Generalizing Nigrescence Profiles: Cluster Analyses of Cross Racial Identity Scale (CRIS) Scores in Three Independent Samples

Frank C. Worrell  
*University of California, Berkeley*

Beverly J. Vandiver  
Barbara A. Schaefer  
*Pennsylvania State University*

William E. Cross Jr.  
*CUNY Graduate Center*

Peony E. Fhagen-Smith  
*Wheaton College*

The two studies in this article examine the interpretability and generalizability of nigrescence profiles based on Cross Racial Identity Scale scores across different educational contexts. Study 1 participants (N = 333) came from a predominantly White institution (PWI) and were grouped into six clusters labeled Afrocentric, multiculturalist, assimilated, immersion, low race salience, and miseducated variant. The two samples in Study 2 consisted of students from PWIs (N = 314) and from historically Black colleges and universities (HBCUs; N = 306), respectively. Both PWI and HBCU participants were grouped into five clusters. Four of the six original clusters (assimilated, immersion, low race salience, and miseducated variant) replicated in both samples, and one (multiculturalist) replicated only in the PWI sample. The results indicate that there are generalizable racial identity profiles in the Black population. The authors discuss the implications of the findings.

During the colonial period of the mid-20th century, the French African poet and statesman Leopold Senghor charged Africans to begin a personal journey toward nigrescence, to expunge and replace negative attitudes about being Black and African with positive and proactive ones (Jack,
1996; Senghor, 1988). This French term effectively captured the African American identity search in the U.S. social context. More than half a century later, the race issue continues to loom large in the daily lives of African Americans (Cose, 1993; Ogbu, 2003; Pinkney, 1990; Smith, 2003; Tatum, 1997; West, 2001).

The publication of the Racial Identity Attitude Scales (RIAS; Helms, 1990b; Helms & Parham, 1990, 1996; Parham & Helms, 1981) resulted in a panoply of empirical research on Black racial identity (e.g., Bagley & Copeland, 1994; Britton, 2001; Carter & Helms, 1988; Martin & Hall, 1992; Parham & Helms, 1985; Pena, Bland, Shervington, Rice, & Foulks, 2000; Richardson & Helms, 1994; Sanchez, 2002; Taylor & Howard-Hamilton, 1995; Whatley, Allen, & Dana, 2003; Wilcots, 2001). Although much of the early theorizing on Black racial identity attitudes (e.g., Cross, 1971, 1978) postulated a stage model of racial identity (for a review, see Helms, 1990a), current conceptualizations define racial identity as attitudes to be examined multidimensionally (e.g., Cross & Vandiver, 2001; Helms, 1990b, 1996; Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Trimble, Helms, & Root, 2003). Cluster analysis is one of several procedures for examining profiles on multidimensional scales (Ding, 2001; Hair, Anderson, Tatham, & Black, 1995).

In addition to accepting Black racial identity as an important construct, studies of racial identity attitudes using multivariate techniques are based on at least two other, albeit tacit, assumptions. The first is that general profiles of racial identity attitudes exist across African Americans and that these attitudes are stable, at least some of the time. If no generalizable or stable profiles exist, then studies examining the relationships between racial identity attitudes and other variables are exercises in pure empiricism with no practical or clinical use, a view that is not supported by research (e.g., Cokley, 2002; Whatley et al., 2003). The second assumption is that different racial identity profiles are related to different patterns of functioning. In other words, high scores on assimilation attitudes and low scores on Afrocentric attitudes will predict different functioning than will low scores on assimilation attitudes and high scores on Afrocentric attitudes.

To date, few studies have tested the assumptions of racial identity profiles, and none has examined profiles of racial identity scores in multiple contexts. Trimble et al. (2003) highlighted the importance and complexity of racial and ethnic identity research and noted that “situational and contextual correlates must be examined because ethnic and racial declarations can be influenced by settings” (p. 267). The current study’s purpose is to examine the generalizability of Black racial identity profiles using cluster analysis based on a nigrescence framework. Although several researchers have contributed to our understanding of nigrescence theory (e.g., Carter, 1996; Carter & Helms, 1988; Cross, 1971, 1978, 1985, 1991, 1995; Cross, Parham, & Helms,

**AN OVERVIEW OF CROSS’S NIGRESCENCE THEORY**

Cross’s (1971; Hall, Freedle, & Cross, 1972) original nigrescence theory, articulated in the 1970s, described the development of African American identity from a pro-White assimilationist position to a pro-Black internalized stance. Since its conception, Cross’s nigrescence model has been revised (Cross, 1991, 1995) and expanded (see Cross & Vandiver, 2001; Vandiver, Cross, Worrell, & Fhagen-Smith, 2002; Vandiver & Worrell, 2001). The expanded nigrescence theory (NT-E) differs from the original and revised theories in several ways. Perhaps most important is the change from a developmental-stage theory to one that focuses on attitudes or social identities (Cross & Vandiver, 2001; Vandiver, 2001; Vandiver et al., 2002; Worrell, Cross, & Vandiver, 2001), which focus on recurring psychological themes in the social history of Black people (Cross et al., 1998). The theory highlights how Black attitudes are socialized across the life span (Cross & Fhagen-Smith, 2001) and conceptualizes the multiple ways that Black identities are transacted or enacted in everyday life (Cross, Smith, & Payne, 2002; Cross & Strauss, 1998). As such, racial identity attitudes are not developmental in the traditional sense—that is, an invariant sequence of qualitatively different stages—although they are influenced and changed by events and contexts across the life span.

NT-E also maintains the distinction between personal identity and reference-group orientation (Cross, 1991). In this conceptualization, it is possible to divide self-concept into two domains: a general personality, or personal identity domain, and a group identity, social identity, or reference-group orientation domain (Cross, 1985; Spencer, 1982). NT-E focuses on reference-group orientation because it views each variant of Black identity as a form of group identity (Cross & Vandiver, 2001) rather than as a variable representing general personality characteristics.

