on IEAW and IA

subscales; (b) the Multiculturalist cluster had a primary elevation on the IMCI subscale; (c) the

Assimilated cluster had dual elevations on PM and PSH subscales; (d) the Immersion cluster also

had dual elevations on IEAW and IA; (e) the Low Race Salience cluster had no elevations on

any subscales; and (f) the Miseducated Variant cluster was characterized by higher mean scores

on the PM, PSH, and PA subscales. The six interpretable clusters found in study 1 coincided

with the expanded nigrescence model (Cross & Vandiver, 2001; Vandiver et al., 2002; Vandiver

& Worrell, 2001).

 Worrell et al.'s (2006) goal for Study 2 was to identify clusters in independent samples

and to see if these clusters replicated the clusters found in Study 1. Study 2 used two samples of

students from PWIs (*n* = 314) and historically Black colleges and universities (HBCUs; *n* = 306),

respectively. The PWI participants grouped into 5 clusters, as did the HBCU participants. Four

of the six clusters reported in Study 1 – Low Race Salience, Assimilated, Miseducated Variant, and Immersion - replicated in both samples, and one (Multiculturalist) replicated only in the PWI sample. Using the clusters from Study 1 as the basis for comparison, four to five of the six clusters replicated in either or both samples; however, Afrocentric did not replicate in either one, and Multiculturalist only replicated in the PWI sample. In addition, a seventh cluster that had not appeared in Study 1, called Identity in Transition (characterized by elevated scores on the PA, PM, IA, and IMCI subscales) surfaced only in the HBCU sample. Tentative conclusions can be drawn from the results of Study 2. First, there appears to be generalizable racial identity clusters in the Black population. Second, some of these clusters may be found in PWI and HBCU samples. Third, some clusters may be more common in the population than others. Finally, multicultural attitudes may more likely to be found in institutions where African Americans are in the minority. Table 1 provides a summary of the *T* scores for each cluster identified by Worrell et al. (2006), and Figure 1 provides a visual representation of the clusters based on *T* scores.

Comparisons between Worrell et al.'s (2006) findings and the previously reported cluster solutions (Carter, 1996; Neville & Lily, 2000) are difficult because of theoretical and measurement differences. Carter (1996) and Neville and Lily (2000) used the RIAS, which is based on the original nigrescence model (Cross, 1971). Worrell et al. (2006) used the CRIS, which is based on the expanded nigrescence model (Cross & Vandiver, 2001). Also, the cluster findings used different measurement standards. Neville and Lily reported using the scale midpoint to aid in interpreting means of racial identity clusters; however, the subscale scores were not standardized, making it difficult to interpret the clusters. Carter converted the racial identity scores to percentile ranks for interpretation, but the scores were not standardized prior to

Table 1

Summary of CRIS Clusters Based on T Scores Reported in Worrell et al. (2006)

	PA	PM	PSH	IEAW	IA	IMCI
Afrocentric [1]	At 50	Below 50	Below 50	Above 50	Above 50	Above 50
Multiculturalist [1,2]	Below 50	Below 50	Below 50	Below 50	Below 50	Above 50
Assimilated [1,2,3]	Above 50	Above 50	Above 50	Below 50	Below 50	Above 50
Immersion [1,2,3]	Below 50	At 50	Above 50	Above 50	Above 50	Below 50
Low Race Salience [1,2,3]	At 50	Below 50	Below 50	Below 50	Below 50	Below 50
Miseducated Variant [1,2,3]	Above 50	Above 50	Above 50	Above 50	Above 50	Below 50
Identity in Transition [3]	Above 50	Above 50	Below 50	Below 50	Above 50	Above 50

Note. The subscale means in this table are based on the *T*-score mean of 50. CRIS subscales include PA = Pre-Encounter Assimilation; PM = Pre-Encounter Miseducation; PSH = Pre-Encounter Self-Hatred; IEAW = Immersion-Emersion Anti-White; IA = Internalization Afrocentricity; IMCI = Internalization Multiculturalist Inclusive.
[1] Study 1 - Predominately White Institution (*N* = 333).
[2] Study 2 - Predominately White Institution (*N* = 314).
[3] Study 2 - Historically Black University (*N* = 306).

Figure 1

Graphical Depiction of Seven Cluster Solution Reported in Worrell et al. (2006)[1]
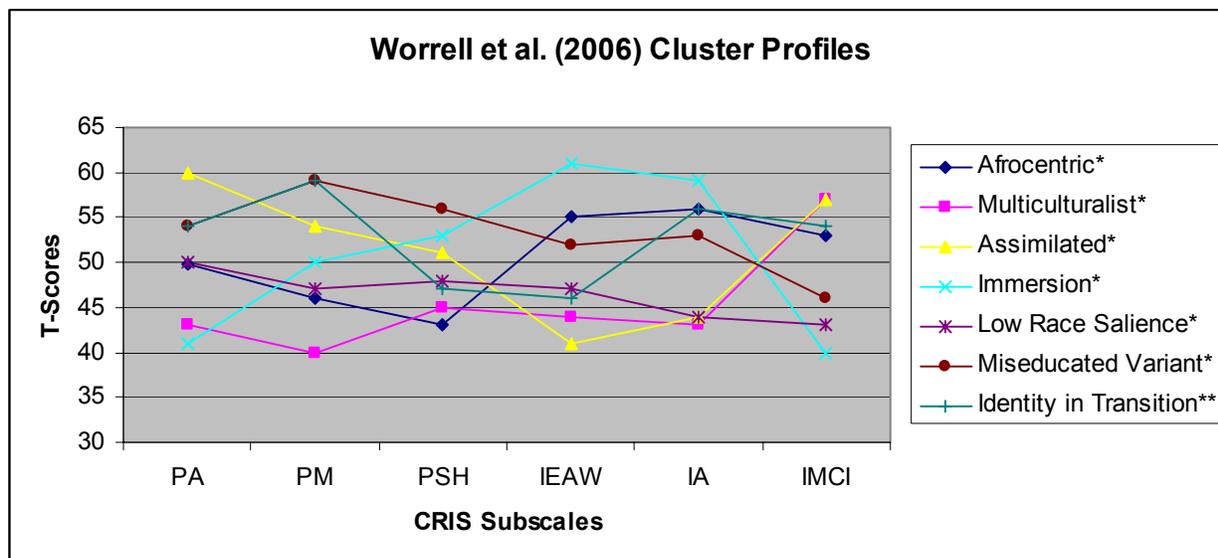
Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales include PA = Pre-Encounter Assimilation; PM = Pre-Encounter Miseducation; PSH =Pre-Encounter Self-Hatred; IEAW = Immersion-Emersion Anti-White; IA = Internalization Afrocentricity; IMCI = Internalization Multiculturalist Inclusive.
* Clusters plotted using results from Study 1 (Predominately White Institution).
** Cluster plotted using results from Study 2 (Historically Black University).
[1] Permission granted by publishers to use this information (see Appendix A).
[2] The line graph is used as a visual aid to compare the similarities and differences between the cluster solutions. It does not accurately portray the actual cluster pattern, as each point represents a mean score of cases for each variable. Thus, the distance between the points does not exist and has no interpretive value.

conducting the cluster analyses. Although Carter, and Neville and Lily used the RIAS, different clusters and different numbers of clusters were found, which raise questions about the generalizability of the racial identity clusters. Also, two of the clusters in the Neville and Lily study consisted of less than 15 individuals (less than 9% of the sample), raising further questions about the generalizability of the results. However, there are some similarities between the three studies. Carter's Racial Pride cluster appears to be similar to Worrell et al.'s Afrocentric cluster found in Study 1 and the Multiculturalist clusters found in both PWI samples. Similarly, Carter's Pro-White cluster parallels the Assimilated clusters reported by Worrell et al. In addition, Neville and Lily's Engaged Internalization cluster and the Dissonance Internalization clusters correspond to Worrell et al.'s Assimilated clusters in the PWI samples. Neville and Lily's Undifferentiated cluster seemed to be similar to the Low Race Salience cluster found in all three samples examined by Worrell et al. (2006).

Summary

Empirical research on Black racial identity has advanced beyond simply understanding racial identity attitudes to investigating the impact of these attitudes on many aspects of a Black individual's daily functioning. Based on the literature review of the predictive usefulness of CRIS scores, several themes seem to best describe the current body of research. First, all of the studies reviewed using the CRIS yielded some results that were theoretically consistent with the expanded nigrescence theory (Cross & Vandiver, 2001; Worrell et al., 2001); although, some studies misinterpreted the theoretical underpinnings resulting in inaccurate conclusions. Second, the predictive utility of the scores from CRIS subscales was supported in all of the studies examining relationships between Black racial identity and such sociocultural variables as college adjustment (Anglin, 2003), acculturation (Helm, 2001), acculturative stress (Redden, 2003),

preference for counselor race (Townes, 2003), rape myth acceptance (Wright, 2003), and gender role conflict (Wester et al., 2006).

Despite such strong support of the predictive validity of the CRIS, a major shortcoming of most of the research reviewed was the use of univariate statistics (treating CRIS subscales as separate units – one independent or dependent variable at a time) to examine the relationship between the CRIS subscale scores and other spheres of functioning (i.e., acculturative stress, college adjustment). Black identity is complex and multifaceted, thus, univariate approaches are limiting because only one facet of Black identity can be examined. However, the cluster analyses work of Carter (1996), Neville and Lily (2000), and Worrell et al. (2006) has the potential to advance the field of Black identity research by offering a more complete picture of the Black individual.

Worrell et al. (2006) found, using cluster analyses, different racial identity clusters. These identity clusters may be related to different levels of psychological well being and thus, these clusters may provide guidance for psychologists in working with clients. Worrell et al.'s (2006) research did not test the predictive utility of these clusters in relation to other sociocultural experiences (i.e., acculturation, self-esteem, etc.). Replicating Worrell et al.'s findings would provide strong support for the stability of CRIS clusters and further continued research in interpreting and using the CRIS in the lives of Black individuals. Further examination of the clusters and their relationship to psychological variables could enhance the application and utility of the CRIS in evaluating racial identity in clinical settings, achievement, academic success, and retention.

The Present Study

The developers of the CRIS have recommended a sequence of research to support the validity of the CRIS and thereby strengthen its viability as a tool to measure and interpret Black racial identity, which could have implications for clinical and non-clinical work with Black individuals in America (e.g., Cross & Vandiver, 2001; Worrell, Vandiver, & Cross, 2003). The focus of the research is based on two of the ten recommendations made by CRIS developers: (1) the continuation of validation research on the CRIS, and (2) predictive utility research (Cross & Vandiver, 2001). First, continued validation research of the nigrescence model (Cross & Vandiver, 2001; Worrell et al., 2003) for this study involves building on the work of Worrell et al. (2006) toward establishing stability of CRIS clusters. A cluster analysis of CRIS scores was used to determine whether the identity clusters identified by Worrell et al. (2006) emerged in a new sample of Black college students. Worrell et al.'s study is the only one to date that has examined clusters of the CRIS scores. The purpose of this study was to test whether the CRIS scores are robust and reflective of Black individuals' reality enough for the clusters to be replicated in another independent sample. There is a need to use more complex analyses (i.e., cluster analyses) on the CRIS scores to match the conceptualization of the expanded nigrescence model as multivariate constructs.

Second, predictive validity studies on the CRIS scores need to be conducted to extend its use beyond academic and research purposes. To date, most of the predictive validity research on the CRIS has focused on univariate analyses between CRIS scores and other sociocultural constructs (e.g., self-esteem, Big Five constructs). Thus, the other purpose of this study was to extend the body of literature on the CRIS and the expanded nigrescence theory by examining

whether racial identity clusters have predictive utility in relation to level of acculturation and social distance preferred to other racial/ethnic groups.

Research Questions and Hypotheses

The following research questions were examined in this study:

1. Were the CRIS scores at the subscale level correlated in the expected direction as noted in the expanded nigrescence model with the scores tapping acculturation and social distance?

2. Were the clusters found by Worrell et al. (2006) replicated in the current sample of Black college students?

3. If the expected CRIS clusters emerged, did the clusters differ on acculturation level and the social distance preferred from other racial/ethnic and minority groups?

Five hypotheses are delineated and were used to test the research questions, with the expanded nigrescence theory serving as the underlying guideline. Interpretations of findings were based on statistical significance level set at .01 and a minimum effect size of 9 to 10%.

Hypothesis 1: Specific CRIS subscale scores were expected to have a statistically significant correlational relationship with the African American Acculturation Scale - Revised (AAAS-R; Klonoff & Landrine, 2000) total score: (a) a negative correlation between Pre-Encounter Assimilation and AAAS-R total score, with higher AAAS-R indicative of high endorsement of traditional Black cultural values; (b) a positive correlation between Immersion-Emersion Anti-White and AAAS-R total score; and (c) a positive correlation between Internalization Afrocentric and AAAS-R total score. Significant relationships between the CRIS subscales, Pre-Encounter Miseducation, Pre-Encounter Self-Hatred, and Internalization

Multiculturalist Inclusive, and the AAAS-R total score were not hypothesized, but were explored.

Hypothesis 2: Specific CRIS subscale scores were expected to have statistically significant correlations with specific indicators on the modified version of Bogardus Social Distance Scale – Revised (BSDS-R; Bogardus, 1933): (a) Pre-Encounter Assimilation would positively correlate with *White* social distance scores (positive correlations are indicative of less social distance). Immersion-Emersion Anti-White and Internalization Afrocentric would positively correlate with *Other Blacks* social distance scores. Internalization Multicultural Inclusive would positively correlate with all the social distance indicators (i.e., *Whites, Other Blacks, Latinos, Asians, Jews, and Gays/Lesbians*); (b) Immersion-Emersion Anti-White subscale scores would have a negative correlation with *White* social distance scores; and (c) Pre-Encounter Miseducation and Pre-Encounter Self-Hatred would have a negative relationship with *Other Blacks* social distance scores.

Hypothesis 3: Cluster analysis was expected to yield racial identity clusters similar to the previous clusters found by Worrell et al. (2006) for Black students attending a predominately White university. Four to seven clusters were expected to emerge from the cluster analysis (e.g., Afrocentric, Multiculturalist, Assimilated, Immersion, Low Race Salience, Miseducated Variant, and Identity in Transition.)

Hypothesis 4: Specific racial identity clusters that emerged from the cluster analyses were expected to have statistically significant relationships with the level of acculturation expressed: (a) Individuals with Multiculturalist, Afrocentric or Immersion clusters would have higher total scores on the AAAS-R (high endorsement of traditional Black cultural values) than the other CRIS clusters; (b) Individuals with Assimilated or Low Race Salience clusters would have lower

AAAS-R total scores (less endorsement of traditional Black cultural values) than the other CRIS

clusters; (c) other CRIS clusters were expected to fall in the middle range on the AAAS-R

scores.

Hypothesis 5: Specific racial identity clusters that emerged from the cluster analyses were

expected to have statistically significant relationships with the linear composite of social distance

indicators for the racial/ethnic or minority groups rated: (a) Individuals with Afrocentric,

Immersion, and Assimilated cluster membership would have a more limited range of social

distance than other CRIS clusters, with a preference of only one group or an exclusion of other

racial/minority groups and (b) Individuals with Multiculturalist cluster membership would have a

universal social closeness to all racial/minority groups more so than other CRIS clusters.

Significant relationships between other CRIS clusters and the linear composite of social distance

indicators were not hypothesized, but were explored.

CHAPTER 3

Method

Overview

A secondary data set was used in this study; therefore, the method section includes only

the pertinent details that resulted in recruitment of participants and data collection. The data were

collected between spring 2005 and spring 2006 at a predominantly White university in the mid-

Atlantic region of the United States. Permission was granted by the primary investigator for this

data to be used in this research project.

Participants

Participants initially consisted of 373 college students who self-identified as being

African American or Black, but were reduced to 360 due to missing data or extreme outliers.

Removal of these data points is detailed at the beginning of Chapter 4. Although recruitment

announcements and study criteria indicated that participants had to identify as being African

American or Black, participants racially identified on the self-reported demographic

questionnaire as follows: African American (24.8%), Black (43.9%), African (5.6%), West

Indian Caribbean (7.8%), Hispanic Black (1.9%), Mixed (7.2%), Other (.8%), and No Answer

(8%). Participants' ranged in age from 18 to 38 years ($M = 20.69$, $SD = 2.78$, $N = 357$, 3

participants did not answer). Approximately seventy percent of the sample was female ($n = 252$);

29.4% of the sample was male ($n = 106$); and two participants did not answer this question.

Majority of the sample was comprised of undergraduate students (92.8%) with only 7.2% being

graduate students. GPAs ranged from 1.00 to 4.00 ($M = 3.01$; $SD = .56$). Participants were

United States citizens ($n = 321$) or permanent residents ($n = 36$; see Appendix B for criteria on

establishing permanent residency); three participants did not answer this question. Family

income was reported to be below $20,000 annually for 6.6% of participants, between $20,001 and $40,000 for 24.2%, between $40,001 and $60,000 for 17.8%, over $60,000 for 34.7% of participants, and 16.7% of participants did not answer this question.

Procedures

    Recruitment procedures. Approval to conduct research with human participants was granted by the University's Office of Research Protections. Participants were recruited by using numerous solicitation methods, including distributions of fliers and announcements at student organization meetings, on student electronic mailing lists, and distributions through the university's multicultural coordinators (see Appendix C for solicitation fliers and announcements). All solicitation methods included the purpose of the study, inclusion criteria, contact information, and incentives for participating.

    Data collection procedures. At the beginning of data collection, participants were informed about the study and voluntarily signed a consent form (see Appendix D). The researchers (one African American female faculty member, one Latina graduate student, and two White female graduate students) verbally highlighted from the informed consent form the purpose of the study, approximate length of time necessary to complete measures, reason for informed consent, and the number of measures to be completed before receiving monetary compensation for participation. Questions or concerns about the informed consent or participation in the study were addressed prior to distributing the research packet.

    Once questions and concerns were addressed, participants were given a packet of eight self-administered paper and pencil measures, which took approximately 25-30 minutes to complete. To minimize order effect, the measures were randomly placed in the packets. Participants were informed that some of the items could be perceived as controversial; candid

responses and honest opinions were requested. Researchers were careful not to use the words "racial identity" throughout the data collection process. In addition, participants were asked not to talk to other participants during or after testing to preserve the integrity of the study's results. Participants who completed all of the measures were paid five dollars.

Measures

Data for the study were collected as part of a larger project. Eight measures were used in the larger project; data from four of these measures were used in this study: demographic questionnaire, Cross Racial Identity Scale (CRIS; Vandiver et al., 2000), African American Acculturation Scale - Revised (AAAS-R; Klonoff & Landrine, 2000), and a modified version of the Bogardus Social Distance Scale - Revised (BSDS-R; Bogardus, 1933).

Demographic questionnaire. The demographic questionnaire (Appendix E) was composed of an array of background items. The items permitted for use in this study included sex, age, ethnic background and racial identification, academic status (undergraduate or graduate, and grade point average), socioeconomic status, and citizenship.

CRIS. Participants' Black identity or reference group orientation was measured by the CRIS (Vandiver et al., 2000). The CRIS (Appendix F) is a 40-item instrument developed to measure six nigrescence attitudes described in the expanded nigrescence model (Cross & Vandiver, 2001; Vandiver et al., 2002; Worrell, Cross, & Vandiver, 2001). The six subscales are Pre-Encounter Assimilation (PA), Pre-Encounter Miseducation (PM), Pre-Encounter Self-Hatred (PSH), Immersion-Emersion Anti-White (IEAW), Internalization Afrocentricity (IA), and Internalization Multiculturalist Inclusive (IMCI). The Pre-Encounter Assimilation (PA) subscale describes a pro-American identity. The Pre-Encounter Miseducation (PM) subscale depicts negative stereotypical views about Black people. The Pre-Encounter Self-Hatred (PSH) subscale

assesses an anti-Black, self-hating identity. The Immersion-Emersion Anti-White (IEAW) subscale measures a person's rejection of White people and White culture. The Internalization Afrocentricity (IA) subscale is characterized by Black empowerment. The Internalization Multiculturalist Inclusive (IMCI) subscale describes Black self-acceptance and the acceptance of other cultural groups. Sample items listed by the respective subscale are located in Appendix F. Each of the six attitudes on the CRIS is measured by five items, which are randomly distributed among 40 items (30 CRIS items and 10 filler items). Responses to CRIS items are made on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Subscale scores are obtained by summing scores of the five items that make up each subscale and dividing by five, resulting in average total scores ranging from one to seven, which parallel the rating anchors and are easily interpretable.