NT-E groups racial identity attitudes into three thematic categories: preencounter, immersion-emersion, and internalization (Cross & Vandiver, 2001; Worrell et al., 2001). Preencounter themes refer to identities that accord low or even negative salience to race and Black culture. Consequently, in the face of a racial epiphany or encounter, these attitudes may be the focus of identity change. Preencounter attitudes include assimilation, which reflects low race salience, as well as miseducation and self-hatred, both forms of negative race salience.
Immersion-emersion themes indicate a state of limbo representing identity volatility and flux. The immersion-emersion attitudes—anti-White and intense Black involvement—connote intense pro-Black or anti-White fixations (immersing), or it can reflect a state of emersing when a person is moving from myopic attitudes to more nuanced views of the Black and White community. Internalization themes indicate a sense of reconciliation with being Black in a multicultural world, and all identities falling within this category accord moderate to high importance to race and Black cultural issues. Afrocentric, bicultural, and multicultural identities are the attitudes under internalization, and are symbolic of the types of identity attitudes where positive feelings about being Black do not preclude acknowledging other salient identities in self or others.

These multiple identity attitudes underscore a central theme of NT-E—that there is no one type of Black identity; rather, there are multiple Black identity attitudes (Cross & Vandiver, 2001), and individuals can manifest differing levels of the various attitudes at the same time, although one attitude or a particular theme (e.g., preencounter) may be more salient. The Cross Racial Identity Scale (CRIS; Vandiver, Cross, Fhagen-Smith, Worrell, Swim, & Caldwell, 2000; Worrell, Vandiver, & Cross, 2004) is a six-factor scale based on NT-E. Racial identity attitudes measured on the CRIS include preencounter assimilation, preencounter miseducation, preencounter self-hatred, immersion-emersion anti-White, internalization Afrocentric, and internalization multiculturalist inclusive (Vandiver & Worrell, 2001; Vandiver et al., 2002).

CLUSTERS OF RACIAL IDENTITY ATTITUDES

A search of the extant literature yielded four published studies, other than dissertations, that examined profiles of racial identity attitudes. Two of the studies (Carter, 1996; Neville & Lily, 2000) were based on nigrescence theory and used the RIAS, one study (Chavous et al., 2003) was based on the multidimensional model of racial identity (Sellers et al., 1997; Sellers, Smith, Shelton, Rowley, & Chavous, 1998), and the fourth study (Carter, Helms, & Juby, 2004) was based on Helms’s (1984; Helms & Carter, 1990) White racial identity theory. We discuss the two studies based on nigrescence theory below.

Cluster analysis is the name given to a group of multivariate techniques used to group respondents or other objects on the basis of their characteristics (Hair et al., 1995; Hair & Black, 2000). Unlike factor analysis, which groups items or variables, cluster analysis groups objects, including respondents, based on the similarity of score profiles on the measured variables.
Thus, cluster analyses result in groups where members of one cluster have similar profiles on the cluster variables and different profiles from members of other clusters, or “high internal (within-cluster) homogeneity and high external (between-cluster) heterogeneity” (Hair et al., 1995, p. 423).

Studies of the RIAS Using Cluster Analysis

In 1996, Carter reported on a cluster analysis of scores from the long form of the RIAS-L (Helms & Parham, 1996) in a sample of 557 African Americans aged 16 to 66. Carter examined two-, three-, four-, and five-cluster solutions and accepted a three-cluster solution on the basis of “scale means, case groupings, and interpretability” (p. 214). Using percentile rankings to facilitate interpretation, Carter (1996) labeled Cluster 1, which had high percentile ranks on preencounter and immersion-emersion and low ranks on encounter and internalization, pro-White. Cluster 2 respondents had moderately high ranks on all four subscales, and Carter labeled this cluster racial confusion. Cluster 3, which had a high rank on internalization and moderate ranks on immersion-emersion, encounter, and preencounter, was labeled racial pride.

More recently, Neville and Lily (2000) used cluster analysis to examine racial identity profiles. They also used the RIAS-L (Helms & Parham, 1996) in a sample of 182 African American undergraduates from two predominantly White institutions (PWIs). They examined three-, four-, five-, and six-cluster solutions and chose the five-cluster solution based on the within-cluster variance statistic (Hartigan, 1975). They labeled Cluster 1, with high internalization and encounter scores (above 4.0 on a 1 to 5 scale), engaged internalization. Cluster 2 had moderate scores on all subscales (2.99 ≤ M ≤ 3.15) and was labeled undifferentiated racial identity. Cluster 3, labeled committed internalization, had an internalization score of 3.87 and scores below 3 on the other subscales. The highest mean on Cluster 4 was 3.04 on internalization, and this cluster was called dormant racial identity. Finally, the authors labeled Cluster 5 dissonance internalization, with an internalization score of 4.34, an encounter score of 3.6, and the other two scores below 3.0.

Thus, both examinations of nigrescence profiles using the RIAS-L (Carter, 1996; Neville & Lily, 2000) yielded interpretable solutions (Carter, 1996). Although Carter’s racial pride cluster appears similar to Neville and Lily’s engaged internalization cluster, the results of the two studies are not easily compared as the authors used different scaling procedures. Neville and Lily reported using the scale midpoint—presumably 3 on a 5-point Likert-type scale—and Carter converted the racial identity scores to percentile ranks for interpretation. Neither study examined cluster generalizability.
Research Goals of the Current Study

In sum, since the RIAS publication (Helms, 1990b; Helms & Parham, 1990, 1996; Parham & Helms, 1981), numerous studies have examined potential correlates of racial identity attitudes. However, only two published studies have examined profiles based on a nigrescence theory (Carter, 1996; Neville & Lily 2002), and both used single samples. The goals of the current research endeavor were (a) to identify racial identity profiles of CRIS (Vandiver et al., 2000) scores that are interpretable within the framework of NT-E, (b) to replicate these profiles in independent samples, and (c) to examine the impact of context on racial identity profiles. Hair and Black (2000) highlighted the importance of validating cluster solutions and recommended cluster analyzing “separate samples, comparing the cluster solutions and assessing the correspondence of the results” (p. 186) as the most direct method.

STUDY 1

Method

PARTICIPANTS

Participants consisted of 333 African American students (63% female; 93% undergraduates) attending a PWI in the mid-Atlantic United States. They ranged in age from 17 to 59 years ($M = 20.69$, $SD = 3.97$) and reported a mean grade point average (GPA) of 2.77 ($SD = .57$). Participants reported their racial designations as follows: African American (36.7%), Black (26.7%), African (5.8%), colored (3%), and other Black (27.9%). The majority described their families as working class (49.1%) or middle class (40%).

MEASURE

Participants completed the CRIS (Vandiver et al., 2000; Worrell, Vandiver, & Cross, 2004), a 40-item, paper-and-pencil measure comprising 30 racial identity items and 10 filler items, assessing the expanded nigrescence model (Cross & Vandiver, 2001). The CRIS measures six nigrescence attitudes: preencounter assimilation ($0.83 \leq \alpha \leq 0.85$), preencounter miseducation ($0.77 \leq \alpha \leq 0.89$), preencounter self-hatred ($0.70 \leq \alpha \leq 0.88$), immersion-emersion anti-White ($0.83 \leq \alpha \leq 0.90$), internalization Afrocentric ($0.82 \leq \alpha \leq 0.85$), and internalization multiculturalist inclusive ($0.76 \leq \alpha \leq 0.86$; Vandiver et al., 2002; Worrell, Vandiver, Cross, & Fhagen-Smith, 2004). Respondents rate the degree to which each item reflects their thoughts and feelings using a 7-point Likert-type scale, where 1 = strongly disagree, 4 = neither agree nor
disagree, and 7 = strongly agree. Each of the subscales consists of five items, and the sum of the raw scores on component items gives a total raw score, which is divided by the number of items (5) on the subscale to obtain subscale scores ranging from 1 to 7, with higher scores reflecting greater endorsement of the attitude named by the subscale. Examples of items are “I see and think about things from an Afrocentric perspective” (internalization Afrocentric item) and “I am not so much a member of a racial group, as I am an American” (preencounter assimilation item).

The six CRIS subscales were established using both exploratory and confirmatory factor-analytic procedures (Vandiver et al., 2002; Vandiver, Fhagen-Smith, Cokley, Cross, & Worrell, 2001), and as indicated in the previous paragraph, reliability estimates for CRIS scores have been in the medium to high range. CRIS subscale intercorrelations are generally low, ranging from |.04| to |.42| (Md = |.16|). Convergent validity was established with selected subscales of the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1998), and correlations between subscale scores on both instruments were in the appropriate directions (|.30| ≤ r ≤ |.59|, Md = .34; see Vandiver et al., 2002). CRIS scores have low correlations with social desirability and the Big Five personality traits (Vandiver et al., 2002).

PROCEDURE

The CRIS was part of a packet containing multiple measures that took about an hour to complete. Other measures included the Balanced Inventory for Desirable Responding (Paulhus, 1984, 1991), the Big Five Inventory (John, Donahue, & Kentle, 1991), the MIBI (Sellers et al., 1998), and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Measures were counterbalanced in the packets to control for order effects. Participants were students attending a PWI in a mid-Atlantic state and were given an honorarium ($10) for their participation. Recruitment strategies included flyers, posters, and face-to-face requests. Data collectors included two undergraduate students, one male graduate student, and a male faculty member, all of whom were African Americans. They were trained and given scripts to minimize differences across data collectors. They collected data at several campus locations and supervised participants completing the packets.

Results

PRELIMINARY ANALYSES

The convergent, discriminant, and structural validity of CRIS scores had been explored and supported in this sample (see Vandiver et al., 2002).
Thus, these scores represented a solid base for an examination of profiles based on the CRIS. Mean scores were lower for the preencounter and immersion-emersion subscales (i.e., below 3.5) and higher for the internalization subscales, and multiculturalist inclusive scores were significantly higher than other subscale scores ($p < .001$). Subscale intercorrelations were generally low ($\text{Mdn } r = |.17|$), even when corrected for attenuation ($\text{Mdn } r = |.20|$), and internal consistency estimates for the scores in this study were significantly greater than .70: preencounter assimilation (.84), preencounter miseducation (.76), preencounter self-hatred (.88), immersion-emersion anti-White (.88), internalization Afrocentric (.83), and internalization multiculturalist inclusive (.81).

CLUSTER ANALYSES

Cluster analysis is an exploratory classification procedure that works best when scores are on the same metric (Hair & Black, 2002). To aid interpretability and comparability, raw scores were converted to $T$ scores ($M = 50$, $SD = 10$) for each of the six CRIS factors. Because cluster solutions may be unstable, replication can help validate the integrity of cluster solutions. To accomplish multiple replications within the sample ($N = 333$), participants were randomly divided into three equal-sized subsamples ($n = 111$).