A growing body of reliability and validity information for the CRIS scores has been reported (Cross & Vandiver, 2001; Vandiver et al., 2002; Vandiver & Worrell, 2001; Worrell Vandiver, & Cross, 2003). Subscale reliability estimates for the scores have ranged from .78 (PM) to .90 (IEAW; *Mdn* = .82; Vandiver et al., 2002; Worrell, Vandiver, Cross, & Fhagen-Smith, 2004). In addition, the subscale intercorrelations have ranged from |.04| (IMCI) to |.42| (IA; *r* = |.16|; Vandiver et al., 2001, 2002; Worrell et al., 2004). The six-factor structure has been supported in four independent samples using exploratory (EFA) and confirmatory factor analyses (CFA), with structure coefficients for items on the factors ranging from |0.50| to |0.90| (Vandiver et al., 2001, 2002; Worrell et al., 2004). From the CFA the comparative fit index was reported to be .94 and the root-mean-square error of approximation (RMSEA – a measure of misfit) indicated a close fit (90% confidence interval = .04 and .06; Vandiver et al., 2002). Convergent validity analyses with the Multidimensional Inventory of Black Identity (MIBI; Sellers et al.,

1997) provided preliminary support for the construct validity of the CRIS scores; correlations between subscale scores on both instruments were in the appropriate directions (|.30| r |.59|, *Mdn* = .34; Helm, 2001; Vandiver et al., 2002). CRIS scores had low correlations with a social desirability measure and are distinct from one measure of the Big Five personality traits (Vandiver et al., 2002).

AAAS-R. Participants' acculturation level was measured by the AAAS-R (Klonoff & Landrine, 2000; see Appendix G), a 47-item scale that measures eight empirically derived dimensions of African American culture (Landrine & Klonoff, 1994, 1996). Participants were instructed to answer each question on a 7-point Likert-type scale, ranging from 1 (*I totally disagree, not true at all*) to 7 (*I strongly agree, absolutely true*). Scoring the AAAS-R involves adding the participant's ratings on all items to obtain the total AAAS-R score. High scores on the scale (agreement with items) reflect an embracement of a traditional Black cultural orientation, and low scores (disagreement with items) reflect an acculturated orientation with low acceptance of traditional Black culture.

The original AAAS (Landrine & Klonoff, 1994) consisted of 74 items. Some of the items considered to be objectionable by participants in past studies were dropped (26 items dropped), and a new version of the scale was created by factor analyzing the remaining 48 items, so that subscales of the revised AAAS would reflect empirically derived factors rather than theoretically based subscales (Klonoff & Landrine, 2000). The 48 items were examined using a principal components analysis (PCA) with an orthogonal rotation. The PCA resulted in the reduction of the AAAS-R to 47 items making up eight subscales. Religious Beliefs and Practices (RBP; 10 items) subscale assesses agreement with Black American religious beliefs and practices. Preferences for Things African American (PTAA, 9 items) subscale measures a preference for

Black music, magazines, and people. Interracial Attitudes (IA, 7 items) subscale depicts

agreement with traditional attitudes about Whites and about racism. Family Practices (FP, 4

items) subscale assesses participation in traditionally Black family practices and agreement with

traditionally Black family values. Health Beliefs and Practices (HBP, 5 items) subscale is the

fifth factor which assesses traditional health beliefs and practices of African American's.

Cultural Superstitions (CS, 4 items) subscale depicts cultural superstitions. Racial Segregation

(RS, 4 items) subscale measures segregation alone. And the last subscale is Family Values (FV,

4 items), which assesses Black family practices and values. The final step in improving the

AAAS was adding an explanation for the scale; some participants had expressed concern about

the absence of an explanation (Klonoff & Landrine, 2000).

Reliability estimates for the subscale scores have ranged from .67 (Family Values) to .89

(Religious Beliefs & Practice; Preferences for Things African American), and the reliability

estimates for the entire scale scores have been reported to be .93 (total score) and .79 (split-half;

Klonoff & Landrine, 2000). Evidence for the validity of the AAAS-R was based on a sample of

520 African American adults (Klonoff & Landrine, 2000). Initial evidence for convergent

validity was based on the intercorrelation between the original AAAS and the revised version (r

= .97). In addition, participants in this sample who reported more racial segregation scored

higher on the scale than their less racially segregated cohorts (the AAAS-R measures immersion

in African American culture; therefore, Black people who are racially segregated should score

higher on the scale), thus providing preliminary support for concurrent validity. Additional

evidence in support of the validity of AAAS-R scores was based on a MANOVA in which the

scores of Black individuals were compared to those of other ethnic groups. The MANOVA was

statistically significant; African Americans scored higher (more immersed in African American

culture) than non-African Americans (i.e., Asian, Latino, White, and Native Americans) on all eight AAAS-R subscales (Klonoff & Landrine, 2000).

Modified BSDS-R. A modified version of the BSDS-R (Bogardus, 1933; see Appendix H) was used to measure the social distance or degree of social acceptance that exists between participants and certain social groups. The BSDS was developed and later revised by Bogardus (1925; BSDS-R; 1933). The BSDS-R has been widely used in social research on prejudice, specifically the social distance attitudes among racial and ethnic groups (Jackson & Curtis, 1968). The Bogardus scales have been used to estimate the extent of the trend toward conflict or toward cooperation between groups (Bogardus, 1925, 1933, 1938). The scale, in various iterations, has had the longest period of usage of any special research measure developed by sociologists (Campbell, 1952; Miller, 1991).

In the original BSDS scale participants were given a list of 40 ethnicities/races and 30 religions and were asked to rank the 40 items with respect to the degrees of social distance on seven attributes, starting with, "acceptance to close kinship by marriage" and concluding with "would exclude from my country." The seven questions used in the BSDS were established by a group of 100 judges who identified these seven attributes among 60 as those ordered on a continuum of social distance (Bogardus, 1925). The BSDS-R is a Guttman scale meaning that those participants who agree with a more extreme test item will also agree with all less extreme items that preceded; the scale is assumed to be cumulative (Guttman, 1950). Thus, the Bogardus technique yields a ranking (ordinal scale) of various groups in terms of the social distance at which the participant would prefer to hold them (Siegel & Shepherd, 1959). Saying "no" to the last statement (e.g., "Would you establish a long-term relationship, including marriage?") is the weakest indication of prejudice.

In a series of three studies, the BSDS-R scores were found to have Cronbach's alpha ranging from .89 to .93 (Stewart, Weeks, & Lupfer, 2003). However, Corrigan et al. (2002) reported lower internal reliability estimates (.76) for the BSDS-R scores. Split-half reliability coefficients for the BSDS-R scores were reported to range between .94 to .97 (Hartley, E. L., 1946; Hartley, R. E., 1952; Murphy & Likert, 1938). Convergent validity analyses with the subscales of the Modern Racism Scale (McConahay, 1986) provided preliminary support for the construct validity of the BSDS-R; correlations between scores on both instruments were in the appropriate directions (*r* |.35|, *p* < .007, two tailed; Stewart et al., 2003).

Since the development of the original BSDS, modifications have been made to the scale as a means of adapting it to the needs of current social science research (Bogardus, 1938; Miller, 1991). Certain modifications have been considered acceptable without affecting the integrity of the scale (Miller, 1991), such as revising the list of cultural groups that social distance is measured toward. Other modifications include updating the language used in the original scale to fit current social language (Bogardus, 1947; Miller, 1991). The study used a modified version of the BSDS-R found on-line (http://piercecollege.edu/faculty/gilletp/ExSocialDis.html).

Like the BSDS-R, the modified version is a self-administered paper and pencil measure. Participants were asked to answer seven questions (representing social interaction) in relation to six different social groups for a total of 42 responses. The seven questions represent seven increasingly intimate social situations and are presented in rank order with social distance decreasing. Participants had the choice to answer *"yes"* or *"no"* regarding their social relations with Latino/as, Asians, other Blacks (i.e., Africans or Caribbeans), Whites, Jews, and Gays and Lesbians. In keeping with the original scale, the first question represents the greatest social distance (question 1 - "Would you converse with…"). As the questions proceed social distance is

reduced (question 4 – "Would you have someone from this group as a roommate?; question 7 - "Would you establish long-term relationships (including marriage) with…").

Several scoring methods have been used for the BSDS-R (Miller, 1991). A method that has been found to be as reliable as more complex ones is summing all positive responses to create a cumulative score for each social group; this scoring method was used in this study (Bogardus, 1933; Miller, 1991). "No" responses are equal to zero and "yes" responses equal one. For any one social group, a participant's social distance score could vary from 1.0 (*would converse*) to 7.0 (*would establish a long-term intimate relationship*). The BSDS-R yields a total score for various groups in terms of the social distance at which the participant would prefer to hold them (Miller, 1991). In general, the higher the score, the greater the measure of intimacy reflected by that participant to that particular ethnic/social group.

Analyses

Quantitative methods were used to analyze the data, using SPSS (version 15.0) and SAS (version 9.1) software. Descriptive statistics, including means, standard deviations, correlations, and reliability estimates of the scores, were generated for scores on the major variables used in the study. As no structural validity on the AAAS-R beyond the original study has been published, an EFA of the AAAS-R was conducted to determine whether the current data supported the expected eight-factor solution and therefore the use of the subscales or the total score (if the expected structure was not supported) in subsequent analyses. Three primary statistical analyses were conducted to address the hypotheses. For hypotheses one and two, bivariate correlational analyses were used to examine the concurrent relationship between the CRIS scores and scores on the other measures (i.e., AAAS-R, modified BSDS-R). For hypothesis three, cluster analysis was conducted on the CRIS subscales' scores to assess whether

the racial identity clusters previously established (Worrell et al., 2006) would replicate in this sample of Black college students. Cluster analysis was performed using SAS and the Multistage Euclidean Grouping (MEG; McDermott, 1998), a comprehensive analytic strategy for hierarchical agglomerative cluster analysis. For hypothesis four, a one-way ANOVA was run to examine whether mean acculturation scores would be statistically different as a result of the racial identity clusters that emerged. (EFA of the AAAS-R items, summarized in Chapter 4, did not support the 8-factor structure. Thus, the total scores were used in the analyses.) Tukey HSD post hoc analysis was used as a follow-up to statistically significant results. For hypothesis five, a MANOVA, followed by a descriptive discriminant analysis, was run to examine whether mean social distance scores were statistically different as a result of the racial identity clusters that emerged.

CHAPTER 4

Results

Preliminary Analyses

      Data management. The original data set consisted of 373 participants, but was reduced to 360, due to missing data or extreme outliers. Four participants had missing data (three on the CRIS and one on the modified BSDS-R). Mahalanobis distances tests were used to identify multivariate outliers, resulting in the removal of nine additional cases. Examination of these cases revealed there was no systematic pattern by sex or any other demographic variable for the participants' extreme responses. In addition, the data were examined for assumptions of normality (skewness and kurtosis) and linearity. Scores on the Cross Racial Identity Scale (CRIS; Vandiver et al., 2000) subscales Pre-Encounter Assimilation (PA) and Pre-Encounter Self-Hatred (PSH) were positively skewed and leptokurtic, was approximately normally distributed on Pre-Encounter Miseducation (PM), was positively skewed on Immersion-Emersion Anti-White (IEAW), was negatively skewed and leptokurtic on Internalization Multiculturalist Inclusive (IMCI), and was symmetrical and leptokurtic on Internalization Afrocentricity (IA). These patterns are not uncommon for responses to social attitude measures (Paulhaus, 1991). The African American Acculturation Scale – Revised (AAAS-R; Klonoff & Landrine, 2000) total score was approximately normally distributed. Scores on the modified version of the Bogardus Social Distance Scale (BSDS-R; Bogardus, 1933) subscales *Latinos, Asians, Whites, Jews,* and *Other Blacks* were negatively skewed, and approximately symmetrical and leptokurtic for *Gays/Lesbians.*

      Twice during the analyses, the sample size was smaller than 360. The first change in sample size occurred at the conclusion of cluster analysis in hypothesis three where nine

participants were not assigned cluster status thus, reducing the total sample size to $N = 351$. The second change occurred prior to conducting the ANOVA in hypothesis four, where nine participants were missing data on the AAAS-R, reducing the total sample size for this analysis to $N = 342$. No discernible pattern (by cluster assignment, sex, or any other demographic variable) was found for those cases with missing AAAS-R data. In addition, examination of the full data set ($N = 360$) in comparison to the two reduced data sets ($N = 351$, $N = 342$) revealed that there were no differences in the descriptive demographics of all the data sets in regards to age, sex, racial identification, level of education, grade point average or any other demographic variable.

EFA of the AAAS-R. Since the creation of the AAAS-R (Klonoff & Landrine, 2000) no additional structural validity work has been reported to support the revisions. Thus, an EFA was conducted on the AAAS-R items to determine whether its inclusion in further analyses should use subscales or total scale scores. The AAAS-R scores were factorable: determinant of the correlation matrix = .0000000487 and Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .82 (Kaiser, 1970). A principal-axis factor extraction, with an oblique rotation, was used, as (a) an orthogonal rotation results in a loss of valuable information if the factors are correlated, whereas, an oblique rotation should theoretically render a more accurate solution, (b) principal components extraction can result in inflated factor coefficients because of inclusion of error variance, and (c) a simple structure bias is associated with an orthogonal rotation (Costello & Osborne, 2005; Cudeck, 2000). Factor retention was based on multiple criteria: (a) parallel analysis (Horn, 1965), (b) scree plot (Cattell, 1966), (c) a minimum number of three items on each factor, (d) a minimum factor coefficient of $|.40|$ for each item, and (e) interpretability of the factors (Thompson & Daniel, 1996). Eight factors were identified through parallel analysis and by a visual examination of the scree plot. Each factor was then examined to assure that a

minimum of three items with coefficients of at least |.40| were present; not all factors met this minimum criterion. Factor eight had only one item with a coefficient of at least |.40|. Even when the .40 criterion was relaxed, the 8-factor structure was not tenable, as items either did not have a salient loading on any factor (e.g., PTAA17) or loaded on factors not in keeping with subscale assignment (e.g., RBP10, FV45, HBP33). For this sample of Black college students, a seven factor structure, with all factors meeting the minimum criteria, was identified as the most viable solution instead of the expected eight factors. This seven factor structure was not interpreted as the focus of this study was not on scale development or revision of the AAAS-R. Based on the results of this EFA, and in keeping with the recommendations of the AAAS-R authors (Klonoff & Landrine, 2000), the cumulative AAAS-R total score was used in the statistical analyses in this study as opposed to using the subscales of the AAAS-R scores. Table 2 presents a summary of the EFA findings for the eight factor solution of the AAAS-R, including the structure coefficients, communalities, eigenvalues, percent of variance, and Cronbach's Alpha from the salient items on each factor.

Descriptive statistics. Descriptive statistics, including scale means, standard deviations, bivariate correlations, and reliability estimates of scores, for the CRIS, AAAS-R, and the modified BSDS-R is reported in Table 3. CRIS means ranged from 1.61 (IEAW) to 5.82 (IMCI). In addition, reliability estimates for the scores on the CRIS subscales ranged from .78 (IMCI) to .89 (PA; *Mdn* = .88). Intercorrelations between the CRIS subscales ranged from |.01| to |.32| (*Mdn* = |.13|). The highest correlation was between IEAW and IA, with nonsignificant correlations found between the remainder of the CRIS subscales. AAAS-R total score mean was 4.42 (higher scores reflect increased knowledge of traditional Black culture), with a reliability estimate of .89. BSDS-R means ranged from 2.01 (*Gays/Lesbians)* to 6.90 *(Other Blacks)*, with

Table 2

Pattern Coefficients from Principal-Axis Extraction and Oblimin Rotation of AAAS-R Scores for an 8-Factor Solution (N = 351)

Items – Content Paraphrased	I	II	III	IV	V	VI	VII	VIII	h^2
PTAA12 - I like Black music more than White music.	0.77	-0.09	0.01	0.01	0.04	0.01	0.01	-0.12	0.59
PTAA11 - Most of my music is by Black artists.	0.75	0.01	0.05	0.02	0.05	-0.03	-0.02	-0.11	0.60
PTAA13 - Listen to Black radio stations.	0.67	-0.06	0.04	0.03	-0.05	-0.06	-0.02	0.12	0.45
PTAA18 - Most of my friends are Black.	0.55	0.22	0.25	0.04	0.03	0.09	0.10	-0.04	0.58
PTAA16 - More comfortable around Blacks than Whites.	0.54	0.12	0.04	0.09	0.15	0.27	0.10	-0.01	0.49
PTAA14 - Watch Black shows on TV.	0.39	0.03	0.08	0.05	-0.17	0.07	-0.05	-0.09	0.33
PTAA15 - Person I admire most is African American	0.36	0.04	0.11	-0.01	-0.10	0.12	-0.03	0.02	0.25
PTAA19 - Read Essence or Ebony magazine	0.32	0.05	-0.12	-0.07	-0.21	0.09	-0.20	0.06	0.28
PTAA17 - I always say hello/ acknowledge Black people.	0.18	0.08	-0.15	-0.05	0.02	0.17	0.03	-0.26	0.19
RBP1 – I believe in the Holy Ghost.	-0.03	0.83	-0.03	0.07	-0.03	-0.08	-0.06	0.08	0.70
RBP3 - I believe in heaven and hell.	0.10	0.70	0.01	-0.02	-0.01	-0.08	0.09	-0.01	0.50

(table continues)

Items – Content Paraphrased	I	II	III	IV	V	VI	VII	VIII	h^2
RBP8 - Prayer can cure disease.	-0.07	0.58	0.01	0.08	0.02	-0.01	-0.06	-0.14	0.42
RBP2 - I like gospel music.	0.06	0.50	-0.07	0.07	-0.06	-0.03	-0.34	-0.04	0.53
RBP5 - People ""get the spirit"", speak in tongues.	-0.16	0.41	0.06	0.01	0.03	0.18	-0.32	-0.02	0.38
RS40 - I grew up in a mostly Black neighborhood.	0.06	0.03	0.82	0.01	-0.02	0.05	0.02	0.05	0.72
RS42 - I went to a mostly Black elementary school.	-0.01	-0.09	0.69	-0.02	0.01	0.04	-0.09	-0.08	0.50
RS43 - I currently live in a mostly Black neighborhood.	0.10	0.06	0.61	0.03	-0.04	-0.06	0.06	0.06	0.43
RS41 - I went to a mostly Black high school.	0.03	-0.01	0.60	-0.05	-0.01	-0.01	-0.01	-0.11	0.39
FP29 - Extend family lived with me for a while.	0.01	0.01	0.03	0.70	0.09	-0.07	0.01	0.01	0.47
FP30 - When young, I bathed with siblings.	-0.01	0.02	-0.16	0.68	-0.05	0.11	0.11	0.02	0.46
FP27 - When young, I shared a bed a night with a sibling.	-0.07	0.09	0.08	0.56	-0.10	-0.06	0.08	-0.08	0.42
FP28 - Parents sent me to stay with a relative for weeks.	0.10	0.01	-0.01	0.49	0.04	-0.03	-0.18	-0.03	0.31
CS38 - There's some truth to many old superstitions.	-0.10	-0.06	-0.03	0.05	-0.78	0.01	0.03	-0.13	0.63
CS37 - Palm itches…you'll receive some money.	0.03	0.04	0.13	0.08	-0.68	-0.05	0.04	-0.08	0.57

(table continues)

Items – Content Paraphrased	I	II	III	IV	V	VI	VII	VIII	h^2
CS36 - I avoid splitting a pole.	0.03	-0.02	0.05	0.03	-0.49	-0.01	-0.04	-0.03	0.27
CS39 - I eat Black-eyed peas on New Year's Eve.	0.22	0.04	-0.13	-0.06	-0.36	0.02	-0.22	0.06	0.30
IRA24 - Whites don't understand Blacks.	0.02	0.01	0.01	-0.04	0.13	0.77	0.11	-0.05	0.56
IRA23 - Most White people are racists.	-0.02	0.02	-0.04	-0.05	-0.04	0.70	0.03	-0.11	0.54
IRA22 - Most Whites are afraid of Blacks.	-0.04	-0.09	-0.07	0.04	0.05	0.67	-0.09	-0.03	0.45
IRA20 - I don't trust most White people.	0.11	-0.10	0.05	-0.06	0.05	0.58	-0.08	-0.05	0.40
IRA21 - IQ tests purposely discriminate.	0.06	0.08	-0.01	0.09	-0.15	0.55	0.07	0.15	0.40
IRA25 - Standardized tests are set up against Blacks.	0.05	0.08	0.09	0.01	-0.19	0.50	0.02	0.05	0.39
IRA26 - Members of my family hate/distrust White people.	0.04	-0.03	0.07	0.03	-0.07	0.40	-0.11	0.08	0.23
RBP10 - Used to sing in church	-0.01	0.09	-0.05	0.03	0.05	0.01	-0.63	-0.10	0.46
RBP7 - When young, was member of a Black church.	0.01	0.07	0.14	0.05	-0.03	0.05	-0.59	0.03	0.45
RBP6 - Currently member of a Black church.	0.11	0.27	0.08	-0.02	-0.01	0.04	-0.48	0.03	0.44
RBP9 - What goes around, comes around.	-0.01	0.13	0.04	-0.02	-0.34	0.14	0.22	-0.05	0.21

(table continues)

65

Items – Content Paraphrased	Factors								h^2
	I	II	III	IV	V	VI	VII	VIII	
RBP4 - Church is the heart of Black community.	0.12	0.25	-0.04	0.01	-0.07	0.04	-0.20	-0.19	0.28
FV45 - Old people are wise.	0.05	0.07	-0.04	-0.08	-0.15	-0.04	-0.01	-0.61	0.42
HBP33 - Some old women know how to cure disease.	-0.12	-0.05	-0.02	0.19	-0.16	0.14	-0.04	-0.39	0.32
FV46 - I lend money or other support to family members.	-0.01	-0.05	0.18	0.19	-0.05	-0.01	-0.06	-0.38	0.31
HBP32 - Illnesses are natural types and unnatural types.	0.03	0.02	0.09	0.16	-0.05	-0.07	-0.10	-0.36	0.25
FV44 - Better to move whole family ahead than be alone.	0.06	0.09	0.10	0.01	0.07	0.01	0.08	-0.34	0.16
HBP34 - Some old women know a lot about pregnancy.	-0.01	-0.11	0.07	0.14	-0.12	0.22	-0.13	-0.33	0.32
FV47 - Child should not use first names, instead '"Miss.."	-0.01	0.20	0.01	-0.05	-0.05	0.07	-0.14	-0.20	0.17
HBP35 - You shouldn't take a bath and then go outside.	0.02	0.02	0.24	0.04	-0.27	0.08	-0.06	0.06	0.21
HBP31 - People in my family use Epsom salts.	0.09	-0.04	0.16	0.28	-0.13	0.07	-0.11	0.05	0.23

(table continues)

Items – Content Paraphrased	Factors	I	II	III	IV	V	VI	VII	VIII
Rotation Eigenvalues		4.40	3.59	3.26	2.69	3.46	4.30	2.67	2.56
% of Variance		16.03	5.70	5.06	4.48	2.59	2.41	2.19	1.81
Cronbach's Alpha		0.79	0.81	0.80	0.70	0.57	0.69	0.80	0.52

Note. RBP = Religious Beliefs and Practices; PTAA = Preference for Things African American; IRA = Interracial Attitudes; FP = Family Practices; HBP = Health Beliefs and Practices; CS = Cultural Superstitions; RS = Racial Segregation; FV = Family Values; h^2 = Communalities.