Multistage Euclidean grouping (MEG; McDermott, 1998) was applied to resolve the racial identity profiles. This procedure is a hierarchical clustering technique, which uses Euclidean distance scores, Ward’s minimum variance clustering, and a three-stage clustering process. Stage 1 analyses were conducted independently for each of the three subsamples after omitting a small percentage of outliers (2%). Fusion statistics provided guidelines to assist in identifying plausible cluster solutions. The fusion statistics applied included (a) Mojena’s stopping criterion, (b) increase in error variance, and (c) the pseudo-$F$ statistic simultaneously elevated over the pseudo-$r^2$ statistic (Aldenderfer & Blashfield, 1984; Mojena, 1977). A good cluster solution should maximize within-cluster homogeneity while maximizing between-cluster heterogeneity (Hair & Black, 2002). Once Stage 1 clusters were selected, Stage 2 clustering was applied to determine the extent to which Stage 1 clusters emerged similarly across each of the three subsamples. Finally, Stage 3 clustering allowed individual profiles to be relocated from one cluster to another to adjust any cluster membership misassignments in the first two stages.

Three- to six-cluster solutions were viable options for each of the three subsamples in the first stage. Second-stage clustering resulted in a six-cluster solution (see Figure 1), which had relative cohesion of variance within clusters, within profile variables, and overall ($\bar{H} = .68$), and third-stage clustering
improved overall homogeneity ($H = 0.73$). Clusters 1 through 4 replicated in all three subsamples, and Clusters 5 and 6 replicated in two of the three subsamples (66.7%). Clusters ranged in size from 48 (14.4% of sample) to 62 participants (18.5%), with 9 participants (2.7%) unassigned.

Cluster profiles were interpreted and named on the basis of the score dispersion around the $T$ score mean of 50 (see Figure 2). For example, scores within one third standard deviation of the mean (47 to 53) were interpreted as reflecting average attitudes in that subscale, and scores that were two
FIGURE 2. Disaggregated Profiles From Sample 1

NOTE: The subscale means in this figure are differences from the $T$ score mean of 50; thus, 0 represents the midpoint of the distributions and the figures show the distribution of CRIS scores for each profile in relation to the mean. PA = preencounter assimilation; PM = preencounter miseducation; PSH = preencounter self-hatred; IEAW = immersion-emersion anti-White; IA = internalization Afrocentric; IMCI = internalization.
thirds or more standard deviations above (67) or below (43) the mean were interpreted as reflecting substantial differences from the mean.

Cluster 1, labeled Afrocentric, included participants with average assimilation scores, below-average miseducation and self-hatred scores, above-average multiculturalist inclusive scores, and Afrocentric and anti-White scores well above average. Cluster 2 (multiculturalist) had multiculturalist inclusive scores well above average and all other scores below or well below average. Cluster 3 (assimilated) participants had assimilation and multiculturalist inclusive scores well above average, average miseducation and self-hatred scores, and anti-White and Afrocentric scores well below average. Cluster 4 (immersion) participants had well-below-average assimilation and multiculturalist inclusive scores, well-above-average anti-White and Afrocentric scores, average miseducation scores, and average self-hatred scores. Cluster 5 (low race salience) participants had average scores on assimilation and below- to well-below-average scores on other subscales. Finally, Cluster 6 (miseducated variant) participants were characterized by above-average to well-above-average scores on the preencounter subscales, with scores being highest on miseducation, average scores on anti-White and Afrocentric, and scores well below average on multiculturalist inclusive.

Study 1 Discussion

This study’s goal was to examine racial identity profiles based on CRIS scores. Results yielded six clusters with interpretable profiles that fell into the three thematic areas in which NT-E attitudes are measured—that is, preencounter (low race salience, assimilation, miseducated variant), immersion-emersion (immersion), and internalization (Afrocentric, multiculturalist). Profiles on two pairs of clusters are worth contrasting: Afrocentric and immersion, and assimilation and multiculturalist.

In keeping with the elevated correlation between anti-White and Afrocentric subscale scores (e.g., Vandiver et al., 2001), higher scores on these two subscales characterized both the Afrocentric and the immersion profiles. However, Afrocentrics had a multiculturalist inclusive score above the mean, a preencounter assimilation score at the mean, and scores below the mean on the miseducation and self-hatred subscales. In contrast, the immersion group had scores near the mean on miseducation and self-hatred and scores substantially below the mean on assimilation and multiculturalist inclusive. Thus, although the clusters appear to be similar on the basis of anti-White and Afrocentric scores, they are clearly distinguishable by their scores on the other subscales.
The multiculturalist cluster was distinguished by having multicultural inclusive scores substantially above the mean and scores below the mean on other subscales, and the assimilated cluster had a high multiculturalist inclusive score and an even higher score on the assimilation subscale. The major difference between the multiculturalist and the assimilated groups is the former’s rejection of an I’m-an-American-first perspective, as indicated by the low assimilation scores, in favor of a perspective embracing other groups and a Black heritage.

The low race salience profile was an unexpected finding but of tremendous significance for theorizing about racial identity attitudes. Typically, assimilation is associated with low race salience (Cross, 1991; Cross & Vandiver, 2001). However, the low race salience profile is quite different from the assimilation profile. Whereas individuals with an assimilated profile embrace their similarities to other Americans, low race salience individuals seem to eschew any focus on racial attitudes. Nonetheless, assimilationist scores, albeit near the mean, were the highest scores in the low race salience profile.

STUDY 2

The findings in Study 1 were promising: The clusters were robust and interpretable and provided some suggestions about reconceptualizing aspects of NT-E (e.g., with regard to race salience). There were also areas of congruence with previous cluster analyses (Carter, 1996; Neville & Lily, 2000). Carter’s racial pride cluster has commonalities with the Afrocentric and the multiculturalist profiles, all of which reflect moderate to high scores on internalization subscales, and Carter’s pro-White cluster seems to parallel the assimilated profile. Similarly, Neville and Lily’s engaged internalization cluster with high encounter and internalization scores and, to a lesser extent, their dissonance internalization profile correspond to the assimilated cluster. Similarly, Neville and Lily’s undifferentiated profile is similar to the low race salience profile, and their committed internalization profile seems to match the multiculturalist profile in this study and Carter’s racial pride profile.