Table 3

Means, Standard Deviations, Reliability Estimates, and Correlations for Scores on CRIS and BSDS-R Subscales and AAAS-R Total

Subscale	1	2	3	4	5	6	7
1. PA	--						
2. PM	.13	--					
3. PSH	.12	.22*	--				
4. IEAW	-.21*	.10	.22*	--			
5. IA	-.26*	.11	-.01	.32*	--		
6. IMCI	.19*	.12	.07	-.26*	-.04	--	
7. AAAS-R Total	-.32*	.13	-.03	.25*	.36*	-.05	--
8. Latinos	.04	-.15*	.01	-.12	-.01	.10	-.17*
9. Asians	.18*	-.07	-.03	-.28*	-.04	.20*	-.24*
10. Other Blacks	-.04	-.06	-.03	-.01	.08	-.01	.06
11. Whites	.27*	-.01	.04	-.37*	-.17*	.29*	-.32*
12. Jews	.21*	-.07	-.02	-.35*	-.20*	.24*	-.32*
13. Gay Lesbian	.14	-.02	.07	-.05	-.12	.18*	.01
M	2.98	3.40	2.09	1.61	3.07	5.82	4.42
SD	1.58	1.24	1.26	0.91	1.25	0.94	0.82
Alpha	0.89	0.80	0.88	0.88	0.87	0.78	0.89

Subscale	8	9	10	11	12	13
8. Latinos	--					
9. Asians	.47*	--				
10. Other Blacks	.23*	.20*	--			
11. Whites	.39*	.66*	.11	--		
12. Jews	.40*	.70*	.13	.76*	--	
13. Gay Lesbian	.13	.14	.06	.21*	.25*	--
M	6.53	5.23	6.90	5.67	5.06	2.01
SD	1.09	1.90	0.41	1.71	1.89	2.10
Alpha	0.76	0.81	0.59	0.78	0.80	0.72

Note. $N = 360$ college students. CRIS subscales include PA = Pre-Encounter Assimilation; PM = Pre-Encounter Miseducation; PSH = Pre-Encounter Self-Hatred; IEAW = Immersion-Emersion Anti-White; IA = Internalization Afrocentricity; IMCI = Internalization Multiculturalist Inclusive. AAAS-R Total = total score for all AAAS-R subscales. BSDS subscales include Latinos, Asians, Other Blacks, Whites, Jews, Gay Lesbian. *M* = mean, *SD* = standard deviation, Alpha = Cronbach's alpha. For interpretation purposes the means and standard deviations have been converted to the ratings on the scale: 1 = *strongly disagree* to 7 = *strongly agree* for CRIS scores and AAAS-R; BSDS-R scores are 1 = *yes* and 0 = *no*.
* $p < .01$.

higher scores indicative of less social distance from the target group. Intercorrelations between BSDS-R subscales ranged from |.06| to |.76| (*Mdn* = |.23|). The highest correlation was between *Whites* and *Jews,* with those who reported less social distance with Whites also reported less social distance with Jews. Correlations between CRIS subscales and the other variables – AAAS-R and modified BSDS-R, are discussed under specific hypotheses.

Hypothesis One Findings

For hypothesis one, a statistically significant correlational relationship was expected between specific CRIS subscale scores and the AAAS-R total score: (a) a negative correlation between PA and the AAAS-R total score; (b) a positive correlation between IEAW and AAAS-R total score; and (c) a positive correlation between IA and AAAS-R total score. Table 3 shows the bivariate correlations between the CRIS subscales and the AAAS-R total score. Two of the six correlations met the a priori criteria (α = .01; *r* = .30) for interpretation. A negative correlation was found between PA and AAAS-R total score (*r* = -.33), in that higher assimilation scores were linked to lower AAAS-R scores. Black students who rated themselves higher on assimilation also deemed themselves as less immersed in traditional Black cultural values. In contrast, a positive correlation was found between IA and AAAS-R total score (*r* = .36). Black students who rated themselves higher on valuing an Afrocentric worldview, tended to view themselves as more immersed into traditional Black cultural values. Although a statistically significant relationship was found between IEAW and AAAS-R, the effect size was less than 9% (*r* = .25). No other statistically and practically significant patterns were observed between the CRIS subscale scores and AAAS-R total scores.

Hypothesis Two Findings

Specific CRIS subscale scores were expected to have statistically (α = .01) and practically (r = .30) significant correlations with specific indicators on the BSDS-R: (a) PA would positively correlate with *White* social distance scores. IEAW and IA would positively correlate with *Other Blacks* social distance scores. IMCI would positively correlate with all the social distance indicators (i.e., *Latinos, Asians, Other Blacks, Whites, Jews, and Gay Lesbian*); (b) IEAW subscale scores would have a negative correlation with *White* social distance scores; and (c) both PM and PSH would have a negative relationship with *Other Blacks* social distance scores. Table 3 shows bivariate correlations between the subscales of the CRIS and the BSDS-R.

Two of the thirty-six correlations met the a priori criteria (α = .01; r = .30) for interpretation. A negative correlation was found between IEAW and *Whites* (r = -.37), in that higher anti-White scores were linked to lower BSDS-R *Whites* scores. Black students who rated themselves higher on anti-White attitudes also deemed themselves as having more social distance from Whites. In addition, a negative correlation was found between IEAW and *Jews* (r = -.35), in that higher anti-White scores were linked to lower BSDS-R *Jews* scores. Black students who rated themselves higher on anti-White attitudes tended to view themselves as having great social distance with Jews. Although statistically significant relationships were found between (a) PA and BSDS-R *Asians, Whites, Jews, Gays/ Lesbians;* (b) PM and BSDS-R *Latinos;* (c) IEAW and BSDS-R *Latinos* and *Asians;* (d) IA and BSDS-R *Whites, Jews,* and *Gays/ Lesbians;* and (e) IMCI and BSDS-R *Asians, Whites, Jews,* and *Gays/ Lesbians*, the effect sizes were less than 9%. No other statistically and practically significant patterns were observed between CRIS subscale scores and BSDS-R subscale scores.

Hypothesis Three Findings

It was predicted in hypothesis three that cluster analyses would yield four to six racial identify clusters similar to the previous clusters found by Worrell et al. (2006). Cluster analysis was used to identify racial identity clusters and was performed using SAS version 9.1 and the Multistage Euclidean Grouping (MEG; McDermott, 1998) method, a comprehensive analytic strategy for hierarchical agglomerative cluster analysis, was applied to identify racial identity clusters.

First, to aid interpretability and comparability, CRIS subscale scores were standardized to T scores ($M = 50$, $SD = 10$) through linear conversion. Then, participants' CRIS data (T scores for each CRIS subscale) were randomly assigned to three mutually exclusive and equivalent size blocks ($N = 360$; $n = 120$). First-stage cluster analyses were conducted independently for each of the three blocks. Cluster solutions at the various iterations were based on fusion statistics. The fusion statistics used included pseudo-F and t-squared statistics, Mojena stopping rule one criterion (Mojena, 1977), and increases in error variance statistic. Second-stage cluster analysis was used to determine (based on fusion statistics) whether the selected cluster solutions from first-stage analysis replicated consistently across each of the three blocks. Third-stage cluster analysis allowed for case relocation from one cluster to another in order to adjust for prior misassignments in earlier analyses and to optimize within-cluster homogeneity (McDermott, 1998).

First-stage clustering resulted in a 6-cluster solution for Blocks 1 and 3, and a 7-cluster solution for Block 2. Second-stage clustering resulted in a 6-cluster solution. Homogeneity statistics indicated the relative cohesion of variance within clusters, variables, and overall ($\bar{H} = .64$). Third-stage clustering with reassignment of cases substantially improved the 6-cluster

solution ($\bar{H}$ = .70). Good replication rates were evident for each cluster, with Clusters 1 through 6 replicating 100%.

Alternate 5-, 7-, 8-, and 9-cluster solutions were assessed by replicating the exploratory clustering techniques at the second and third stages. Subsequent homogeneity coefficients were lower (5-cluster solution) and replicability rates did not improve (5-, 8-, and 9-cluster solutions) in the exploration of 5-, 8-, and 9-cluster solutions; therefore, these solutions were ruled out as a viable option. However, the 7-cluster solution did emerge as a viable option to the 6-cluster solution. At second-stage clustering, homogeneity statistics indicated the relative cohesion of variance within clusters, variables, and overall ($\bar{H}$ = .65). Third-stage clustering with reassignment of cases improved the 7-cluster solution ($\bar{H}$ = .72). Adequate to good replication rates were evident for each cluster, with clusters 1 through 6 replicating 100%, and cluster 7 replicating in one out of three of the independent random subsamples (33.3%).

Clusters were interpreted and named according to (a) the dispersion of scores around the *T*-score mean of 50, (b) the expanded nigrescence theory (Cross & Vandiver, 2001), and (c) Worrell et al.'s (2006) cluster descriptions. Clusters 1 through 6 were found in the 6- and 7-cluster solutions, with two new clusters identified in both solutions and a previously identified cluster by Worrell et al. (2006) emerging as the additional cluster in the 7-cluster solution. Cluster 1 had a primary elevation on PA (mean of 65), a slight elevation on PM and IMCI (above 50), and no elevations on PSH, IEAW, and IA (mean scores below 50). As a result, cluster 1 was labeled Assimilated and consisted of 16.52% (*n* = 58) of the participants. Cluster 2 had a primary elevation on PSH (mean of 66), a slight elevation on PA, PM, and IMCI (above 50), and no elevations on IEAW and IA (mean scores below 50). As a result, cluster 2 was labeled Self-Hating with 15.38% (*n* = 54) of the participants having this cluster pattern. Cluster 3 had a

primary elevation on IMCI (mean of 52), and no elevations on all other subscales (mean scores

below 50). Cluster 3 was labeled Multiculturalist; this cluster pattern was the most prevalent

(22.51%; n = 79) in this sample of participants. Cluster 4 had primary elevations on IEAW and

IA (mean scores of 58 and 57 respectively), and no elevations on all other subscales (mean

scores below 50). Cluster 4 was labeled Immersion – Intense Black Involvement and 12.25% (n

= 43) of the participants had this cluster pattern. Cluster 5 had a primary elevation on IA (mean

of 59), a slight elevation on IMCI (above 50), and no elevations on PA, PM, PSH, and IEAW

(mean scores below 50). Cluster 5 was labeled Afrocentric and consisted of 21.08% (n = 74) of

the participants. Cluster 6 had a primary elevation on IEAW (mean score of 66), and slight

elevations on PM, PSH, and IA (mean scores above 50), and no elevations on PA and IMCI

(mean scores below 50). Cluster 6 was labeled Immersion with 12.25% (n = 43) of the

participants having this cluster pattern. Cluster 7 had a slight elevation on PA (mean score of 52),

and there were no elevations on the other subscales (mean scores below 50). Cluster 7 was

labeled Low-Race Salience. In Figures 2 through 8 a line graph of each of the seven clusters is

used to depict the pattern of the average T scores for the 6- and 7-cluster solutions[1]. Figure 9

shows the same cluster solutions on a single graph to allow for easier comparisons of the

clusters.

Table 4 summarizes the homogeneity coefficients for the 6- and 7-cluster solutions. The

homogeneity coefficients per cluster across variables (on the relocated solution) were all above

0.62 for both cluster solutions. The mean homogeneity coefficient per variable across clusters

was slightly better for the 7-cluster solution, as was the Grand Mean Tryon and Bailey

[1] The line graph is used as a visual aid to compare the similarity and differences between the cluster solutions. It does not accurately portray the actual cluster pattern, as each point represents a mean score of cases for each variable. Thus, the distance between the points does not exist and has no interpretive value.

Figure 2

CRIS Cluster 1 – Assimilated
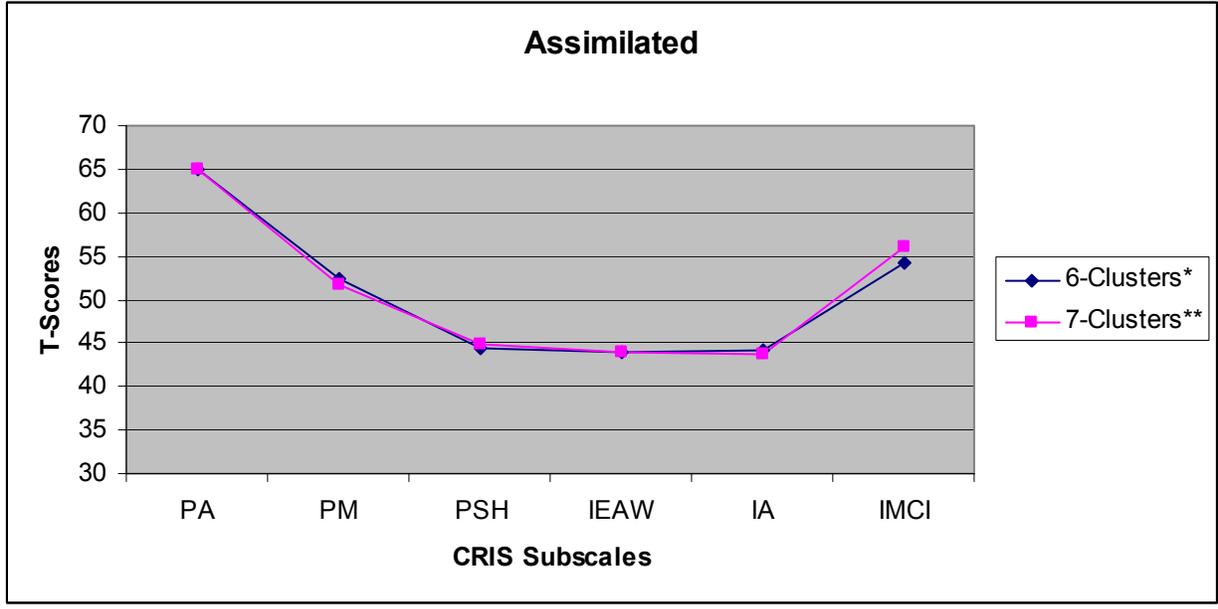
Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales and *T* scores for the 6- and 7-cluster solution, respectively include PA = Pre-Encounter Assimilation (65, 65); PM = Pre-Encounter Miseducation (52.3, 51.8); PSH =Pre-Encounter Self-Hatred (44.5, 44.9); IEAW = Immersion-Emersion Anti-White (43.9, 44); IA = Internalization Afrocentricity (44.1, 43.7); IMCI = Internalization Multiculturalist Inclusive (54.3, 56.1).
* 6-cluster solution, cluster membership *n* = 58; replication 100%
** 7-cluster solution, cluster membership *n* = 53; replication 100%

Figure 3

CRIS Cluster 2 – Self-Hating

Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales and *T* scores for the 6- and 7-cluster solution, respectively include PA = Pre-Encounter Assimilation (52.8, 52.3); PM = Pre-Encounter Miseducation (52.8, 52.9); PSH =Pre-Encounter Self-Hatred (66, 65.8); IEAW = Immersion-Emersion Anti-White (47.4, 47.4); IA = Internalization Afrocentricity (47.3, 47.6); IMCI = Internalization Multiculturalist Inclusive (53.1, 54.8).
* 6-cluster solution, cluster membership *n* = 54; replication 100%
** 7-cluster solution, cluster membership *n* = 50; replication 100%

Figure 4

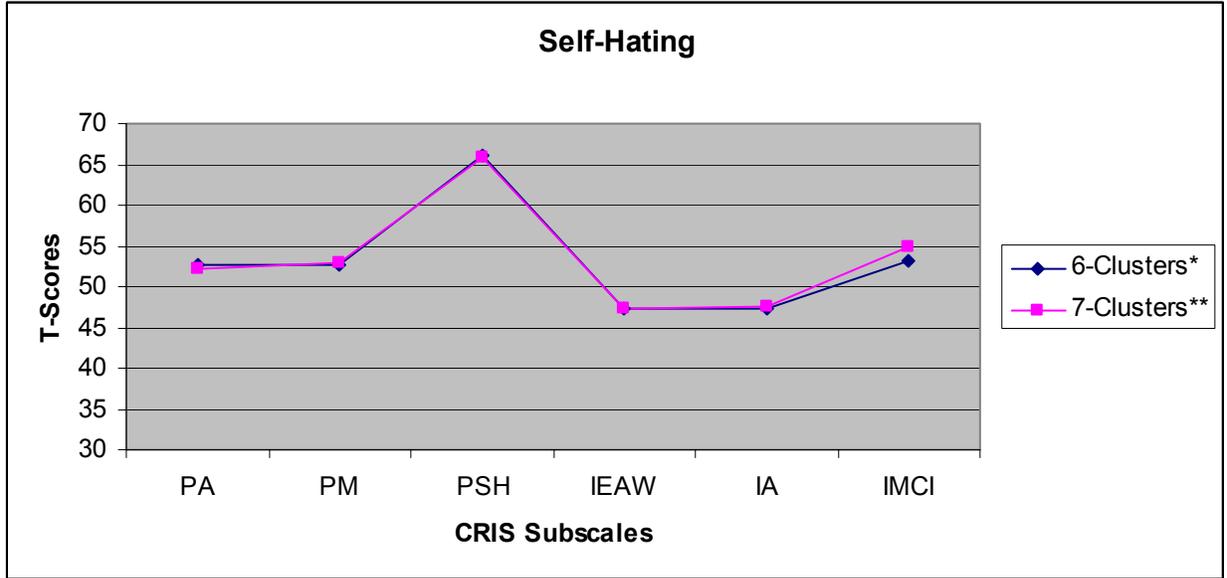*CRIS Cluster 3 – Multiculturalist*

Multiculturalist

Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales and *T* scores for the 6- and 7-cluster solution, respectively include PA = Pre-Encounter Assimilation (44.5, 44.2); PM = Pre-Encounter Miseducation (44.3, 44.1); PSH =Pre-Encounter Self-Hatred (46.1, 45.9); IEAW = Immersion-Emersion Anti-White (46.1, 46.3); IA = Internalization Afrocentricity (41.6, 41.4); IMCI = Internalization Multiculturalist Inclusive (52, 52.3).
* 6-cluster solution, cluster membership *n* = 79; replication 100%
** 7-cluster solution, cluster membership *n* = 74; replication 100%