In Study 2, we examined clusters from different educational contexts to see if context was related to racial identity profiles. Several researchers have reported differences on racial identity attitudes between students attending PWIs and historically Black colleges and universities (HBCUs) using a variety of measures, including Baldwin and Bell’s (1985) African Self-Consciousness Scale (Cokley, 1999a, 1999b), the RIAS (Dartson, 1999; Hood, 1998), and the MIBI (Cokley, 1999a, 1999b; Webster, 2002). Students attending HBCUs and PWIs have been found to have higher scores on Black
nationalism and immersion-emersion (pro-Black/anti-White) attitudes and lower scores on assimilation attitudes. Some researchers have also reported higher African Self-Consciousness Scale scores for students attending HBCUs as opposed to PWIs (Baldwin, Duncan, & Bell, 1987; Cokley, 1999a, 1999b), although others have reported higher scores for students attending PWIs (e.g., Cheatham, Tomlinson, & Ward, 1990). The majority of these findings suggest that African Americans in predominantly Black environments are more likely to have separatist attitudes than are African Americans in majority White environments. This hypothesis is in keeping with the social psychological literature, which has demonstrated that (a) “safe intergroup contact, within mixed neighborhoods, encourages intergroup friendships” (Fiske, 1998, p. 375) and that (b) “personalized interactions with out-group members” reduces prejudice (Brewer & Brown, 1998, p. 580).

The goals of Study 2 were (a) to see if the clusters from Study 1 replicated in these samples and (b) to see if clusters from PWI and HBCU environments differed. We applied the same clustering techniques in Study 2 and compared the cluster profiles both statistically and theoretically to those obtained in Study 1.

Method

Participants

The participant base in this study consisted of two independent samples of students attending several PWIs and HBCUs. The PWI group totaled of 314 students (65% female; 88% undergraduates) from 17 different institutions, ranging in age from 18 to 53 years \((M = 22.02, SD = 5.4)\) and with a mean GPA of 2.91 \((SD = .55)\). Of these students, 67% chose African American as their racial designation and 33% chose Black. Participants indicated that 60% of their mothers and 53% of their fathers had at least some college education.

The HBCU group totaled 306 students (54% female; 96% undergraduates) from five different institutions, ranging in age from 18 to 54 years \((M = 21.96, SD = 4.2)\) and reporting a mean GPA of 2.93 \((SD = .44)\). Of these students, 75% chose African American as their racial designation and 25% chose Black. Participants indicated that 64% of their mothers and 55% of their fathers had at least some college education.

Measure and Procedures

The CRIS was the only instrument used in this study. Four graduate students collected CRIS data as part of graduate research projects (Evans,
2003; Helm, 2002; White, 2002; Wright, 2003). They were given permission to use and were provided copies of the CRIS, with the understanding that they would share their CRIS data with the authors for future combined sample research on the CRIS. The data were provided to the researchers in files with demographic information and CRIS items only. Recruitment strategies included mailed and faxed requests to individuals and groups, flyers, postings on Web sites, and personal requests to professors, classes, and student organizations. Some participants were supervised in completing the questionnaires, and the questionnaires were mailed to others with stamped return envelopes. Given this study’s goal of exploring profiles from students in different settings, the combined data set was divided into two groups, one with students attending PWIs and one with students attending HBCUs.

Results

PRELIMINARY ANALYSES

The patterns of means in both the PWI and the HBCU samples were similar to the original sample—that is, lower for the preencounter and immersion-emersion subscales and significantly higher ($p < .001$) for the internalization subscales. Internal consistency estimates for all subscale scores were in the moderate to high range. In the PWI sample, reliability estimates were .83 (preencounter assimilation), .79 (preencounter miseducation), .80 (preencounter self-hatred), .85 (immersion-emersion anti-White), .79 (internalization Afrocentric), and .78 (internalization multiculturalist inclusive). Reliability estimates for the HBCU sample were .74 (preencounter assimilation), .83 (preencounter miseducation), .78 (preencounter self-hatred), .88 (immersion-emersion anti-White), .82 (internalization Afrocentric), and .77 (internalization multiculturalist inclusive). Both obtained (PWI $Mdn r = |.14|$; HBCU $Mdn r = |.19|$) and corrected (PWI $Mdn r = |.17|$; HBCU $Mdn r = |.24|$) subscale intercorrelations were low.

As (a) both the PWI and the HBCU samples were drawn from multiple studies, (b) the CRIS is a relatively new instrument, and (c) the structural validity of the scores was critical for interpretation of any clusters found, we conducted exploratory factor analyses (principal axis extraction; oblimin rotation) to ensure that the six-factor structure was viable. Results provided strong support for the six-factor structure of CRIS scores in both samples: salient structure coefficients of .40 or greater on appropriate subscales, no salient cross-loadings, and low intercorrelations among the six factors (PWI $Mdn r = |.15|$; HBCU $Mdn r = |.21|$).
CLUSTER ANALYSES

We applied MEG (McDermott, 1998) to resolve the racial identity profiles based on clustering techniques in precisely the same way as in the original sample. Cluster analyses are sensitive to the scale used, and altering the scales of included variables can result in different cluster solutions (Hair & Black, 2002). Because we used the same instrument (i.e., the CRIS) in both studies, we converted the PWI and HBCU sample raw scores to T scores using the sample distribution from the Study 1 sample to assure comparability of scores.

PWI sample. We analyzed the three independent subsamples ($n_1 = 105; n_2 = 105; n_3 = 104$) using first-stage clustering and revealed viable solutions ranging from three to five or six clusters. Applying Ward’s minimum variance clustering in the second stage resulted in a five-cluster solution (see Figure 3) with adequate homogeneity statistics and sufficient overall cohesion ($\bar{H} = .69$). Cohesion within clusters and profile variables was also adequate. Third-stage clustering indicated that within-cluster homogeneity and within-profile variable homogeneity were adequate and that overall homogeneity was improved ($\bar{H} = .72$). Excellent replication rates were evident for each cluster, with all five clusters replicating across the three subsamples. Clusters ranged in size from 48 (15.3%) to 87 respondents (27.7%), with 14 (3.2%) unassigned.

HBCU sample. Fusion statistics in the first stage for each of the three HBCU subsamples ($n = 102$) indicated that two- to five-cluster solutions were viable options. Second-stage clustering resulted in a five-cluster solution (see Figure 4) with adequate cohesion ($\bar{H} = .65$), and third-stage clustering improved overall homogeneity ($\bar{H} = .70$). Replication rates across these subsamples were variable, with Clusters 1 through 3 replicating 100%, Cluster 4 replicating 67%, and Cluster 5 replicating 33%. These clusters ranged in size from 36 (11.8% of sample) to 71 (23.2%), with 24 participants (7.8%) unassigned.

Cross-sample profile replication. We compared each sample’s cluster mean scores by using the generalized distance score ($D^2$). Using the cluster profiles from the original sample as the basis for comparison, we found that Clusters 3 through 6 replicated in both the PWI and the HBCU samples; however, Cluster 1 (Afrocentrics) did not replicate, and Cluster 2 (multiculturalists) replicated only in the PWI sample. We gave all five clusters in the PWI sample names reflecting their replication of profiles in the original sample: Cluster 1 = miseducated variant, Cluster 2 = multiculturalists, Cluster 3 = low race salience, Cluster 4 = assimilated, and Cluster 5 = immersion.
Similarly, cluster names in the HBCU sample followed suit: Cluster 1 = low race salience, Cluster 2 = assimilated, Cluster 3 = miseducated variant, and Cluster 5 = immersion. Based on statistical comparisons, HBCU Cluster 4 appeared to be a version of the miseducated variant profile. However, an examination of the profile (see Figure 4) showed substantially lower self-hatred and anti-White mean scores and a substantially higher multiculturalist inclusive score. The differences seemed to reflect a reduction of negative attitudes aimed at both Blacks and Whites, and we named this cluster identity in transition.

FIGURE 3. Racial Identity Clusters—Study 2: Predominantly White Institution Sample

NOTE: PA = preencounter assimilation; PM = preencounter miseducation; PSH = preencounter self-hatred; IEAW = immersion-emersion anti-White; IA = internalization Afrocentric; IMCI = internalization.
Study 2 Discussion

This study examined the generalizability of the profiles found in Study 1, in another PWI sample, and in an HBCU sample. Results indicated that four of the six profiles found in Study 1 replicated in the Study 2 samples, with one profile (Afrocentrics) not replicating in either sample and with another (multiculturalists) replicating only in the PWI sample. The four profiles found in all three samples included three reflecting preencounter
themes (assimilation, miseducated variant, and low race salience) and one reflecting immersion-emersion (immersion) themes.

The results allowed us to draw five tentative conclusions. First, there are general, replicable nigrescence profiles in the population. We base this conclusion on both the replication of clusters across samples and the replication of clusters within each sample’s three blocks. Second, some of these profiles are found in both PWI and HBCU samples. Third, individuals who have assimilated attitudes are distinct from those with low race-salience attitudes. Fourth, some profiles (e.g., assimilated, low race salience, miseducated variant) may be more common in the population than others (e.g., Afrocentrics). Finally, multicultural attitudes are more likely to be found in institutions where African Americans are a minority or are interacting with substantial numbers of other racial and ethnic groups.

**GENERAL DISCUSSION**

This research endeavor had three major goals: to see if cluster analysis would yield interpretable racial identity profiles; to examine the generalizability of interpretable profiles, if found; and to see if context played a role in the profiles found. The results of the two studies provided support for all three goals. In the following sections, we discuss the theoretical and counseling implications of the findings and provide some suggestions for future research in this area.

**Nigrescence Profiles**

Although the number of nigrescence attitudes is hypothetically finite, there are probably many more of these attitudes than identified in NT-E (Cross & Vandiver, 2001, p. 374). Across these two studies, seven profiles were found; however, if individuals can be classified on the basis of high, medium, or low scores on the six attitudes measured by the CRIS, the potential number of racial identity profiles surpasses the number found in this study. On the other hand, there are certain attitudes that may occur in concert with each other, much as the anti-White and Afrocentric scores are consistently correlated. The results of the studies do provide examples of profiles based on specific combinations of scores, including miseducated variant, immersion, and Afrocentric.

**PREENCOUNTER CLUSTERS**

*Assimilation profile.* We found three preencounter profiles (i.e., profiles placing low or negative salience on race) in all three samples. Individuals
in the assimilation clusters see themselves as American rather than African American. They have accepted the negative stereotypes of African Americans but do not apply these stereotypes to themselves. The below-average scores on anti-White and Afrocentric attitudes confirm the predominance of the assimilation theme. The assimilation clusters had mean differences on multiculturalist attitudes across the three samples, with the two samples from PWIs having above-average internalization multiculturalist inclusive scores and the sample from the HBCU having below-average scores on this subscale. The range of scores on the multiculturalist inclusive subscale is in keeping with the hypothesis about the importance of context. Individuals in the assimilated clusters seem to be responding to the embracing-other-people aspect of the multiculturalist items rather than the strong-Black-identity aspect, resulting in higher scores at the PWIs than at the HBCUs.

*Miseducated variant profile.* This profile describes a group of people whose racial identity is strongly influenced by negative stereotypes of African Americans. Although their Afrocentric attitudes are above average, the dominant themes for this group are clearly preencounter, including miseducation, assimilation, and self-hatred. The importance of context in this profile is reflected in differences between individuals attending PWIs versus HBCUs, with the latter reporting higher anti-White attitudes and substantially lower multicultural attitudes.