Figure 5

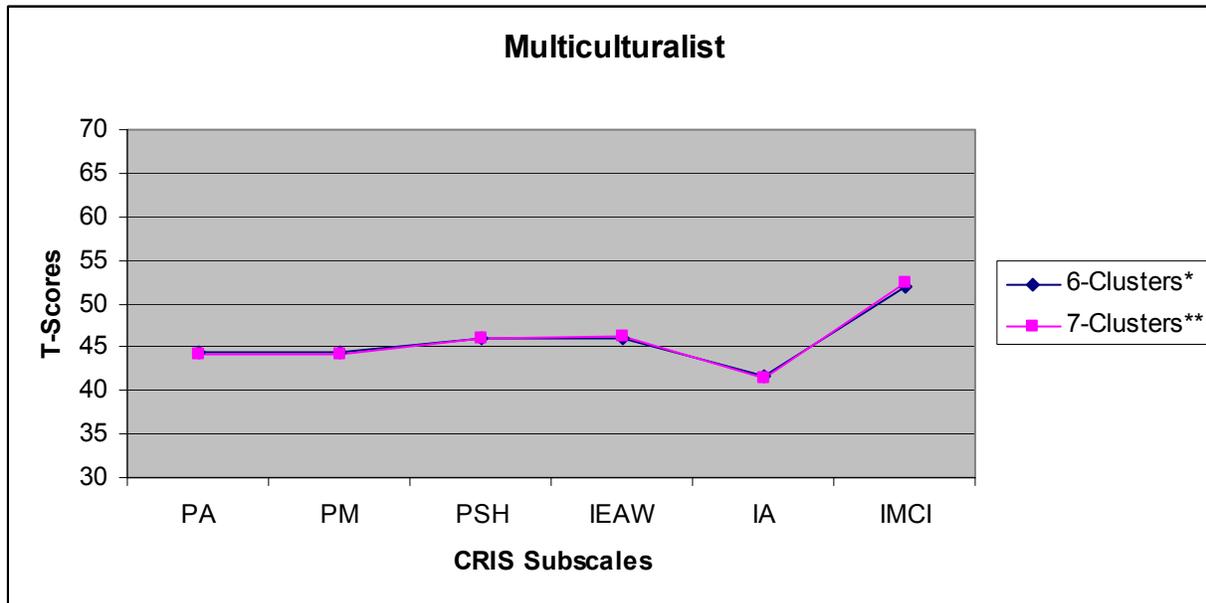*CRIS Cluster 4 – Immersion - Intense Black Involvement*

Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales and *T* scores for the 6- and 7-cluster solution, respectively include PA = Pre-Encounter Assimilation (45, 41); PM = Pre-Encounter Miseducation (42.9, 38.7); PSH =Pre-Encounter Self-Hatred (44.8, 44.1); IEAW = Immersion-Emersion Anti-White (52.7, 57.9); IA = Internalization Afrocentricity (53.4, 56.9); IMCI = Internalization Multiculturalist Inclusive (33.7, 32.7).
* 6-cluster solution, cluster membership *n* = 43; replication 100%
** 7-cluster solution, cluster membership *n* = 23; replication 100%
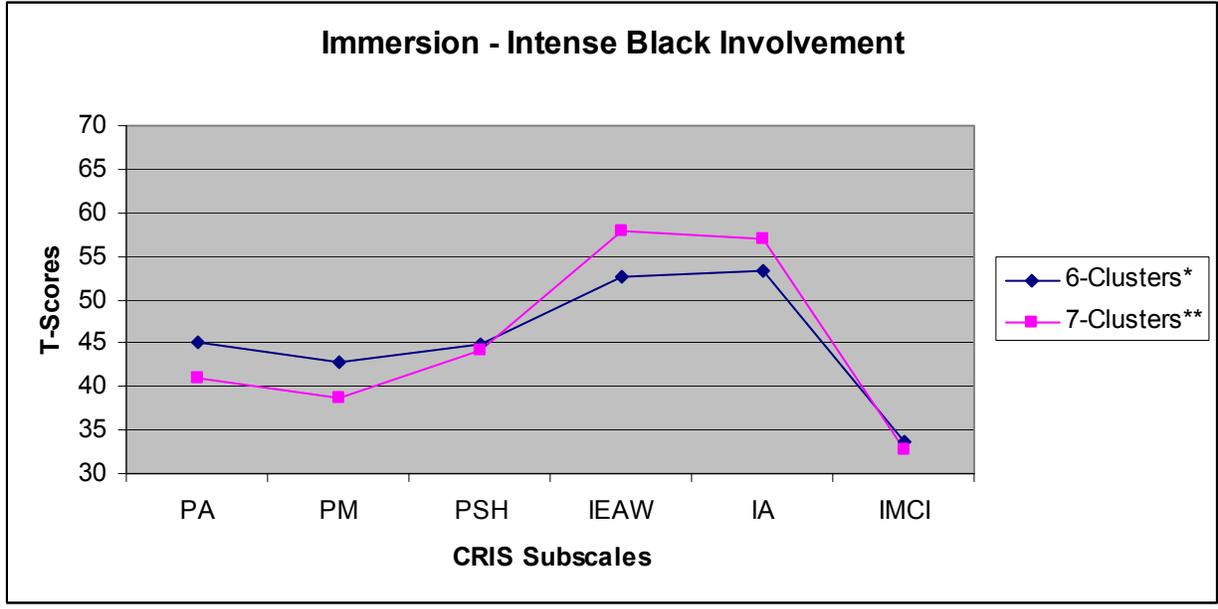
Figure 6

CRIS Cluster 5 –Afrocentric

Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales and *T* scores for the 6- and 7-cluster solution, respectively include PA = Pre-Encounter Assimilation (46.2, 46.1); PM = Pre-Encounter Miseducation (50.2, 50); PSH =Pre-Encounter Self-Hatred (45.6, 45.5); IEAW = Immersion-Emersion Anti-White (46.9, 46.8); IA = Internalization Afrocentricity (59.1, 58.9); IMCI = Internalization Multiculturalist Inclusive (54.6, 54.6).

* 6-cluster solution, cluster membership *n* = 74; replication 100%

** 7-cluster solution, cluster membership *n* = 75; replication 100%

Figure 7

CRIS Cluster 6 – Immersion

Immersion

Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales and *T* scores for the 6- and 7-cluster solution, respectively include PA = Pre-Encounter Assimilation (47.2, 47.2); PM = Pre-Encounter Miseducation (56.7, 56.7); PSH =Pre-Encounter Self-Hatred (53.8, 53.8); IEAW = Immersion-Emersion Anti-White (65.6, 65.6); IA = Internalization Afrocentricity (56, 56); IMCI = Internalization Multiculturalist Inclusive (47.4, 47.4).
* 6-cluster solution, cluster membership *n* = 43; replication 100%
** 7-cluster solution, cluster membership *n* = 43; replication 100%

Figure 8

CRIS Cluster 7 – Low Race Salience
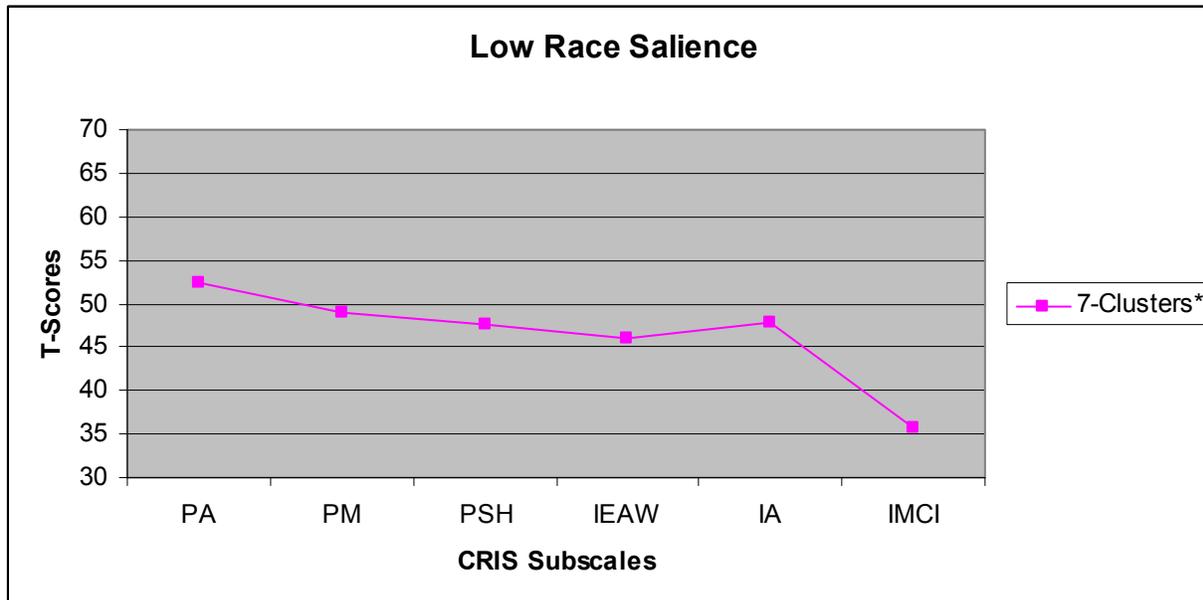
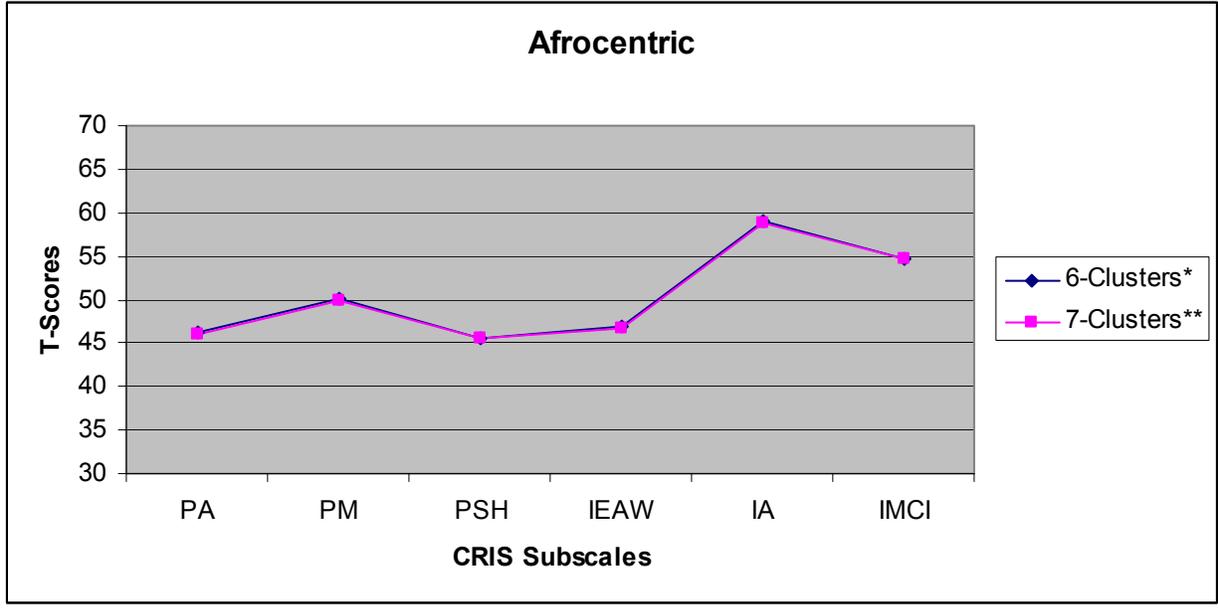*Note*. The subscale means in this figure are based on the *T*-score mean of 50 and standard
deviation of 10. CRIS subscales and *T* scores include PA = Pre-Encounter Assimilation (52.4);
PM = Pre-Encounter Miseducation (50.4); PSH =Pre-Encounter Self-Hatred (47.5); IEAW =
Immersion-Emersion Anti-White (45.9); IA = Internalization Afrocentricity (47.9); IMCI =
Internalization Multiculturalist Inclusive (35.6).
* 7-cluster solution, cluster membership *n* = 33; replication 33.3%
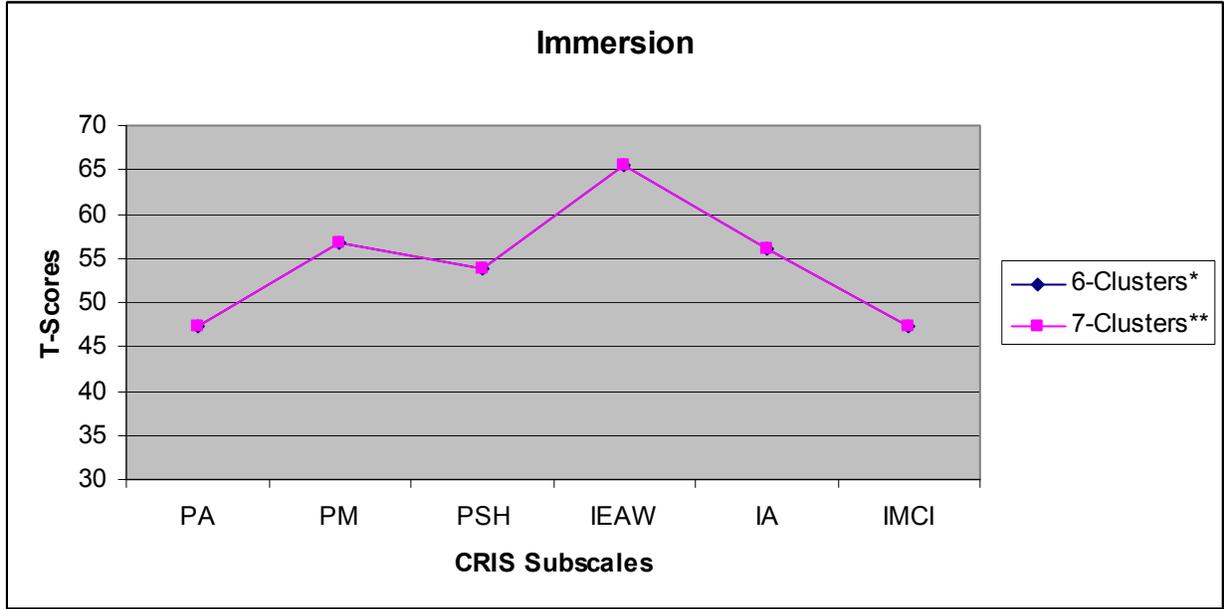
Figure 9

Seven CRIS Clusters Identified Using Cluster Analysis
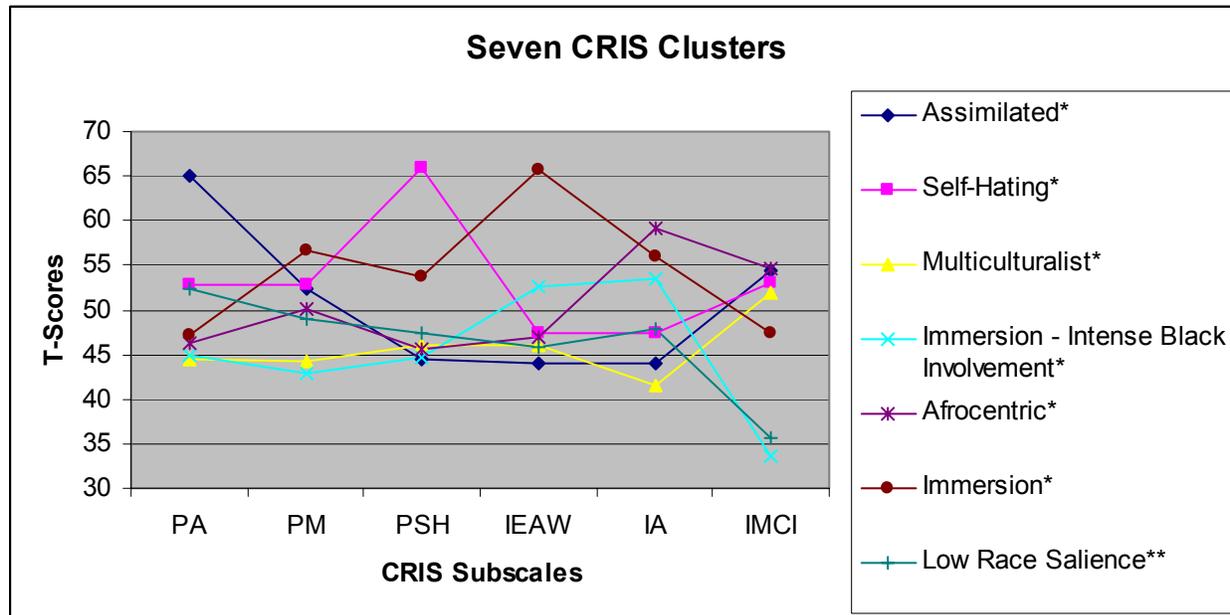
Note. The subscale means in this figure are based on the *T*-score mean of 50 and standard deviation of 10. CRIS subscales include PA = Pre-Encounter Assimilation; PM = Pre-Encounter Miseducation; PSH =Pre-Encounter Self-Hatred; IEAW = Immersion-Emersion Anti-White; IA = Internalization Afrocentricity; IMCI = Internalization Multiculturalist Inclusive.
* Cluster based on *T* scores from 6-cluster solution; replicated in both the 6- and 7-cluster solution.
** Cluster based on *T* scores from 7-cluster solution; cluster found only in the 7-cluster solution.

Table 4

Homogeneity Coefficients, Number of Cases per Cluster, and Prevalence of Clusters (After

Cluster Reassignment) for Scores on CRIS Subscales

Statistic	6-Cluster Solution	7-Cluster Solution
HBAR	$\bar{H} =$ .70	$\bar{H} =$ .72
HVAR1	.73	.75
HVAR2	.55	.60
HVAR3	.80	.79
HVAR 4	.75	.76
HVAR5	.65	.65
HVAR 6	.69	.76
Cluster Pattern; *h*; *n*; %		
Assimilated	$h = .70$; $n = 58$; 100%.	$h = .71$; $n = 53$; 100%.
Self-Hating	$h = .62$; $n = 54$; 100%.	$h = .66$; $n = 50$; 100%.
Multiculturalist	$h = .82$; $n = 79$; 100%.	$h = .83$; $n = 74$; 100%.
Immersion – IBI	$h = .64$; $n = 43$; 100%.	$h = .67$; $n = 23$; 100%.
Afrocentric	$h = .77$; $n = 74$; 100%.	$h = .77$; $n = 75$; 100%.
Immersion	$h = .62$; $n = 43$; 100%.	$h = .62$; $n = 43$; 100%.
Low Race Salience	--------------------------	$h = .74$; $n = 33$; 33.3%.

Note. $N = 351$. HBAR = Grand Mean Tryon & Bailey Homogeneity Coefficient; HVAR = Mean Homogeneity Coefficient Per Variable Across Clusters; *h* = Mean Homogeneity Coefficient Per Cluster Across Variables; *n* = Number of Cases Forming Each Cluster; % = Percentage of Cluster Replication Across Blocks; Immersion – IBI = Immersion – Intense Black Involvement.

Homogeneity Coefficient. Replication rates across blocks were slightly better for the 6-cluster solution. Using expanded nigrescence theory (Cross & Vandiver, 2001) as the guide for interpretation, both solutions were also theoretically consistent. In summation, both cluster solutions were viable to use; however, due to limited replication of the seventh cluster (33.3%) in the 7-cluster solution, the results of the 6-cluster solution were used in the subsequent analyses for hypotheses four and five. At the conclusion of cluster analysis, 97.5% ($N = 351$) of the cases were clustered, while 2.5% ($n = 9$) were not assigned cluster membership and therefore could not be used in subsequent analyses that used cluster status as a variable. Examination of these unassigned cases revealed there was not a systematic pattern by sex or any other demographic variable between these cases, nor was there such a pattern on the CRIS subscale scores.

Hypothesis Four Findings

Specific racial identity clusters that emerged from the cluster analysis were expected to have statistically ($\alpha = .01$) and practically ($r = .30$) significant relationships with the level of acculturation expressed: (a) Individuals in the Multiculturalist, Afrocentric or Immersion clusters would have higher total scores on the AAAS-R (less acculturated) than individuals in the other CRIS clusters; (2) Individuals in the Assimilated or Low-Race Salience clusters would have lower AAAS-R total scores (more acculturated) than individuals in the other CRIS clusters; and (c) Other CRIS clusters were expected to fall in the middle range on the AAAS-R scores.

A one-way ANOVA and *post hoc* analyses were used to test hypothesis four. The independent variable was cluster status (six clusters identified in hypothesis three) and the dependent variable was the AAAS-R total score. Due to missing data on the AAAS-R (nine participants) and cases that were not assigned cluster membership during the cluster analysis (nine participants), the sample size for this analysis was $N = 342$.

All assumptions of ANOVA were examined and reported: independent observations of data, AAAS-R scores approximately normally distributed, and scores generated from an interval-like scale. In addition, homogeneity of variance was supported (Levene's Test $p = .26$). There was a significant effect of cluster status on AAAS-R total scores, $F(5, 336) = 6.43$, $p = .001$; $\eta^2 = .09$. Tukey HSD *post hoc* test was used to compare mean differences between the cluster statuses. Table 5 summarizes the means, standard deviations, and significance levels of the differences from *post hoc* testing. On average, individuals who were classified in the Assimilated cluster were likely to rate themselves as more acculturated than those who had been placed in the Afrocentric cluster ($p < .001$; $\eta^2 = .06$) or Immersion cluster ($p < .01$; $\eta^2 = .04$). Those who were classified in the Self-Hating cluster on average were likely to rate themselves as more acculturated than those who had been placed in the Afrocentric cluster ($p < .01$; $\eta^2 = .04$). The other cluster statuses were not statistically different on acculturation level. However, a potential trend ($p = .03$) was found for two other clusters in regards to acculturation level: On average, individuals in the Self-Hating cluster were likely to rate themselves as more acculturated than individuals in the Immersion cluster ($p = .03$; $\eta^2 = .03$), and those in the Multiculturalist cluster were likely to report they were more acculturated than individuals in the Afrocentric cluster ($p = .03$; $\eta^2 = .03$). Although the patterns are consistent with the expanded nigrescence theory, these trends must be viewed with caution due to the numerous analyses performed in the study and the subsequent increase in experiment-wise error rate.

Hypothesis Five Findings

Specific racial identity clusters that emerged from the cluster analysis were expected to have statistically ($\alpha = .01$) and practically ($r = .30$) significant relationships with the linear composite of social distance indicators for the racial/ethnic or minority groups rated:

Table 5

Summary of Tukey HSD Post-Hoc Analyses of ANOVA: Means and Standard Deviations for the

AAAS-R by CRIS Cluster Status

Cluster Status	*N*	Mean AAAS-R Total Score	*SD*
Assimilated*, **	57	4.06	.95
Self-Hating***	52	4.19	.78
Multiculturalist	76	4.31	.74
Immersion - IBI	42	4.50	.76
Afrocentric*, ***	73	4.70	.72
Immersion**	42	4.68	.71
Total	342	4.40	.81

Note. Immersed - IBI = Immersed - Intense Black Involvement cluster. Asterisks denote the cluster comparisons that were significantly different from each other at .01.
* $\eta^2 = .06$
** $\eta^2 = .04$
*** $\eta^2 = .04$

(a) Individuals in the Afrocentric, Immersion, and Assimilated clusters would have a more limited range of social distance than other CRIS clusters, and (b) Individuals in the Multiculturalist cluster would have a universal social closeness to all racial minority groups more so than other CRIS clusters.

A one-way MANOVA and a descriptive discriminant analysis were used to investigate hypothesis five. For the MANOVA, the independent variable was cluster status as identified in hypothesis three and the dependent variables were the six subscale scores on the BSDS-R. Due to the cases that were not assigned cluster membership during the cluster analysis (nine participants), the sample size for this analysis was $N = 351$.

The assumptions of a MANOVA were examined and reported. All observations were independent and multivariate normality was assumed based on the univariate summary provided in the preliminary analyses. The homogeneity of covariance assumption was not met (Box's Test of Equality of Covariance Matrices was significant $p < .001$; Sherry, 2006). Thus, any significant findings were interpreted with caution due to the likelihood that significance could have emerged erroneously (Tabachnick & Fidell, 1996).

The MANOVA was statistically significant for cluster status, Wilks's lambda = .74, F (30, 1254) = 3.26, $p < .001$. To interpret the linear composite of this significance, a descriptive discriminant analysis was conducted, where cluster status was the dependent variable and the six BSDS-R scores were the independent variables. Five discriminant variates emerged. The first discriminant variate accounted for 67% of the variance, whereas the second variate accounted for 17.7%. Based on the dimension reduction analysis, only the first variate was significant at .01 (p = .001), with a p-value for the second being greater than .01 (p = .03), and the subsequent variate was not statistically significant (p = .22). The standardized function coefficients ranged from -.06

to 1.20, with social distance toward *Whites* (1.20) contributing the most to the function, followed-by social distance with *Other Blacks* (-.28) and *Asians* (-.26). Table 6 provides a summary of the standardized discriminant function coefficients and correlations of BSDS-R subscales to the function.

The canonical variate structure coefficients ranged from -.18 to .90, with social distance with Whites sharing approximately 80% of its variance to the variate, followed-by social distance with *Jews* ($r = .58$) and *Asians* ($r = .39$). In contrast, *Other Blacks* ($r = -.18$) had a negative correlation to the function. Thus, the variate was named *dominant culture group preference* because of its inclusion of cultural groups (i.e., Whites, Jews, and Asians) that are either the majority group or perceived as part of or functioning like the dominant social group, and the exclusion of cultural groups (i.e., Other Blacks, Latinos, and Gays/ Lesbians) perceived, treated, or deemed as socially marginalized.

On average, individuals in the Self-Hating and Assimilated clusters rated themselves higher (.58 and .57, respectively) on the discriminant function of dominant culture group preference, indicating a preference for social closeness with dominant cultural groups as Whites, Jews, and Asians, whereas individuals in the Immersion – Intense Black Involvement, Afrocentric, and Immersion clusters rated themselves lower (-.20, -.29, -.82, respectively) on dominant culture group preference, preferring social distance with the same groups. The Multiculturalist cluster fell in the middle (.01) showing no preference in being socially close or distant from dominant cultural groups (i.e., Whites, Jews, and Asians).

Table 6

Structure Coefficients and Standardized Function Coefficients for Descriptive Discriminant

Analyses for the BSDS-R Subscales Based on Cluster Status on the CRIS.

	Structure Coefficients	Standardized Function Coefficients
BSDS-R *Latinos*	.09	-.14
BSDS-R *Asians*	.39	-.26
BSDS-R *Other Blacks*	-.18	-.28
BSDS-R *Whites*	.90	1.20
BSDS-R *Jews*	.58	-.06
BSDS-R *Gay/ Lesbian*	.22	.07

Note. *N* = 351. BSDS-R = Bogardus Social Distance Scale - Revised; CRIS = Cross Racial Identity Scale.

CHAPTER 5

Discussion

The purpose of this study was (a) to replicate clusters identified by Worrell et al. (2006) and (b) to extend empirical research on the expanded nigrescence theory (Cross & Vandiver, 2001) and the Cross Racial Identity Scale (CRIS; Vandiver et al., 2000) by examining the predictive validity of the clusters in relation to acculturation and social distance. This chapter provides a discussion of the results reported in Chapter 4 and their convergence or divergence with previous literature. Limitations of the study are considered, as well as implications for practice and future research.

Construct Validity of the CRIS Subscales

Statistically and practically significant correlations between specific CRIS subscales and measures of acculturation (as measured by the AAAS-R; Klonoff & Landrine, 2000) and social distance (as measured by the modified BSDS-R; Bogardus, 1933) were predicted in hypotheses one and two. For hypothesis one, a negative correlation between Pre-Encounter Assimilation (PA) and the acceptance of traditional Black culture, a positive correlation between Immersion-Emersion Anti-White (IEAW) and the embracement of traditional Black culture, and a positive correlation between Internalization Afrocentric (IA) and the embracement of traditional Black culture were predicted. The findings supported two of the three predictions. Individuals with high PA scores tended to rate themselves lower on acceptance of traditional Black culture, while individuals who rated themselves high on IA embraced traditional Black culture. In accordance with the expanded nigrescence theory (Cross & Vandiver, 2001), assimilated individuals tended to give little significance to race by not viewing traditional Black culture as salient to their lives, while Afrocentric individuals showed a strong singular focus on the Black community. These

findings are consistent with and provide additional support for the expanded nigrescence theory (Cross & Vandiver, 2001) and the construct validity of the CRIS and the expected relationship to a measure of acculturation (Helm, 2001; Redden, 2003). In addition, the importance of the relationship between the subscales PA and IA and acculturation is supported by medium effect sizes.

The prediction that individuals with high anti-White attitudes would be more likely to embrace traditional Black culture (less acculturated) was not supported because it was only statistically significant (at .01) and not practically significant (less than 9%), which mirrors the findings of Helm (2001). The lack of support for this hypothesis could be due to the content differences between AAAS-R and the IEAW subscale. The AAAS-R items were designed to measure an individual's immersion in traditional Black culture and values, whereas the content of the IEAW items has a narrow focus – an extreme dislike for White people and the White community – and do not explicitly tap cultural issues. It would be easy to speculate that disliking White people would indicate a rejection of White culture as well as an embracement of Black traditional culture. However, disliking White people is not an all or nothing proposition. Black individuals who dislike White people could possibly adopt specific mainstream cultural values (i.e., individualism) in order to get ahead. Another possibility is that the individual could have adopted post-modern Black cultural values with limited knowledge of traditional Black values, but the acceptance of pop culture or a hip-hop view of Black life.

Hypothesis two consisted of seven specific predictions about the correlational relationship between Black racial identity attitudes and the preferred social distance from individuals of diverse racial/ethnic groups and sexual orientations. Only one of the seven predictions was supported: A negative relationship was found to exist between IEAW and

BSDS-R *Whites*. This finding is in keeping with how the construct of anti-White is defined in expanded nigrescence theory; individuals with anti-White attitudes are likely to prefer more social distance from White people. The importance of the relationship between IEAW and social distance with White people was supported by a medium effect size.

Six predictions were not supported: (a) assimilated attitudes did not positively correlate with social closeness toward White people, (b) anti-White and Afrocentric attitudes did not positively correlate with social closeness toward other Black people, (c) multiculturalist attitudes did not positively correlate with social closeness toward all groups, and (d) miseducated and self-hatred attitudes did not negatively correlate with social distance toward other Black people. Although finding no support for these predictions was unexpected, it is understandable when the content of the CRIS items is examined–the the lack of support could be due to content and measurement differences. For example, the items for the Self-Hatred subscale specifically tap negative attitudes an individual has about themselves and do not directly assess attitudes towards other Black people; and the items for the Multiculturalist subscale tap attitudes an individual has in regards to building coalitions and bridges across cultural groups but several racial/ethnic terms (i.e., "Hispanics, Asian-Americans, Whites, Jews, gays & lesbians, etc.") are appended together on each IMCI item and thus does not tap separately the degree that coalition building occurs with each individual group. Anti-White is the only subscale with items directly tapping attitudes that would be indicative of social distance (i.e., "I hate White people"); however, these items are focused exclusively on attitudes about White people and are not necessarily indicative of attitudes about other cultural groups. Thus, upon initial examination using univariate analysis the two measures appear to be tapping two different social constructs, with the CRIS subscales designed to measure a preference for an internalized social identity attitude whereas the BSDS-R

items were designed to assess intended social behavior. Therefore, the lack of findings could be due to the content differences in the specificity of the measures as well as the focus of the measures: attitudes versus behavioral intent (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). However, it is also possible that support was not found for this hypothesis because univariate analyses are utilized as opposed to multivariate analyses and that these two measures are in fact tapping something similar. Multivariate analysis assume that human behavior has multiple causes and multiple effects and that these causes and effects exist simultaneously, not mutually exclusive of each other; therefore, the richness and complexity of racial identity and its relationship to social distance preferences would more likely emerge using multivariate analyses as shown in hypothesis five.

Replication of CRIS Clusters

For hypothesis three, four to six racial identity clusters similar to the previous clusters found by Worrell et al. (2006) were predicted to emerge through cluster analysis. This hypothesis was supported. Six to seven clusters emerged from the cluster analyses. Five of these clusters replicated the findings of Worrell et al. (2006) and were named accordingly: Assimilated, Low Race Salience, Multiculturalist, Immersion, and Afrocentric. Two new clusters were identified and were named based on the elevations and configuration of the CRIS subscales in accordance with expanded nigrescence theory (Cross & Vandiver, 2001): Self-Hating and Immersion-Intense Black Involvement.

Pre-Encounter. Three Pre-Encounter clusters, Assimilated, Self-Hating, and Low Race Salience, were identified in this study. An identifying characteristic of the Pre-Encounter clusters is the low or negative salience attributed to race (Cross, 1991; Cross & Vandiver, 2001). Individuals in an Assimilated cluster have a strong reference group orientation centered on being

American. The below-average scores on anti-White and Afrocentric attitudes support the predominant assimilation theme (Worrell et al., 2006). The moderate elevation of multicultural attitudes may be due to the embracement of other cultural groups named in the multiculturalist items as opposed to the Black-identity aspect of the items (Worrell et al., 2006). They may accept negative stereotypes about Black culture and the Black community but may not apply these stereotypes to themselves, which was supported by the slight elevation on PM and the below-average score on PSH.

Individuals in the Self-Hating cluster are considered to have profound negative feelings about being Black. Beyond the elevation on PSH, the general pattern of the other CRIS subscales in relation to PSH support that this cluster of individuals are likely to be self-hating. There were slight elevations on the assimilation and miseducation subscales, with below average scores on anti-White and Afrocentric.

Individuals in the Low Race Salience cluster tend not to attribute any significance to race. This premise was supported by the below-average scores on all attitudes with the exception of a slight elevation on assimilationist attitudes, which can be described as being the least concerned with race. Low Race Salience is different from the Assimilated cluster in that individuals in the Assimilated cluster embrace their similarities to other Americans, whereas race and nationality are insignificant to individuals in the Low Race Salience cluster (Worrell et al., 2006).

Immersion-Emersion. Two Immersion-Emersion clusters were identified in this study: Immersion-Intense Black Involvement and Immersion. The Immersion-Intense Black Involvement cluster has above-average scores on anti-White and Afrocentric attitudes; all other attitudes have below-average scores. Immersion-Intense Black Involvement individuals tend to be extremely focused on Black culture and have strong pro-Black and anti-White attitudes,

evidenced by elevated scores on IA and IEAW in conjunction with below average scores on the other CRIS subscales.

In comparison, the Immersion cluster has above-average scores on anti-White, Afrocentric, miseducated, and self-hating attitudes, with anti-White attitudes being the most dominant. The multiple elevations on two Pre-Encounter subscales and two post-Encounter subscales underscore the transitional attitudes or state of "in-betweeness" of the Immersion cluster as an individual's old perspectives are still present (i.e., high miseducated and self-hating attitudes), while simultaneously expressing new pro-Black attitudes and constructing a new frame of reference (i.e., high anti-White and Afrocentric attitudes; Cross & Vandiver, 2001).

Internalization. Two Internalization clusters, Afrocentric and Multiculturalist, were identified in this study. These clusters reflect high positive race salience (Cross & Vandiver, 2001). The Afrocentric cluster has a signature above-average score on Afrocentric attitudes and a secondary elevation on multicultural attitudes, with all other attitudes having below-average scores. Individuals in the Afrocentric cluster are deemed to be pro-Black with low self-hatred and rejection of negative stereotypes about Black people (low miseducated and self-hatred attitudes; Worrell et al., 2006).

The Multiculturalist cluster has a single signature elevation on multicultural attitudes, with all other scores falling below-average. Although individuals in the Multiculturalist cluster have strong positive associations with Black culture and embrace a Black self-identity, they are also accepting of others from different cultures. Multiculturalists are not assimilationists nor are they Afrocentrics, as they have low scores on assimilation and Afrocentric attitudes (Worrell et al., 2006). They seem to reject miseducated ideas and are comfortable with being Black, which is reflected in below-average scores on miseducation and self-hatred.

Summary of cluster findings. Six to seven cluster patterns (Assimilated, Self-Hating, Low Race Salience, Immersion, Immersion - Intense Black Involvement, Afrocentric, and Multiculturalist) were found in this study using cluster analyses. Five (Assimilated, Low Race Salience, Immersion, Afrocentric, and Multiculturalist) of the seven cluster patterns identified in this study replicate and thus provide support for the findings of Worrell et al. (2006).

Worrell et al. (2006) identified the Assimilated cluster pattern in all three samples examined, which included Study One – Predominately White Institution sample (PWI; $N = 333$), Study Two – PWI sample ($N = 314$), and Study Two – Historically Black College sample (HBCU; $N = 306$). The Assimilated cluster pattern had excellent replication rates during cluster analyses replicating 100% across all three blocks in the current study and in all of Worrell et al.'s (2006) samples. The prevalence of the Assimilated cluster for participants in this study (16.52%) was similar to those reported in the Worrell et al.'s study (15% in Study One PWI, 21.3% in Study Two PWI, & 19.6% in Study Two HBCU). The pattern of the Assimilated cluster appears to be similar across PWI samples with a signature above-average elevation on the mean PA subscale scores and a moderate elevation on the IMCI subscale. In comparison, the HBCU sample was also elevated on the PA subscale; however, the IMCI subscale mean was below-average.

The Immersion cluster pattern in this study was also identified in all three of the sample populations examined by Worrell et al. (2006). This cluster pattern had excellent replication rates of 100% for all three of the PWI samples (including the current study); however, the replication rate was only 33% for the HBCU sample indicating that the pattern emerged in only one out of three blocks during cluster analysis. In addition, the prevalence of the Immersion cluster pattern in the HBCU sample (11.8%) was somewhat lower in comparison to the PWI samples (12.3% in

current study, 14.4% in Study One PWI, & 16.6% in Study Two PWI). The lower replication

rates and prevalence of the Immersion cluster in the HBCU sample could be due to context–

Black students attending PWIs are likely to experience more social obstacles (e.g., race-based

discrimination) because they are Black than students at HBCUs; therefore, it seems possible that

Black students at PWIs have a greater chance of experiencing an encounter (e.g., not invited to

join a fraternity because of their race), thus increasing the prevalence of the Immersion cluster

attitudes. The pattern for the Immersion Cluster is similar across all samples: well above-average

elevations on IEAW and IA and average to below-average scores on all other scales.

The Afrocentric cluster pattern was found in the current study and in one of Worrell et

al.'s sample populations: Study One PWI. The Afrocentric cluster had strong replication rates of

100% across blocks during cluster analyses in both studies, with the prevalence rates of

participants slightly different between this study and Study One PWI (21.08% vs. 15.9%,

respectively). The cluster pattern for Afrocentric has a signature well above-average elevation on

IA and an above-average elevation on IMCI. In Study One, the Afrocentric cluster pattern also

had an above average score on IEAW with the remaining subscales having average or below

average scores, whereas the current study did not have an elevation on IEAW.

The Multiculturalist cluster pattern was found in all three of the PWI samples (including

the current study); however, it did not emerge in the sample of participants from Study Two

HBCU. The emergence (or lack thereof) of the Multiculturalist cluster pattern could be due to

context, where multicultural attitudes are more likely to be found in settings where African

Americans are a minority or are interacting with many other racial groups (Worrell et al., 2006).

The Multiculturalist cluster had excellent replication rates of 100% in all three samples, with

similar prevalence rates in the current study in comparison to Study One and Study Two PWI

(22.51%, 16.8%, 15.3%), respectively. The cluster pattern was consistent across samples with a signature well above-average elevation on IMCI and all other subscales being average or below-average scores.

Two new cluster patterns not previously identified by Worrell et al. (2006) emerged in the current study: Self-Hating and Immersion – Intense Black Involvement. In addition, two cluster patterns identified by Worrell et al. (2006) did not replicate in the current study: Miseducated Variant and Identity in Transition. Miseducated Variant emerged in all three of Worrell et al.'s sample populations with cluster analyses replication rates ranging from 66.7% to 100%, whereas Identity in Transition emerged only in the HBCU sample with a replication rate of 67%. Finally, the cluster pattern Low Race Salience was found by Worrell et al in all three of the sample populations examined with replication rates ranging from 66.7% to 100%. However, the Low Race Salience cluster pattern emerged in the current study during cluster analysis (7-cluster solution) and due to its low replication rates (33%) across blocks, the seven-cluster solution was not deemed as a viable solution for interpretation and use. The cluster pattern for Low Race Salience was consistent across all samples with a signature average to above-average score on PA and all other subscale scores being below-average.

In summation, the seven identified clusters (Assimilated, Self-Hating, Low Race Salience, Immersion, Immersion - Intense Black Involvement, Afrocentric, and Multiculturalist) are consistent with and provide further support for the racial identity attitudes described in expanded nigrescence theory (Cross & Vandiver, 2001) and as measured by the CRIS (Vandiver et al., 2000). Finding the same five cluster patterns (Assimilated, Low Race Salience, Multiculturalist, Immersion, and Afrocentric) as identified by Worrell et al. (2006) provides additional empirical support for the stability of these clusters. Thus, the results suggest that there

may be consistent racial identity clusters in the population, an assumption that underlies much of the research on racial identity to date (Carter, 1996; Cross & Vandiver, 2001; Helms, 1995; Neville & Lily, 2000; Worrell et al., 2006). Furthermore, the discovery of two new clusters (Self-Hating and Immersion-Intense Black Involvement) potentially extends the understanding of Black racial identity by offering additional cluster patterns that are congruent with the expanded nigrescence theory. The instability of some of the cluster patterns (e.g., Afrocentric and Multiculturalist did not replicate across all of Worrell et al.'s sample populations; Self-Hating and Immersion – Intense Black Involvement did not emerge in Worrell et al.'s results; Miseducated Variant and Identity in Transition did not replicate in the current study; Low Race Salience had limited replication rates in the current study and in Study One PWI) may be due to a number of reasons. Sampling differences such as maturation, age, geographic location, and identity development might affect the existence and prevalence of cluster patterns. Two, a plethora of Black racial identities types exist; the CRIS taps six identity types as exemplars of this spectrum (Cross & Vandiver, 2001); thus, it is possible that some of the complexities of racial identity remain untapped by the CRIS. And four, some cluster patterns (e.g., Assimilated, Immersion) may be more common in the population than others (e.g., Afrocentric), based on the comparisons of cluster prevalence found in the current study and by Worrell et al. (2006).