*Low race salience profile.* Individuals in this cluster are not pro-Black or anti-Black, pro-White or anti-White, multicultural, miseducated, or self-hating. Indeed, these individuals seem to avoid dealing with or thinking about issues of race and do not even take a strong position on being American versus African American. Thus, we can classify them as raceless (Arroyo & Zigler, 1995: Fordham, 1988) or aschematic (Oyserman, Kemmelmeier, Fryberg, Brosh, & Hart-Johnson, 2003).

**IMMERSION AND INTERNALIZATION CLUSTERS**

*Immersion profile.* This profile reflected individuals who see themselves as African Americans (high scores on the Afrocentric subscale) but who are still dealing with issues of miseducation and self-hatred. These individuals also reject multiculturalism strongly, suggesting that the high anti-White scores in this profile are closer to Cross’s (1991) notion of Blacks who fantasize about hurting Whites or, as hooks (1992) described it, an anti-Whiteness that “emerges as a response to the traumatic pain and anguish that remains a consequence of White racist domination” (p. 169). Similarly,
the high Afrocentric scores may reflect intense black involvement fueled by “rage, anxiety, and guilt” (Vandiver et al., 2001, p. 177) rather than by embracing an Afrocentric perspective.

**Multiculturalist profile.** This profile emerged in the two PWI samples. These individuals reject negative stereotypes about both Blacks and Whites and have a strong Black identity alongside the willingness to work with other groups. Although not strongly Afrocentric in approach, they are also not assimilationist. Support for this view of multiculturalist is in keeping with Worrell and Gardner-Kitt’s (2005) findings. Worrell and Gardner-Kitt compared scores on the CRIS and the multigroup ethnic identity measure (Phinney, 1992) and reported a canonical function that they labeled *grounded multiculturalism*. This function consisted of pro-Black, pro-ethnic, and pro-other scores.

The lack of a multiculturalist cluster in the HBCU sample seems to be another manifestation of the importance of context. In three of the four profiles found in all three samples, students from HBCUs reported lower multiculturalist inclusive scores than did students from PWIs, and the multiculturalist cluster with the highest mean scores on multiculturalist inclusive did not emerge only in the sample HBCU participants.

**NONREPLICATING CLUSTERS**

**Afrocentric profile.** These individuals are low in self-hatred and reject the negative stereotypes about Blacks. Their anti-White attitudes are countered by average to above-average assimilationist and multiculturalist attitudes, and they are distinguished from the immersion profile by above-average scores on multiculturalist attitudes. These attitudes may explain why this cluster did not emerge in the sample from the HBCUs and seem to suggest that these individuals have adopted a Black frame of reference rather than rejecting a White frame (Cross, 1991; Vandiver et al., 2001).

**Identity in transition profile.** Individuals with this profile, which emerged only in the HBCU sample, accept the negative stereotypes about Blacks but do not apply these stereotypes to themselves. They have above-average Afrocentric attitudes but also see themselves as American, multicultural, and not anti-White. This group was most similar, statistically, to the mis-educated variant cluster; however, their self-hatred, Afrocentric, and multiculturalist inclusive scores are similar to the Afrocentric cluster. Indeed, this cluster was the only one with multiculturalist inclusive scores above the
mean in the HBCU sample and with high Afrocentric but not anti-White scores, one of the theoretical characteristics of an Afrocentric identity (Cross & Vandiver, 2001; Vandiver et al., 2001). Thus, the profile seems to combine preencounter and internalization features.

Revisiting Race Salience

Sellers et al. (1998) defined *race salience* as “the extent to which one’s race is a relevant part of one’s self-concept at a particular moment or in a particular situation” (p. 24), whereas Cross and Vandiver (2001) described it as “the degree to which race and Black culture are important to the individual” (p. 376). Although these definitions are similar and agree on the importance of context for interpreting salience, there is at least one major difference between them. In NT-E, self-concept is a personal identity component and race is a reference-group orientation or social identity component. Thus, from an NT-E perspective, race salience interacts with self-esteem only when racial identity attitudes have implications for personal identity (e.g., self-hatred attitudes; Vandiver et al., 2002). Moreover, Cross and Vandiver argued that the definition of *race salience* should differ across identity attitudes. In other words, race salience in the context of self-hatred attitudes is different from race salience in the context of Afrocentric attitudes.

The results of the present study speak to the issue of race salience. First, a low race salience profile emerged across all three samples. Second, the subscale means in the low race salience profile differed across subscales (Cross & Vandiver, 2001). Third, mean preencounter assimilation scores (i.e., attitudes that were least likely to reflect engagement in racial issues) on the low race salience profile were the highest of all the subscales.

Other recent research has also highlighted race as an important reference group for African Americans. Mendoza-Denton, Downey, Purdie, Davis, and Pietrzak (2002) found that African American students obtained significantly higher scores on race-based rejection sensitivity than did Asian American and White American students. High race sensitivity was positively associated with a tendency to perceive negative racial events and a sense of rejection and was negatively associated with feelings of belonging on campus and positive feelings toward dorm mates and professors. However, African Americans did not differ from other groups on personal rejection sensitivity, and race-based rejection sensitivity was not correlated to self-esteem when personal rejection sensitivity was controlled. Mendoza-Denton et al. (2002) concluded that their data “highlight the value of distinguishing the psychological legacy of people’s experiences as individuals
and as social group members and of seeking to determine when each type of legacy influences social behavior” (p. 914).