Predictive Validity of CRIS Cluster Solutions

Racial identity clusters were hypothesized to have predictive utility in the delineation of acculturation and social preference. Predictions for hypothesis four were that (a) individuals in the Multiculturalist, Afrocentric or Immersion clusters would embrace traditional Black culture more than individuals in other CRIS clusters; (b) individuals in the Assimilated cluster would be less accepting of traditional Black culture than individuals in the other CRIS clusters; and (c) the

other CRIS clusters (i.e., Self-Hating) were expected to fall in the middle range on acceptance of traditional Black culture. Hypothesis four was supported in that CRIS cluster status differed on mean acculturation scores (AAAS-R) in the expected pattern.

Individuals in the Assimilated cluster were likely to rate themselves as being less accepting of traditional Black culture than those in the Afrocentric or Immersion clusters. Those who were in the Self-Hating cluster on average were likely to rate themselves as less accepting of traditional Black culture than those in the Afrocentric cluster. In addition, two trends were identified in the findings, although they should be considered with caution, as they could be spurious in nature: (a) Individuals in the Self-Hating cluster were likely to rate themselves as less accepting of traditional Black culture than individuals in the Immersion cluster; and (b) Those in the Multiculturalist cluster were likely to report they were less accepting of traditional Black culture than individuals in the Afrocentric cluster. All of the findings and trends are consistent with the conceptual tenets of these racial identity attitudes described in expanded nigrescence theory (Cross & Vandiver, 2001). The findings are associated with medium effect sizes for all of the relationships reported, providing some evidence on the importance of these relationships; however, the trends have small effect sizes, which only reinforces the need to be cautious in drawing strong conclusions about these findings.

These results parallel as well as extend the findings reported by Helm (2001), where multiple regression analyses were used and revealed that IEAW was the only CRIS subscale found to be a significant predictor of the AAAS-R total scores. In the current study, using cluster status instead of actual CRIS scores, the one-way ANOVA findings provide indirect support for Helm's findings as well as underscore the importance of using all six CRIS scores as a coherent whole. Comparing the pattern of CRIS scores for the four significant clusters on AAAS-R

revealed that the Assimilated and Immersion cluster patterns had the lowest and highest (respectively) IEAW subscale mean score. Thus, it is not surprising that individuals with an Assimilated cluster pattern would not have an elevated anti-White as well as not embrace traditional Black cultural values. In contrast, it is equally understandable that individuals in the Immersion cluster would likely be more anti-White, while at the same time embrace traditional Black cultural values. But individuals in the Self-Hating and Afrocentric clusters, as expected, did not have elevated IEAW subscale scores (T-scores between 45-50), and also scored differently on the AAAS-R. On average anti-White is not the critical attitude of Afrocentric individuals, as measured by the CRIS, but instead a pro-Black attitude is. Understandably, someone who has a self-hating pattern about being Black would not necessarily be anti-White, as the racial salience is negative toward being Black, not toward Whites. Even though IEAW was elevated in the Immersion – Intense Black Involvement cluster, Afrocentric was also elevated, possibly moderating the relationship between anti-White and acculturation scores, resulting in no mean difference between Immersion – Intense Black Involvement and Afrocentric or Immersion. Thus, the differential elevation of IEAW seems to highlight how clustering the CRIS scores provides a more nuanced and complex view of racial identity in relation to the salience placed on traditional Black culture than when the CRIS subscales are treated as individual indicators of racial identity as used in Helm's study.

Hypothesis five had two predictions: (a) Individuals in the Afrocentric, Immersion, and Assimilated clusters would have a more limited range of social distance than individuals in the other CRIS clusters; and (b) Individuals in the Multiculturalist cluster would have a universal social closeness to all racial and minority groups more so than individuals in the other CRIS clusters. This hypothesis was supported; however, because the homogeneity of covariance

assumption was not met for all cell comparisons, all findings were interpreted with caution due to the likelihood that significance could have emerged erroneously (Tabachnick & Fidell, 1996).

The discriminant function was named *dominant culture group preference* because of the importance given to majority or perceived dominant cultural groups (i.e., Whites, Asians, and Jews) in contrast to the lack of attention given to socially marginalized groups (i.e., other Blacks, Latinos, and Gays/Lesbians). Individuals in the different clusters varied in the degree of social distance they preferred to have between cultural groups. The effect sizes for the relationship between the discriminant function and the synthetic composite of social distance attitudes was large, which provides support for the importance of this relationship. On average, individuals in the Self-Hating and Assimilated clusters indicated a preference for social closeness with majority/perceived dominant cultural groups such as Whites, Jews, and Asians; whereas, individuals in the Immersion, Immersion - Intense Black Involvement, and Afrocentric clusters indicated a preference for social distance with majority/dominant cultural groups. Individuals in the Multiculturalist cluster indicated that they did not have a preference for being socially close or distant from majority/dominant cultural groups.

These findings are understandable in context of the expanded nigrescence theory. First, the neutral social position endorsed by individuals in the Multiculturalist cluster is consistent with how Multiculturalists are conceptualized in the expanded nigrescence theory (Cross & Vandiver, 2001), in that those deemed as Multiculturalists have a strong Black identity while also valuing other cultures. Multiculturalists appear to be equally comfortable socializing with majority and non-majority cultures, indicating no preference for one cultural group over another. Furthermore, the neutral social stance of Multiculturalists seems to align with Anglin's (2003) finding that high multiculturalist attitudes predicted good college adjustment in a sample of

Black college students; thus, Multiculturalists might adjust to college, regardless of the demographic composition of the campus, better than individuals in other CRIS clusters because they may seek out opportunities for establishing social supports/connections due to their inclusive attitudes and a neutral social preference.

Second, the finding that individuals in the Immersion clusters (Immersion and Immersion - Intense Black Involvement) and Afrocentric cluster prefer to be socially distant from majority/perceived dominant cultures (i.e., Whites, Jews, and Asians) is also in keeping with the expanded nigrescence theory. Individuals in the Immersion clusters embrace Black culture and have strong pro-Black attitudes, while simultaneously withdrawing from White American culture and endorsing anti-White attitudes; therefore, it is understandable that social distance from the majority culture would be preferred. Individuals in the Afrocentric cluster have strong pro-Black identity attitudes and have a singular focus on the Black community; therefore, social distance with the majority culture is congruent with these attitudes. Afrocentrics' preference for social distance from majority culture seem to also fit with Anglin's (2003) finding that high Afrocentric attitudes predicted poor college adjustment; thus, Afrocentrics on a predominately White campus might experience difficulty adjusting because of the necessary social closeness that is required in day-to-day campus life. In addition, the findings are also consistent with Townes (2003) findings that individuals with high Afrocentric and anti-White attitudes preferred Black counselors, in that they might have had a preference for social distance with majority culture.

Third, the finding that individuals in the Pre-Encounter clusters (Assimilated and Self-Hating) prefer to be socially close to majority culture is also consistent with the expanded nigrescence theory. Assimilated individuals have a strong reference group orientation to their American identity and may experience race as insignificant; therefore, it is fitting that they

would prefer to be socially close with the majority culture. Individuals in the Self-Hating cluster are likely to prefer less social distance with majority culture due to their negative feelings and beliefs about their own Blackness. The findings are consistent with Townes's (2003) finding that individuals with high assimilated attitudes did not prefer Black counselors, in that they might have had a preference for social closeness with majority culture.

The findings for hypotheses four and five provide support that cluster membership could be useful in understanding the nature of the relation between Black racial identity and social patterns such as acculturation and social distance. The ability to examine racial identity in a multidimensional way using clusters gives researchers and clinicians a more complete picture of the complexity and richness of racial identity and its role in the day-to-day functioning of Black individuals. The findings that emerged from using multivariate techniques in examining the relationship between Black racial identity and other sociocultural variables stand in sharp contrast to what was found when using univariate procedures, reinforcing the contention that Black identity is a complex construct that needs to be treated as a multivariate construct.

Limitations

Generalizability of the findings due to the sample used is a limitation of the study. The sample of participants was not randomly selected from the population of U. S. Black college students. The sample was comprised of Black college students attending a predominately White institution in the mid-Atlantic region of the U. S., which may not be reflective of Black students attending Historically Black colleges, small colleges, or private universities across various geographical regions of the country. The majority of participants were female and undergraduates between the ages of 18 and 21, which mirrors the enrollment statistics for Black

college students at predominately White institutions; again, this may not be reflective of other academic settings.

Another possible limitation to this study involved a critical incident that occurred during the Spring of 2005 while data were being collected. Black student groups on campus organized gatherings and protests due to an on-campus incident where a White student was alleged to have yelled racial epithets at a prominent Black student. This critical incident may have increased study participants' awareness about issues of race and thus may have influenced their reporting of social attitudes. It is conceivable that the newly emerged CRIS cluster, Immersion – Intense Black Involvement, could have resulted from capturing this post encounter data. However, examination of the Spring 2005 data in comparison to the data collected in subsequent semesters indicated that the prevalence of CRIS clusters did not differ.

The self-report nature of all the instruments is a limitation because the use of such measures tends to inflate the correlations found among variables (Paulhaus, 1991). In addition, researchers cannot know how truthfully respondents answer questions. Social desirability might have affected the way participants answered the items. A possible solution for this limitation could be to collect supporting data from a variety of third party sources (e.g., parents, friends, acquaintances, public records, etc.) regarding the participant's social attitudes.

Although the instruments used in this study exhibit adequate psychometric properties, some researchers have encountered problems with the BSDS-R (e.g., Byrnes & Kiger, 1988; Rollock & Vrana, 2005) in measuring social distance attitudes of African Americans. The BSDS-R was originally constructed to measure the social distance attitudes of White people towards other racial/ethnic groups, and has since been heavily used in social science research to measure social distance attitudes of all groups (Miller, 1991). However, some researchers have

questioned whether the items tap Black peoples attitudes toward other Black people and other race/ethnic groups as accurately as it does for White people (Byrnes & Kiger, 1988; Rollock & Vrana, 2005). Therefore, the use of the BSDS-R to measure social distance in an African American/ Black population may be a limitation of the study. In addition, there is insufficient validity for the AAAS-R scores. Although few scales have been developed for measuring the acculturation of African Americans (Matsudaira, 2006), there have not been any published studies supporting the psychometric properties reported by the authors (Klonoff & Landrine, 2000) following the revision of the scale. In fact, only the total scores could be used in this study, as the 8-factor structure was not supported through an EFA. Finally, although there has been support for the CRIS indicating that the scores reflect a psychometrically sound scale measuring the expanded nigrescence model (Helm, 2001; Vandiver et al., 2001, 2002; Worrell et al., 2004), the CRIS may need to be updated and/or more work may be needed to determine whether it is measuring the full spectrum of Black racial identity including Biracial, Multiracial, and Mixed Heritage individuals, Black Hispanics, etc.

The absence of language consideration is a potential limitation to this study. Linguistic properties may be one of the most facile means of ascribing and/or demonstrating a racial or cultural identity (Anderson, 1990; Portes & Zhou, 1993); however, Black vernacular or nonstandard English was not considered in this study in regards to the measures used or demographic data collected. The use of Black vernacular has been described as a verbal representation of race (Anderson, 1990; Waters, 1994) and is often used as a means of identifying oneself as Black and indicating certain social characteristics (e.g., geographic origin such as Southern, urban, rural, etc.) that in turn may be used to bridge social connections with other people with-in and between racial groups (Waters, 1994). However, selecting and validly

measuring a specific language to use in Black research will be an ongoing challenge, as there is no one form of Black English or nonstandard English. Multiple hybrids of the American English are used in the United States due to the influence of slavery, the immigration of Caribbean and Spanish speaking Black individuals, and the increased socialization of biracial/multiracial children of various nationalities/ethnicities.

The sample size is another limitation of the study in regards to the stability of CRIS clusters. The sample size used in this study allowed for 120 cases per block in the cluster analysis, thus meeting the minimum criterion of 100 cases per block (McDermott, 1998). Although the minimum criterion is 100 cases per block, it is recommended that blocks contain between 150 and 300 cases (McDermott, 1998). Thus, the stability of the clusters found in the current study cannot be assured and future research is needed on clustering the CRIS scores with larger sample sizes ($N > 500$) to determine whether the clusters found are supported.

Clinical Implications

The results of this study could be applicable to mental health settings. For example, counselors may need to consider Black racial identity attitudes when working with Black clients, possibly assessing their attitudes and the role they play in day-to-day functioning (Cross & Vandiver, 2001). As found in this study, racial identity attitudes may function as predictors of an individual's preference for social distance or closeness with others from similar or different racial/ethnic and social backgrounds and may also be reflective of the client's worldview in regards to cultural values and identity salience. This research could prove to be useful for clinicians in drawing meaning from CRIS scores and possibly lead to a better understanding of a client's social experience and value orientation, which could in turn shape the clinician's approach to treatment.

Past studies have provided support for the link between racial identity attitudes and Black individuals' help-seeking behaviors (Townes, 2003) and client's counselor preference (Helms & Carter, 1991). Townes (2003) found that individuals with anti-White and/or Afrocentric attitudes preferred Black counselors. In addition, individuals with low assimilation attitudes also preferred Black counselors (Townes, 2003). Helms and Carter (1991) found that Black men had a stronger preference for White male counselors than did their female counterparts. The current study found that individuals with an Afrocentric, Immersion, or Immersion – Intense Black Involvement cluster status preferred social distance from members of the majority/perceived dominant cultures (Whites, Jews, and Asians), and that individuals in the Assimilated and Self-Hating clusters had a preference for social closeness with members of the majority/dominant cultures. All of these findings regarding clients' counselor preference are important when considering how a Black client may respond to counseling and whether or not they will remain in counseling until treatment concludes. Thus, the findings only reinforce past findings and recommendations that it is important to consider racial identity attitudes when assigning/referring clients to particular counselors and also in creating treatment approaches that are consistent with their value systems (Helms, 1984).

Using CRIS subscales to create racial identity clusters for Black clients has the potential to improve treatment planning by clinicians, and thus improve the quality of services rendered to Black clients. Although the stability of CRIS cluster patterns continues to be established, support for the existence of cluster patterns across samples is growing. Based on the CRIS cluster patterns found in this study and by Worrell et al. (2006), a clinician could use clients CRIS scores to get a general sense of their cluster pattern. The examination of Black racial identity in this multidimensional way could highlight the complexity of a Black client's presenting concerns

and thus allow for a more accurate assessment of the day-to-day functioning of clients. An understanding of racial identity by the client and clinician may lead to the construction of therapeutic interventions that meet the clinical treatment needs and promote growth in clients. For example, clinical work with an Afrocentric client might include more race-specific interventions and dialogue than clinical work with an Assimilated client.

The findings may also be potentially informative for clinical training programs by providing a contextual understanding for how sociocultural variables such as acculturation and social distance intersect with and are influenced by racial identity. The complexities of racial identity are important to consider in order to more effectively develop interventions tailored to the needs of individuals with different CRIS clusters. For example, a clinician who is aware that their Black client's racial identity attitudes fall into an Afrocentric, Immersion or Immersion - Intense Black Involvement cluster pattern might be more cautious with labeling a client as being "resistant" or "paranoid" about treatment, and instead engage the client in talking about what it is like for them to be in counseling, and then mediate the identified challenges/barriers accordingly. Considering the growing empirical support for the expanded nigrescence theory and the CRIS, training programs should consider teaching students the most current nigrescence theory and its possible use in understanding the heterogeneity of Black identity in America and in working with this population, instead of continuing to use the original (Cross, 1971) or revised (Cross, 1991) nigrescence models (e.g., Sue & Sue, 2003).

Future Research

It has been well documented in the psychology literature that Black clients are at-risk of being over-pathologized, under-treated, and misdiagnosed by clinicians (e.g., Garretson, 1993; Mukherjee, Shukla, & Woodle, 1983; Primm, 2005; Trierweiler, Muroff, Jackson, Neighbors, &

Munday, 2005). Cultural dynamics are likely to influence the client's description of their presenting concerns as well as the clinician's clinical judgment of the client's presenting concerns (Atkinson, Morten, & Sue, 1989; Garretson, 1993). A recommendation for future research is to study the use of CRIS clusters in clinical intake information and the effect it has on clinicians' abilities to accurately diagnose and create treatments plans for Black clients. Clients' would be given the CRIS at the time of intake in addition to other standard intake measures (e.g., Beck Depression Inventory, Brief Psychiatric Rating Scale, Structured Clinical Interview Using DSM-IV). Repeated measurement of the clients' racial identity and qualitative measures of the clinicians' clinical judgment could be administered throughout the course of treatment. This research might potentially provide support for the importance of assessing racial identity as a means of improving treatment outcomes for Black clients. CRIS clusters may serve as a critical piece of information that bridges the client's presenting concerns to an appropriate diagnosis and/or treatment approach. For example, if a clinician knew that a client was in the Immersion cluster and the client made statements that would generally be described as "paranoid" (e.g., "I'm suspicious of White people" or "I feel like the police are always out to get me or are watching me"), the clinician might be more aware that these statements could be a result of high race salience as opposed to assuming they are indicative of a severe diagnosis (e.g., Paranoid Personality Disorder, Delusional Disorders, Paranoid Schizophrenia). Knowing that the client is in an Immersion cluster would help the clinician frame the information that the client is giving, and thus would ideally lead to more accurate diagnosis and treatment planning.

Another recommendation for future research is the replication of the current study using a larger sample size to see whether the newly emerged clusters (Self-Hating and Immersion-Intense Black Involvement) replicate. Future replication of this study and other CRIS cluster

studies (Worrell et al., 2006) is needed to provide support for the existence and stability of racial identity clusters.

Future research could replicate the design and analyses of the current study while examining new variables. Specifically, demographic variables such as age, socioeconomic status, and phenotype could be individually examined to determine whether the CRIS cluster patterns found in the current study replicate across demographics and whether the prevalence is similar (e.g., Will the same racial identity cluster patterns identified in samples of college students emerge in a sample of adults, and will the prevalence be similar? Are particular cluster patterns more/less prevalent when socioeconomic status is low or high?). In addition, further examination of the predictive validity of cluster membership could be expanded in future studies to examine other variables (e.g., achievement, cultural mistrust, depression, and self-esteem) as a means of building support for the clinical utility of the CRIS.

Another research suggestion is to extend the current study by utilizing other methods of analyses. Specifically, a predictive discriminant analysis could be used to determine whether certain variables (e.g., acculturation, social distance) predict group membership, whereas this study used a descriptive discriminant analysis to determine whether group membership predicted scores on continuous variables. In addition, the current study used only quantitative analyses to examine the research questions. Qualitative methods could be used as a means of gaining insight into the complexity of racial identity as it relates to the personal experiences of individuals.

Conclusion

Empirical support for the racial identity attitudes and theoretical underpinnings described in the expanded nigrescence theory (Cross & Vandiver, 2001), in addition to the construct validity of the CRIS (Vandiver et al., 2000) were further strengthened in this study. Additional

support for the existence of CRIS clusters, as conceptualized in expanded nigrescence theory and initially found by Worrell et al. (2006), was also further established. Empirical support for the predictive validity of racial identity clusters in predicting levels of acculturation and social distance was found. The results of this study are potentially far reaching in regards to clinical practice and future research. Using the CRIS racial identity clusters in diagnosis, case conceptualizations, and treatment planning as mediators in improving treatment outcomes while decreasing the over-pathologizing and misdiagnosis of Black clients provides direction for future researchers, practitioners, and educators.

References

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Akbar, N. (1989). Nigrescence and identity: Some limitations. *The Counseling Psychologist, 17,* 258-263.

Anderson, E. (1990). *Streetwise: Race, class and change in an urban community.* Chicago: University of Chicago Press.

Andrews, G., Singh, M., & Bond, M. (1993). The defense style questionnaire. *Journal of Nervous & Mental Disease, 181,* 246-256.

Anglin, D. M. (2003). The predictive effects of racial socialization, racial identity, and African self-consciousness on African American college adjustment and psychological defenses. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64* (7-B), 3512.

Arce, C. A. (1981). A reconsideration of Chicano culture and identity. *Daedalus, 110,* 177-192.

Atkinson, D. R., Morten, G., & Sue, D. W. (Eds.). (1989). *Counseling American minorities: A cross-cultural perspective* (3rd ed.). Dubuque, IA: William C. Brown.

Bagley, C. A., & Copeland, E. J. (1994). African and African American graduate students' racial identity and personal problem-solving strategies. *Journal of Counseling and Development, 73,* 167-171.

Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology, 20,* 179-189.

Baldwin, J. A. (1984). African self-consciousness and mental health of African Americans. *Journal of Black Studies, 15*, 177-194.

Baldwin, J. A., & Bell, Y. R. (1985). The African Self-Consciousness Scale: An Afrocentric personality questionnaire. *Western Journal of Black Studies, 9,* 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,* 27-41.

Bogardus, E. S. (1925). Measuring social distances. *Journal of Applied Sociology, 9*, 299-308.

Bogardus, E. S. (1933). A social distance scale. *Sociology & Social Research, 17,* 265-271.

Bogardus, E. S. (1938). Social distance and its practical implications. *Sociology & Social Research, 22,* 462-476.

Bogardus, E. S. (1947). Measurement of personal-group relations. *Sociometry, 10,* 306-311.

Burlew, A. K., & Smith, L. R. (1991). Measures of racial identity: An overview and a proposed framework. *Journal of Black Psychology, 17,* 53-71.

Burlew, M. M. (1998). *SAS macro programming made easy.* Cary, NC: SAS Institute.

Burt, M. R. (1980). Cultural myths and support for rape. *Journal of Personality and Social Psychology, 38,* 217-230.

Byrnes, D. A., & Kiger, G. (1988). Contemporary measures of attitudes toward Blacks. *Educational and Psychological Measurement, 48*, 107-118.

Campbell, D. T. (1952). The Bogardus Social Distance Scale. *Sociology & Social Research, 36*, 322-326.

Carter, R. T. (1990). Cultural value differences between African Americans and White Americans. *Journal of College Student Development, 31,* 71-79.

Carter, R. T. (1996). Exploring the complexity of racial identity attitude measures. In J. C. Impara (Series Ed.), G. R. Sodowsky, & J. C. Impara (Vol. Ed.), *Multicultural*

assessment in counseling and clinical psychology (pp. 193-223). Lincoln, NE: Buros Institute of Mental Measurements.

Carter, R. T., & Helms, J. E. (1987). The relationship of Black value-orientations to racial attitudes. *Measurement and Evaluation in Counseling and Development, 17,* 185-195.

Carter, R. T., & Helms, J. E. (1988). The relationship between racial identity attitudes and social class. *Journal of Negro Education, 57,* 22-30.

Cass, J. C. (1979). Homosexuality identity formation: A theoretical model. *Journal of Homosexuality, 4,* 219-235.

Cattell, R. B. (1966). *Handbook of multivariate experimental psychology.* Chicago: Rand McNally.

Clark, K. B., & Clark, M. P. (1939). Segregation as a factor in the racial identification of Negro pre-school children: A preliminary report. *Journal of Experimental Education, 8,* 161-163.

Clark, K. B., & Clark, M. P. (1940). Skin color as a factor in racial identification of Negro pre-school children. *Journal of Social Psychology, 11,* 159-169.

Clark, K. B., & Clark, M. P. (1950). Emotional factors in racial identification and preference in Negro children. *Journal of Negro Education, 19,* 341-350.

Corrigan, P. W., Rowan, D., Green, A., Lundin, R., River, P., Uphoff-Wasowski, K., & White, K. (2002). Challenging two mental illness stigmas: Personal responsibility and dangerousness. *Schizophrenia Bulletin, 28,* 293-310.

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10,* 1-9.

Cross, W. E., Jr. (1971). The Negro-to-Black conversion experience. *Black World, 20*, 13-27.

Cross, W. E., Jr. (1978). The Cross and Thomas models of psychological nigrescence. *Journal of Black Psychology, 5,* 13-19.

Cross, W. E., Jr. (1989). Nigrescence: A nondiaphanous phenomenon. *The Counseling Psychologist, 17*, 273-276.

Cross, W. E., Jr. (1991). *Shades of Black: Diversity in African American identity.* Philadelphia: Temple University Press.

Cross, W. E., Jr. (1995). The psychology of nigrescence: Revising the Cross model. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 93-122). Thousand Oaks, CA: Sage.

Cross, W. E., Jr., & Fhagen-Smith, P. E. (2001). Patterns of African American identity development: A life span perspective. In C. L. Wijeyesinghe & B. W. Jackson (Eds.), *New perspectives on racial identity development: A theoretical and practical anthology* (pp. 243-270). New York: New York University Press.

Cross, W. E., Jr., & Vandiver, B. J. (2001). Nigrescence theory and measurement: Introducing the Cross Racial Identity Scale (CRIS). In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 371-393). Thousand Oaks, CA: Sage.

Cudeck, R. (2000). Exploratory factor analysis. In H. E. A. Tinsley & S. D. Brown (Eds.), *Handbook of applied multivariate statistics and mathematical modeling* (pp. 265-296). San Diego, CA: Academic Press.

Dahlstrom, W. G., Welsh, G. S., & Dahlstrom, L. E. (1972). *An MMPI handbook: Vol. 1. Clinical interpretation.* Minneapolis, MN: University of Minnesota Press.

Davidson, J. P. (1975). Empirical development of a measure of Black student identity. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 35*, 7076A.

Derogatis, L. R. (1993). *BSI, Brief Symptom Inventory: Administration, scoring, and procedures manual.* Minneapolis, MN: NCS Pearson.

Downing, N. E., & Roush, K. (1985). From passive acceptance to active commitment: A model of feminist identity development for women. *Counseling Psychologist, 13,* 695-709.

Erikson, E. (1968). *Identity, youth, and crisis.* New York: W. W. Norton.

Fischer, E. H., & Farina, A. (1995). Attitudes Toward Seeking Professional Psychological Help: A shortened form and considerations for research. *Journal of College Student Development, 36,* 368-373.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Garretson, D. (1993). Psychological misdiagnosis of African Americans. *Journal of Multicultural Counseling and Development, 21,* 119-127.

Gordon, V. (1980). *The self-concept of Black Americans.* Washington, DC: University Press of America.

Guttman, L. (1950). The basis for scalogram analysis. In A. Stouffer (Ed.), *Measurement and prediction* (pp. 196-205). New York: Wiley.

Hair, J. F., Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis with readings* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Hall, W. S., Freedle, R., & Cross, W. E., Jr. (1972). *Stages in the development of a Black identity.* Iowa City, IA: American College Testing Program.

Hartley, E. L. (1946). *Problems in prejudice*. New York: King's Crown Press.

Hartley, R. E. (1952). *Fundamentals of social psychology*. New York: Alfred A. Knopf.

Helm, K. M. (2001). A theoretical and psychometric analysis of the revised Black racial identity development model and the multidimensional model of racial identity: Outcomes on the Revised African American Acculturation Scale-33. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 62* (10-B), 4833.

Helms, J. E. (1984). Toward a theoretical explanation of the effects of race on counseling. *Counseling Psychologist, 12,* 153-165.

Helms, J. E. (1989). Considering some methodological issues in racial identity research in counseling psychology. *The Counseling Psychologist, 17,* 227-252.

Helms, J. E. (1990). An overview of Black racial identity theory. In J. E. Helms (Ed.), *Black and White racial identity: Theory, research, and practice* (pp. 9-47). New York: Greenwood.

Helms, J. E. (1995). An update of Helm's White and people of color racial identity models. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 181-198). Thousand Oaks, CA: Sage.

Helms, J. E., & Carter, R. (1991). Relationships of White and Black racial identity attitudes and demographic similarity to counselor preferences. *Journal of Counseling Psychology, 38,* 446-457.

Helms, J. E., & Piper, R. E. (1994). Implications of racial identity theory for vocational psychology. *Journal of Vocational Behavior, 44,* 124-136.

Hood, D. W. (1998). Racial identity attitudes and African American students' academic achievement, campus involvement, and academic satisfaction. *Dissertation Abstracts International, 59* (3-A), 749A.

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30,* 179-185.

Hughes, M., & Demo, D. H. (1989). Self-perceptions of Black Americans' self-esteem and personal efficacy. *American Journal of Sociology, 95,* 132-159.

Jackson, B. W. (1976). Black identity development. In L. Golubschick & B. Persky (Eds.), *Urban social and educational issues* (pp. 158-164). Dubuque, Iowa: Kendall/Hunt.

Jackson, E. F., & Curtis, R. F. (1968). Measuring social distance. In H. M. Blalock & A. B. Blalock (Eds.), *Methodology in social research* (pp. 125-126). Boston: McGraw-Hill.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory: Versions 4a and 54.* Berkeley: University of California, Berkeley, Institute of Personality and Social Research.

Johnson, L. P. (1972). The correlates of the Black identity complex. *Dissertation Abstracts International,* 36 (10A), 2912.

Kaiser, H. F. (1970). A second-generation little jiffy. *Psychometrika, 35,* 401-415.

Kim, J. (1981). Processes of Asian-American identity development: A study of Japanese American women's perceptions of their struggle to achieve positive identities as Americans of Asian ancestry. *Dissertation Abstracts International,* 42 (12B), 4917.

Klonoff, E. A., & Landrine, H. (2000). Revising and improving the African American Acculturation Scale. *Journal of Black Psychology, 26,* 235-261.

Koss, M. P., & Oros, C. (1982). Sexual experiences survey: A research instrument for investigating sexual aggression and victimization. *Journal of Consulting and Clinical Psychology, 50,* 455-457.

Landrine, H., & Klonoff, E. A. (1994). The African American Acculturation Scale:

Development, reliability, and validity. *Journal of Black Psychology, 20,* 104-127.

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

Levinson, D. (1978). *The seasons of a man's life.* New York: Alfred Knopf.

Lipsmeyer, M. E. (1984). *The measurement of religion and its relationship to mental health and impairment.* Unpublished scale.

Martin, J. K., & Hall, G. C. N. (1992). Thinking Black, thinking internal, thinking feminist. *Journal of Counseling Psychology, 39,* 509-514.

Matsudaira, T. (2006). Measures of psychological acculturation: A review. *Transcultural Psychiatry, 43,* 462-487.

McConahay, J. B. (1986). Modern racism, ambivalence, and the Modern Racism Scale. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 91-126). San Diego, CA: Academic Press.

McDermott, P. A. (1998). MEG: Megacluster analytic strategy for multistage hierarchical grouping with relocations and replications. *Educational and Psychological Measurement, 58,* 677-686.

Miller, D. (1991). *Handbook of research design and social measurement*. Newbury Park, CA: Sage.

Milliones, J. (1973). Construction of the developmental inventory of Black consciousness. (Doctoral dissertation, University of Pittsburgh, 1973). *Dissertation Abstracts International,* 35-02, 1241-A.

Milliones, J. (1980). Construction of a Black consciousness measure: Psychotherapeutic implications. *Psychotherapy Theory Research and Practice, 17,* 458-462.

Mojena, R. (1977). Hierarchical grouping methods and stopping rules – An evaluation. *Computer Journal, 20,* 359-363.

Morten, G., & Atkinson, D. R. (1983). Minority identity development and preference for counselor race. *Journal of Negro Education, 52,* 156-161.

Mukherjee, S., Shukla, S., Woodle, J. (1983). Misdiagnosis of schizophrenia in bipolar patients: A multiethnic comparison. *American Journal of Psychiatry, 140,* 1571-1574.

Murphy, G., & Likert, R. (1938). *Public opinion and the individual.* New York: Harper & Brothers.

Neville, H. A., & Lily, R. L. (2000). The relationship between racial identity cluster profiles and psychological distress among African American college students. *Journal of Multicultural Counseling and Development, 28,* 194-207.

Nobles, W. (1976). Extended self: Rethinking the so-called Negro self-concept. *Journal of Black Psychology, 2,* 15-24.

Nobles, W. (1989). Psychological nigrescence: An Afrocentric review. *The Counseling Psychologist, 17*, 253-257.

O'Neil, J. M., Helms, B., Gable, R., David, L., & Wrightsman, L. (1986). Gender Role Conflict Scale: College men's fear of femininity. *Sex Roles, 14,* 335-350.

Parham, T. A. (1989). Cycles of psychological nigrescence. *The Counseling Psychologist, 17*, 187-226.

Parham, T. A., & Austin, L. A. (1994). Career development and African Americans: A contextual reappraisal using the nigrescence construct. *Journal of Vocational Behavior, 44*, 139-154.

Parham, T. A., & Helms, J. E. (1981). The influence of Black students' racial identity attitudes

on preference for counselor's race. *Journal of Counseling Psychology, 28*, 250-258.

Parham, T. A., & Helms, J. E. (1985). Relation of racial identity attitudes to self-actualization and affective states of Black students. *Journal of Counseling Psychology, 32*, 431-440.

Paulhaus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes: Volume 1 of measures of social psychology attitudes.* San Diego, CA: Academic Press.

Plummer, D. L. (1995). Patterns of racial identity development of African American adolescent males and females. *Journal of Black Psychology, 21,* 168-180.

Ponterotto, J. G. (1988). Racial consciousness development among White counselor trainees: A stage model. *Journal of Multicultural Counseling and Development, 16,* 146-156.

Ponterotto, J. G. (1989). Expanding directions for racial identity research. *The Counseling Psychologist, 17,* 264-272.

Pope-Davis, D. B., Liu, W. M., Ledesma-Jones, S., & Nevitt, J. (2000). African American acculturation and Black racial identity: A preliminary investigation. *Journal of Multicultural Counseling and Development, 28,* 98-112.

Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy, 530,* 74-96.

Primm, A. (2005). Misdiagnosis. *Drug Benefit Trends, 17,* 354-363.

Redden, C. E. (2003). Racial identity and acculturative stress among African American college women. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64* (7-B), 3512.

Richardson, T. Q., & Helms, J. E. (1994). The relationship of the racial identity attitudes of

Black men to perceptions of "parallel" counseling dyads. *Journal of Counseling and Development, 73,* 172-177.

Roland, A. (1994). Identity, self, and individualism in a multicultural perspective. In E. P. Salett & D. R. Koslow (Eds.), *Race, ethnicity, and self: Identity in multicultural perspective* (pp. 39-54)*.* Washington, DC: National Multicultural Institute.

Rollock, D. & Vrana, S. R. (2005). Ethnic social comfort: Construct validity through social distance measurement. *Journal of Black Psychology, 31*, 386-417.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Rowley, S. J., Sellers, R. M., Chavous, T. M., & Smith, M. A. (1998). The relationship between racial identity and self-esteem in African American college and high school students. *Journal of Personality and Social Psychology, 74,* 715-724.

Sanchez, D. (2002). The relationship among racial identity attitudes, religious orientation and ego identity status in Black college students. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 63* (4-B), 2072.

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,* 8-27.

Sellers, R. M., Rowley, S. J., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology, 73,* 805-815.

Sherry, A. (2006). Discriminant analysis in counseling psychology research. *The Counseling Psychologist, 34,* 661-683.

Siegel, S., & Shepherd, I. L. (1959). An ordered metric measure of social distance. *Sociometry, 22,* 336-342.

Singer, J. (1988). Using SAS Proc Mixed to fit multilevel models, hierarchical models, and individual growth models. *Journal of Educational and Behavioral Statistics, 24,* 323-355.

Smith, E. M. (1989). Black racial identity development: Issues and concerns. *The Counseling Psychologist, 17,* 277-288.

Spence, J. T., Helmreich, R. L., & Stapp, J. (1973). A short version of the Attitudes Toward Women Scale. *Bulletin of the Psychonomic Society, 2,* 219-220.

SPSS, Inc. (2007). *SPSS Base 15.0 Applications Guide.* Chicago: Author.

Stevenson, H. C., Cameron, R., Herrero-Taylor, T., & Davis, G. Y. (2002). Development of the Teenage Experience of Racial Socialization Scale: Correlates of race-related socialization from the perspective of Black youth. *Journal of Black Psychology, 28,* 84-106.

Stewart, T. L., Weeks, M., & Lupfer, M. B. (2003). Spontaneous stereotyping: A matter of prejudice? *Social Cognition, 21,* 263-298.

Sue, D. W., & Sue, D. (2003). *Counseling the culturally diverse: Theory and practice* (4th ed.). New York: John Wiley & Sons.

Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins.

Taylor, R. D., Casten, R., Flickinger, S. M., Roberts, D., & Fulmore, C. D. (1994). Explaining the school performance of African American Adolescents. *Journal of Research on Adolescence, 4,* 21-44.

Taylor, C. M., & Howard-Hamilton, M. F. (1995). Student involvement and racial identity attitudes among African American males. *Journal of College Student Development, 36,*

330-336.

Terrell, F., & Terrell, S. L. (1981). An inventory to measure cultural mistrust among Blacks. *Western Journal of Black Studies, 5,* 180-184.

Thomas, C. W. (1971). *Boys no more.* Beverly Hills, CA: Glencoe Press.

Thomas, A. J., & Speight, S. L. (1999). Racial identity and racial socialization attitudes of African American parents. *Journal of Black Psychology, 25,* 152-170.

Thompson, B., & Daniel, L. G. (1996). Factor analytic evidence for the construct validity of scores: A historical overview and some guidelines. *Educational and Psychological Measurement, 56,* 197-208.

Townes, D. L. (2003). The impact of cultural mistrust, racial identity, and attitudes for seeking professional psychological help on prospective Black clients' preference for their counselor's race. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 64* (8-B), 4068.

Townes, D. L., Cunningham, N. J., & Petrosko, J. (2003). *Client Preference Scale.* Unpublished scale.

Trierweiler, S., Muroff, J. R., Jackson, J., Neighbors, H. W., & Munday, C. (2005). Clinician race, situational attributions, and diagnosis of mood versus schizophrenia disorders. *Cultural Diversity and Ethnic Minority Psychology, 11,* 211-238.

United States Department of Homeland Security: Citizen & Immigration Services. (2003, March 11). Retrieved April 9, 2005, from http://uscis.gov/graphics/howdoi/PermRes.htm

Vandiver, B. J. (2001) Psychological nigrescence revisited: Introduction and overview. *Journal of Multicultural Counseling and Development, 29,* 165-173.

Vandiver, B. J., Cross, W. E., Jr., Fhagen-Smith, P. E., Worrell, F. C., Swim, J. K., & Caldwell,

L. D. (2000). *The Cross Racial Identity Scale*. Unpublished scale.

Vandiver, B. J., Cross, W. E., Jr., Worrell, F. C., & Fhagen-Smith, P. E. (2002). Validating the Cross Racial Identity Scale. *Journal of Counseling Psychology, 49,* 71-85.

Vandiver, B. J., Fhagen-Smith, P. E., Cokley, K. O., Cross, W. E., Jr., & Worrell, F. C. (2001). Cross' nigrescence model: From theory to scale to theory. *Journal of Multicultural Counseling and Development, 29,* 174-200.

Vandiver, B. J., & Worrell, F. C. (Eds.). (2001). Psychological nigrescence revisited [Special issue]. *Journal of Multicultural Counseling and Development, 29,* 161-214.

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

Wester, S. R., Vogel, D. L., Wei, M., & McLain, R. (2006). African American men, gender role conflict, and psychological distress: The role of racial identity. *Journal of Counseling & Development, 84,* 419-429.

White, J. L., & Parham, T. A. (1990). *The psychotherapy of Blacks.* Englewood Cliffs, NJ: Prentice Hall.

Williams, I. (1975). An investigation into the developmental stages of Black consciousness. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 36* (5-B), 2488.

Williams, R. L. (1981). *The collective Black mind: An Afrocentric theory of Black personality.* St. Louis: Williams & Associates.

Williams-Flournoy, A. F., & Anderson, L. P. (1996). The Acculturative Stress Scale: Preliminary findings. *Handbook of tests and measurements for Black populations,* (pp. 351-358). Hampton, VA: Cobb & Henry.

Worrell, F. C., Cross, W. E., Jr., & Vandiver, B. J. (2001). Nigrescence theory: Current status and challenges for the future. *Journal of Multicultural Counseling and Development, 29,* 201-213.

Worrell, F. C., Vandiver, B. J., & Cross, W. E., Jr. (2003). The Cross Racial Identity Scale: Technical manual (2nd ed.). Unpublished manual.

Worrell, F. C., Vandiver, B. J., Cross, W. E., Jr., & Fhagen-Smith, P. E. (2004). Reliability and structural validity of Cross Racial Identity Scale scores in a sample of African American adults. *Journal of Black Psychology, 30,* 489-505.

Worrell, F. C., Vandiver, B. J., Schaefer, B. A., Cross, W. E., Jr., & Fhagen-Smith, P. E. (2006). Cluster analyses of Cross Racial Identity Scale (CRIS) scores in three independent samples. *The Counseling Psychologist, 34,* 519-547.

Wright, E. W. (2003). An exploratory study of rape myth acceptance among African American women. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 63* (9-B), 4392.

Appendix A

Permission to Reprint From Sage Publications

Confirmation Number: 1583671
Order Date: 05/20/2007

Customer: Shannon Korell
Email: sck164@psu.edu

Order detail ID: 16839648

ISBN/ISSN: 15523861
Publication Year: 2006
Publisher: SAGE PUBLICATIONS INC.
Author/Editor: Worrell, Vandiver, Schaefer, Cross, & Fhagen-Smith

Permission Status: ✅ **Granted**
Permission type: Republish into a book, journal, newsletter…
Requested use: Dissertation
Republication title: A CLUSTER ANALYSIS OF CROSS RACIAL IDENTITY SCALE SCORES AND THEIR USEFULNESS IN PREDICTING LEVELS OF ACCULTURATION AND SOCIAL DISTANCE IN THE LIVES OF BLACK COLLEGE STUDENTS
Republishing organization: PENN STATE UNIVERSITY
Organization status: For profit
Republication date: 08/01/2007
Circulation/Distribution: 1
Type of content: Figuire, diagram, or_table
Description of requested content: figure of cluster profiles from study 1 and study 2
Page range(s): 527, 534-535
Requested content's publication date: 07/01/2006
Your reference: SHANNON'S THESIS, CHAPTER 2

Appendix B

Criteria for Establishing U. S. Permanent Residency
(U. S. Department of Homeland Security, Citizenship and Immigration Services, 2003)

You may be eligible to apply for a permanent resident status if you are already in the United
States and if one or more of the following categories apply to you.