**Implications for Counseling**

The clinical implications of the current study’s findings are potentially far reaching. The results highlight the need for counselors who believe racial identity attitudes are important in working with clients to assess these attitudes across multiple dimensions. There is empirical support for a relationship between racial identity attitudes and using counseling services. For example, Parks (2001) found that African Americans with high preencounter and immersion scores had more negative attitudes toward psychotherapy. In another study, Townes (2004) reported a significant positive correlation between anti-White scores and scores on the cultural mistrust inventory (Terrell & Terrell, 1981) and a positive relationship between Afrocentric scores and preference for a Black counselor. These studies suggest that individuals with miseducated variant or immersion profiles may be less willing to seek psychological assistance. Similarly, individuals with an immersion profile, which has high anti-White and Afrocentric scores, may establish a therapeutic alliance more easily with a Black counselor.

Arroyo and Zigler (1995) found that although students who were raceless performed better academically, they also had higher depression scores. In another study, Oyserman et al. (2003) reported that students who were aschematic performed less well academically and were more vulnerable to stereotype threat (Steele, 1997). These findings suggest that students with a low race salience profile may be at risk for maladjustment. On the other hand, students with a multiculturalist cluster are the least likely to be poorly adjusted (Anglin, 2004) or in trouble academically (Oyserman et al., 2003) and are more likely to participate in psychotherapy (Anglin, 2004). Thus, when these multiculturalists seek assistance, psychologists may wish to be alert for issues unrelated to racial identity attitudes.

**Limitations**

This article had several limitations. The first is the use of secondary data in Study 2. We did not administer the CRIS ourselves, and the differences in administration procedures across the studies (e.g., supervised administration versus via mail) may have had an effect on responses provided. Several other concerns emerge from the first. One is that we drew samples
in the second study from multiple sites. Although sampling across multiple sites is not a limitation per se, it does increase other potential sources of error variance, especially as the number of participants varied by school type, with, on average, 60 students from each HBCU and 18 students from each PWI. In addition, the CRIS was collected with different instruments across the five studies from which the samples were drawn, and the impact of this on responses is unknown. A final concern related to the use of data from multiple sources is related to differential incentives to participate: Some participants were paid, others received course credit, and some did not receive any type of reward.

Another limitation is related to the research design. One can argue that it is more important to demonstrate cluster stability (i.e., replication within the same sample) than generalizability. Moreover, although studies by Anglin (2004) and Townes (2004) provide tentative support for the impact of cluster membership on functioning, these authors were using other analytic procedures. Any conclusion about the impact of cluster membership on psychological functioning is still speculative and in need of empirical support.

FUTURE RESEARCH

There are several avenues for future research. First, researchers can use cluster analytic techniques to see if similar profiles are found in other samples at both PWIs and HBCUs and with samples of different ages, socioeconomic statuses, and areas of residence (e.g., South, Northeast, etc.). Comparing clusters across individual PWIs and HBCUs and examining the gender distributions of cluster membership will also be important. To the extent that these clusters generalize to other samples, it will be important to examine differences among clusters on many of the variables related to racial identity attitudes (e.g., affective states, academic achievement, internalized racism, attitude toward psychotherapy, and psychological well-being) and other cultural variables like racial sensitivity (Mendoza-Denton et al., 2002). These studies are critical for informing psychologists who work with clients.

Of particular importance to conceptualizing race salience will be comparisons of cluster members on other variables measuring personal identity (e.g., self-esteem) and reference-group orientation (e.g., ethnic identity). For example, how do the individuals with miseducated variant, assimilation, and low race salience profiles differ on self-esteem? Another important study would be one examining the stability of these profiles.
In other words, if one examines the same individuals on two occasions, will he or she find the same profiles, and how much interprofile movement will there be?

**CONCLUSION**

In this study, we examined nigrescence profiles based on NT-E and CRIS scores in three independent samples. In sum, we found seven different profiles, four of which were in all three samples. The results of the two studies provide evidence indicating that there are theoretically interpretable racial identity profiles in African American groups and that we can measure these profiles. Moreover, the results support (a) the contention that racial identity should be measured multidimensionally (Cross & Vandiver, 2001; Sellers et al., 1997, 1998; Trimble et al., 2003; Vandiver et al., 2002); (b) the assessment of different identities within the themes of preencounter, internalization, and so on; and (c) the use of multivariate approaches to examine racial identity attitudes (Vandiver et al., 2002; Worrell, Vandiver, & Cross, 2004).

As this was the first study to demonstrate the generalizability of racial identity profiles, questions of replication are an important first step for future studies. However, accepting that there are profiles that can be identified mandates the field to revisit many of the questions that have been asked about the connection of racial identity attitudes to mental and physical well-being, academic achievement, engagement in risky behavior, and the host of other variables that have been studied with African American populations.

**NOTES**

1. Cluster analysis uses proximity measures reflecting the degree of similarity or dissimilarity among the objects or individuals being clustered and the clusters themselves (Jobson, 1992). The homogeneity statistic is one measure of proximity included in MEG (McDermott, 1998). Like the correlation coefficient, the homogeneity statistic can range from 1 to −1, with 1 indicating “perfect homogeneity (similarity)” (McDermott, 1998, p. 679), and is interpreted similarly. Thus, homogeneity statistics in the 0.6 to 0.7 range as in this study indicate adequate homogeneity.

2. Generalized distance scores are a proximity measure indicating dissimilarity. Euclidean distance is “the most commonly used measure of dissimilarity” (Jobson, 1992, p. 486) and is the foundation for MEG analyses, which use squared Euclidean distance scores ($D^2$). Generalized distance scores were calculated for all clusters from the PWI and HBCU samples.
with each of the clusters from the original sample, and PWI and HBCU clusters were classified as similar to the cluster with which they had the smallest generalized distant score.

REFERENCES


Evans, G. L. (2003, April). *Joint factor analysis of the AAAS-II (short form) and the CRIS: Do they measure the same thing?* Poster presented at the Great Lakes Conference (Counseling Psychology: Building Bridges—Making a World of Difference), Kalamazoo, MI.