Family Member
- You are the spouse, parent, unmarried child under age 21, the unmarried son or daughter
  over age 21, the married son or daughter, or the brother or sister of a United States citizen
  and have a visa petition approved in your behalf.

- You are the spouse or unmarried son or daughter of any age of a lawful permanent
  resident and you have a family-based visa petition approved in your behalf.

Employment
- You are an alien who has an approved visa petition filed in your behalf by a United States
  employer.

Visa Number
- If you are a Family- or Employment-based applicant, you must have an immigrant visa
  number available for the State Department unless you are in a category that is exempt
  from numerical limitations. Immediate relatives of United States citizens are exempt from
  this requirement. Immediate relatives of U. S. citizens are parents, spouses, and
  unmarried children under 21.

- For the unmarried son or daughter (over 21 years of age) of a U. S. citizen, brother or
  sister of a U. S. citizen, or the spouse or children of lawful permanent residents, visa
  numbers are limited by law every year.

Fiancé(e)
- You were a fiancé who was admitted to the U. S. on a K-1 visa and then married the U. S.
  citizen who applied for the K-1 visa for you. Your unmarried, minor children are also
  eligible for adjustment of status.

Asylee
- You are an asylee or refugee who has been in the U. S. for at least a year after being
  given asylum or refugee status and still qualify for asylum or refugee status.

Diversity Visa
- You received notice from the Department of State that you have won a visa in the
  Diversity Visa Lottery.

Appendix C

Solicitation Fliers and Announcements

PARTICIPATE IN A STUDY ON

BLACK STUDENTS'

SOCIAL ATTITUDES

You must be 18 years or older & a Penn State Student.

You will be financially compensated for your time.

(SEE OTHER SIDE FOR DETAILS)

Schedule an appointment by contacting Shannon at

sck164@psu.edu or call 865-6482

Solicitation Fliers and Announcements

DATA COLLECTION SCHEDULE

African American Research – 865-6482 or <u>sck164@psu.edu</u>

*Financial compensation for Study 1 is $5 (approximately 30 minutes) and Study 2 is $10 (approximately 20 minutes)

Day	Time	Building	Room # (Name)
Monday	10:00 AM	Willard	Africana Research Ctr. – Rm. 217
Monday	11:00 AM	Willard	Africana Research Ctr. – Rm. 217
Monday	12:00 NOON	Willard	Africana Research Ctr. – Rm. 217
Monday	1:00 PM	Willard	Africana Research Ctr. – Rm. 217
Monday	2:00 PM	Willard	Africana Research Ctr. – Rm. 217
Monday	4:00 PM	Willard	Africana Research Ctr. – Rm. 217
Monday	5:00 PM	Willard	Africana Research Ctr. – Rm. 217
Monday	6:00 PM	Willard	Africana Research Ctr. – Rm. 217
Monday	7:00 PM	Willard	Africana Research Ctr. – Rm. 217
Tuesday	4:00 PM	Willard	Africana Research Ctr. – Rm. 217
Tuesday	5:00 PM	Willard	Africana Research Ctr. – Rm. 217
Tuesday	7:00 PM	Willard	Africana Research Ctr. – Rm. 217
Thursday	4:00 PM	Willard	Africana Research Ctr. – Rm. 217
Thursday	5:00 PM	Willard	Africana Research Ctr. – Rm. 217
Thursday	6:00 PM	Willard	Africana Research Ctr. – Rm. 217
Thursday	7:00 PM	Willard	Africana Research Ctr. – Rm. 217
Friday	10:00 AM	Willard	Africana Research Ctr. – Rm. 217
Friday	11:00 AM	Willard	Africana Research Ctr. – Rm. 217
Friday	12:00 NOON	Willard	Africana Research Ctr. – Rm. 217
Friday	1:00 PM	Willard	Africana Research Ctr. – Rm. 217
Friday	2:00 PM	Willard	Africana Research Ctr. – Rm. 217
Friday	3:00 PM	Willard	Africana Research Ctr. – Rm. 217
Friday	4:00 PM	Willard	Africana Research Ctr. – Rm. 217
Friday	5:00 PM	Willard	Africana Research Ctr. – Rm. 217
Friday	6:00 PM	Willard	Africana Research Ctr. – Rm. 217
Friday	7:00 PM	Willard	Africana Research Ctr. – Rm. 217
Saturday	2:00 PM	Willard	Africana Research Ctr. – Rm. 217
Saturday	3:00 PM	Willard	Africana Research Ctr. – Rm. 217
Saturday	4:00 PM	Willard	Africana Research Ctr. – Rm. 217

Solicitation Fliers and Announcements

Dear Students:

Shannon Korell, a doctoral student in counseling psychology, and I, an associate professor of Education, are conducting research on African American college students' social attitudes and we need your help. This study has the potential to increase our understanding of factors that influence social attitudes of Black students in their daily living at Penn State.

To participate, you must be at least 18 years of age, of Black descent, a U. S. citizen or permanent resident, and a Penn State student.

If you agree to participate in this study, you will be asked to participate in a two-part study. In Part 1, you will be asked to complete paper and pencil measures, which should take approximately 20-30 minutes to complete. All responses will be kept strictly confidential.

For completing the questionnaires, you will be compensated ($5.00) for your time. Once you have completed Part 1, you will be asked to come back in two-three weeks and participate in Part 2. Only those individuals who participate in Part 1 will be eligible for Part 2.

In Part 2, you will complete the same or similar measures contained in Part 1, but it will take you only 20 minutes to complete. You will again be compensated ($10.00) for your time. The reason for the additional funds is that we really need individuals to take the time to do Part 2. Without Part 2, the study will be incomplete.

The schedule for participating in the study for the next two weeks is listed below. You must schedule an appointment to participate. Just email Shannon and let her know when you would like to come. She will then confirm the date and the time, as we have space for 30 students at a time for most times. We hope to hear from all of you, as we need over 300 Black students to make this study work. Thank you very much.

Shannon Korell and Beverly Vandiver

Weekly Schedule for March 28-April 8, 2005

Monday	**10AM-3PM**	**217 Willard Building**
Monday	**5PM-8PM**	**320 Willard Building**
Tuesday	**4PM-8PM**	**203 Willard Building**
Thursday	**4PM-8PM**	**203 Willard Building**
Friday	**10AM-3PM**	**217 Willard Building**
Friday	**4PM-8PM**	**209 Willard Building**

Email Shannon Korell at sck164@psu.edu to schedule a time to participate in Part 1.

Appendix D

Informed Consent Form

INFORMED CONSENT FORM FOR SOCIAL SCIENCE RESEARCH
The Pennsylvania State University

Title of Project: The Validity and Predictive Usefulness of the Cross Social Attitude Scale in the Lives of African American College Students

Principal Investigator: Beverly J. Vandiver, Ph.D., Associate Professor of Education, School Psychology Program, 137 Cedar Building/ 217 Willard Building, University Park, PA 16802, (814) 863-2846/ 865-6482; bjv3@psu.edu

Other Investigator: Shannon Korell, M.A., Doctoral Candidate, Counseling Psychology 327 Cedar Building, University Park, PA 16802; (814) 237-9778; s sck164@psu.edu

1. **Purpose of the Study:** The purpose of this study is to examine the social attitudes of African American college students and the consistency social attitudes after a time lapse of two to three weeks.

2. **Procedures to be followed:** If you agree to participate in this study, you will be asked to participate in a two-part study. In Part 1, you will be asked to fill out based on your own personal opinion 6 questionnaires. You will be asked to return about two to three weeks later and participate in Part 2. You will be asked to fill out 8 questionnaires, many of them the same as you filled out the first time.

3. **Discomforts and Risks:** This study involves minimal risk; that is, no risks to your physical or mental health beyond those encountered in the normal course of everyday life. If you experience discomfort and need to speak to someone regarding your experience answering these questions, feel free to contact the primary investigator (Beverly Vandiver, 137 CEDAR 863-2846), the Multicultural Resource Center (220 Grange Building, 865-1773), or Counseling and Psychological Services (221 Ritenour Building, 863-0395). Questions regarding this statement or your rights as a participant of this research should be directed to the Office for Research Protections in 212 Kern Building (814) 865-1775.

4. **Benefits:** The benefits to you include an increased understanding of the social attitudes African American college have, which may assist you in interacting with other African American students better.

   The benefit to society include the potential to broaden our understanding of the diversity of opinions that African American students have, which potentially could lead to reduce stereotyping of African Americans.

5. **Duration/Time:** For Part 1, it will take about 20-30 minutes to answer the questions. For Part 2, it will take about 30-40 minutes to answer the questions.

6. **Statement of Confidentiality:** All responses will be kept strictly confidential. Only the primary investigator (Beverly Vandiver, Ph.D.) and the co-investigator (Shannon Korell, M.A.) will have access to your answers in connection with any of your personally identifying information. Signed consent forms will be kept separate from questionnaires to protect confidentiality. Individuals will be assigned a personal identification number that will be used to link the measures with participant names only if you volunteer to participate in the Part 2. After the measures for Part 1 and Part 2 are paired together, the sheet of paper that is used to log identification numbers with participant names will be destroyed. In the event of publication of this research no personally identifying information will be disclosed. The Office for Research Protections and the Social Science Institutional Review Board may review records related to this project. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared.

7. **Right to Ask Questions:** You can ask questions about this research. Contact Beverly Vandiver at 863-2846 at with questions. If you have questions about your rights as a research participant, contact The Pennsylvania State University's Office for Research Protections at (814) 865-1775.

8. **Compensation:** For completing the measures in Part 1, you will receive $5.00. For completing the measures in Part 2, you will receive $10.00.

9. **Voluntary Participation:** Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. However, to receive compensation, you must complete the questionnaires in their entirety.

You must be 18 years of age or older to consent to take part in this research study. If you agree to take part in this research study and the information outlined above, please sign your name and indicate the date below.

You will be given a copy of this signed and dated consent form for your records.

_____   _____
Participant Signature   Date

_____   _____
Person Obtaining Consent   Date

Appendix E

Demographic Questionnaire

1. Male ☐   Female ☐

2. How old are you? _____

3. Please indicate your ethnic background **by circling the answer** that applies to you. Choose **only one** category.

a. African	e. Hispanic Black
b. African-American	f. Mixed _____ /
c. Black	g. Other _____
d. West Indian/Caribbean Black	

4. How do you identify racially?_____

5. What is your mother's racial/ethnic background?_____

6. What is your father's racial/ethnic background?_____

7. I would describe my skin color as: LIGHT   MEDIUM   DARK
    1----------------2-----------------3--------------4--------------------5

    In comparison to most of my family members, my skin color is
                     LIGHTER   THE SAME   DARKER
    1----------------2-----------------3--------------4--------------------5

    Based on your skin color, what was your experience of growing up in your family?
    N/A   NEGATIVE   NEUTRAL   POSITIVE
    1-------------------2-----------------3------------4--------------------5

    In a couple of sentences, describe your experience of how skin color affected your life within your family:

    _____
    _____
    _____
    _____
    _____
    _____

8. If you are **currently** a student, are you a high schooler ☐   an undergraduate ☐   or a graduate student ☐?

9. Name of School: _____   8b. City where school is located: _____

10. What is your semester standing in the school you listed in #8? _____

11. Total Number of course credits earned prior to this school term _____

12. What is the racial composition of the school listed in #8? Mostly Black ☐   Mixed ☐   Mostly White ☐

13. What is your overall grade point average? _____(if just starting high school or college or graduate school, note the kind of grades you have now—A, A-, B+, B, B-, C+, C, C-, D, F)

14. If you are attending college, what is your major? _____

15. If you are **no longer a student**, what is the highest education level obtained? Circle one.

a. Elementary school	d. Business or trade school	g. Bachelor's or four-year degree
b. Some high school	e. Some college	h. Some graduate/professional school
c. High school diploma/equivalent	f. Associate or two-year degree	i. Graduate or professional degree

16. If you are **no longer a student**, what is your current occupation? _____

17. What religious affiliation do you hold? _____

18. How often do you attend religious services?   Seldom ☐   Sometimes ☐   Often ☐

19. How important is your religion to you?   Not Important ☐   Somewhat Important ☐   Very Important ☐

20. What is the best estimate of your/your family's yearly income before taxes? Circle "Y" for yours and "F" for family.

a. Less than $10,000	Y	F	d. Between $30,000 and $40,000	Y	F
b. Between $10,000 and $20,000	Y	F	e. Between $40,000 and $60,000	Y	F
c. Between $20,000 and $30,000	Y	F	f. Over $60,000	Y	F

21. How would you describe the primary community in which you were raised?

Rural ☐   Suburban ☐   Urban ☐   Other _____

22. What is the racial composition of the community listed in #21?   Mostly Black ☐   Mixed ☐   Mostly White ☐

23. Are you a United States citizen ☐   a permanent resident of the US ☐   or Other ☐ _____?

24. How many ethnic organizations do you belong to?   1   2   3   4   5   5+

25. What is the highest education level obtained by your mother (or female guardian) and father (or male guardian)? For mother, circle the "M" in the appropriate box; for father, circle the "F."

a. Elementary school	M	F	f. Associate or two-year degree	M	F
b. Some high school	M	F	g. Bachelor's or four-year degree	M	F
c. High school diploma or equivalent	M	F	h. Some graduate or professional school	M	F
d. Business or trade school	M	F	i. Graduate or professional degree	M	F
e. Some college	M	F			

26. How would you describe your family's socioeconomic status?

Poor ☐   Working Class ☐   Middle Class ☐   Upper Middle ☐   Wealthy ☐

27. How would you describe your current physical health?

Very Poor ☐   Poor ☐   Fair ☐   Good ☐   Very Good ☐

28. How would you describe your current mental health?

Very Poor ☐   Poor ☐   Fair ☐   Good ☐   Very Good ☐

Appendix F

Cross Racial Identity Scale (CRIS)
(Vandiver et al., 2000)

Instructions: Read each item and indicate to what degree it reflects your own thoughts and feelings, using the 7-point scale below. There are no right or wrong answers. Base your responses on your opinion at the present time. **To ensure that your answers can be used, please respond to the statements as written**, and place your numerical response on the line provided to the left of each question**.**

1	2	3	4	5	6	7
strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree

Sample items from the CRIS and their respective domains:

_____1. "I am not so much a member of a racial group, as I am an American" (Pre-Encounter Assimilation).

_____2. "Blacks place more emphasis on having a good time than on hard work" (Pre-Encounter Miseducation).

_____3. "I go through periods when I am down on myself because I am Black" (Pre-Encounter Self-Hatred).

_____4. "I have a strong feeling of hatred and disdain for all White people" (Immersion-Emersion Anti-White).

_____5. "I see and think about things from an Afrocentric perspective" (Internalization Afrocentricity).

_____6. "As a multiculturalist, I am connected to many groups (Hispanics, Asian Americans, Whites, Jews, Gays & Lesbians, etc.)" (Internalization Multiculturalist Inclusive).

Appendix G

African American Acculturation Scale - Revised (AAAS-R)
(Klonoff & Landrine, 2000)

Instructions: Please tell us how much you personally agree or disagree with the beliefs and attitudes listed below by using the rating scale and writing a number in the space to the left of the statement. **There is no right or wrong answer. We want your honest opinion.**

I Totally Disagree Not True At All			*Sort of Agree Sort of True*			*I Strongly Agree Absolutely True*
1	**2**	**3**	**4**	**5**	**6**	**7**

___ 1. I believe in the Holy Ghost.

___ 2. I like gospel music.

___ 3. I believe in heaven and hell.

___ 4. The church is the heart of the Black community.

___ 5. I have seen people "get the spirit" or speak in tongues.

___ 6. I am currently a member of a Black church.

___ 7. When I was young, I was a member of a Black church.

___ 8. Prayer can cure disease.

___ 9. What goes around, comes around.

___ 10. I used to sing in the church choir.

___ 11. Most of the music I listen to is by Black artists.

___ 12. I like Black music more than White music.

___ 13. I listen to Black radio stations.

___ 14. I try to watch all the Black shows on TV.

___ 15. The person I admire the most is Black.

I Totally Disagree Not True At All			Sort of Agree Sort of True			I Strongly Agree Absolutely True
1	2	3	4	5	6	7

___ 16. I feel more comfortable around Blacks than around Whites.

___ 17. When I pass a Black person (a stranger) on the street, I always say hello or nod at them.

___ 18. Most of my friends are Black.

___ 19. I read (or used to read) *Essence* or *Ebony* magazine.

___ 20. I don't trust most White people.

___ 21. IQ tests were set up purposefully to discriminate against Black people.

___ 22. Most Whites are afraid of Blacks.

___ 23. Deep in their hearts, most White people are racists.

___ 24. Whites don't understand Blacks.

___ 25. Most tests (like the SATs and tests to get a job) are set up to make sure that Blacks don't get high scores on them.

___ 26. Some members of my family hate or distrust White people.

___ 27. When I was young, I share a bed at night with my sister, brother, or some other relative.

___ 28. When I was young, my parent(s) sent me to stay with a relative (aunt, uncle, grandmother) for a few days or weeks, and then I went back home again.

___ 29. When I was young, my cousin, aunt, grandmother, or other relative lived with me and my family for awhile.

___ 30. When I was young, I took a bath with my sister, brother, or some other relative.

___ 31. Some people in my family use Epsom salts.

I Totally Disagree Not True At All			*Sort of Agree Sort of True*			*I Strongly Agree Absolutely True*
1	**2**	**3**	**4**	**5**	**6**	**7**

___ 32. Illnesses can be classified as natural types and unnatural types.

___ 33. Some old Black women/ladies know how to cure diseases.

___ 34. Some older Black women know a lot about pregnancy and childbirth.

___ 35. I was taught that you shouldn't take a bath and then go outside.

___ 36. I avoid splitting a pole.

___ 37. When the palm of your hand itches, you'll receive some money.

___ 38. There's some truth to many old superstitions.

___ 39. I eat black-eyed peas on New Year's Eve.

___ 40. I grew up in a mostly Black neighborhood.

___ 41. I went to a mostly Black high school.

___ 42. I went to a mostly Black elementary school.

___ 43. I currently live in a mostly Black neighborhood.

___ 44. It's better to try to move your whole family ahead in this world than it is to be out for only yourself.

___ 45. Old people are wise.

___ 46. I often lend money or give other types of support to members of my family.

___ 47. A child should not be allowed to call a grown woman by her first name, "Alice." The child should be taught to call her "Miss Alice."

Appendix H

Modified Version of the Bogardus Social Distance Scale – Revised (BSDS-R)
(Bogardus; 1933)

INSTRUCTIONS:

1. Remember to give your *first feeling reactions* in every case.

2. Give your reactions to each group. Do not give your reactions to the best or the worst members that you have known, but think of the picture or stereotype that you have of the whole group.

3. Please answer the following questions by **circling either yes or no** for each of the groups represented.

	Latinos Latinas	Asians	Other Blacks (Caribbean; African)	Whites	Jews	Gays/ Lesbians
1. Would you converse with	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N
2. Would you attend the same party with	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N
3. Would you dine in the family home of	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N
4. Would you have someone from this group as a roommate	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N
5. Would you date someone who is	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N **Does Not Apply**
6. Would you engage in a sexual relationship with	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N **Does Not Apply**
7. Would you establish a long-term relationship (including marriage) with	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N **Does Not Apply**

ABBREVIATED VITA

Shanon Korell

EDUCATION

Ph.D.	Counseling Psychology	The Pennsylvania State University	August 2007
M.A.	Counseling	St. Mary's University	May 2001
B.S.	Psychology/Biology	Angelo State University	May 1998
A.S.	Biology	Howard College	May 1996

CERTIFICATION

National Certified Counselor by the National Board for Certified Counselors (Since 2001)

CLINICAL EXPERIENCE

Pre-doctoral Internship
      Suffolk University Counseling Center; Boston, MA   08/2005 – 08/2006
Graduate Assistant – University Counselor
      PSU Counseling and Psychological Services   08/2004 – 05/2005
Practicum Counselor
      PSU Counseling and Psychological Services   06/2003 – 05/2004
      PSU Career Services   01/2003 – 05/2003
      PSU CEDAR Clinic   08/2002 – 05/2003

TEACHING EXPERIENCE

Graduate Teaching Assistant, The Pennsylvania State University, University Park, PA
      Theories of Counseling (CNED 501); Fall 2003
      Multicultural Foundations of Counseling (CNED 507); Fall 2003, Summer 2003
      Scholarship and Community (AAAS 003); Fall 2006, Fall 2005, Fall 2004
      Understanding Discrimination (CNED 297G); Spring 2003

RECENT PUBLICATION

Korell, S. C., & Lorah, M. (2006). Affirmative counseling with transgender individuals. In
      K. J. Bieschke, R. M. Perez, & K. A. DeBord (Eds.), *Handbook of counseling and
      psychotherapy with lesbian, gay, bisexual, and transgender clients (*2nd ed, pp.271-288*).*
      Washington, DC: American Psychological Association.

GRANTS

Africana Research Center Student Dissertation Grant (2005). Awarded by The Pennsylvania
State University, Africana Research Center. Grant Amount $1000.00