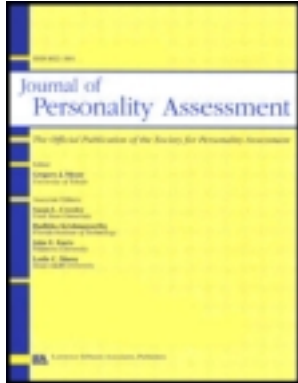


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### Cross Racial Identity Scale (CRIS) Scores: Stability and Relationships With Psychological Adjustment

Frank C. Worrell<sup>a</sup>, Rodolfo Mendoza-Denton<sup>b</sup>, James Telesford<sup>b</sup>, Crystal Simmons<sup>a</sup> & Justin F. Martin<sup>a</sup>

<sup>a</sup> Cognition and Development, Graduate School of Education, University of California, Berkeley

<sup>b</sup> Department of Psychology, University of California, Berkeley

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## Cross Racial Identity Scale (CRIS) Scores: Stability and Relationships With Psychological Adjustment

FRANK C. WORRELL,<sup>1</sup> RODOLFO MENDOZA-DENTON,<sup>2</sup> JAMES TELESFORD,<sup>2</sup> CRYSTAL SIMMONS,<sup>1</sup> AND JUSTIN F. MARTIN<sup>1</sup>

<sup>1</sup>*Cognition and Development, Graduate School of Education, University of California, Berkeley*

<sup>2</sup>*Department of Psychology, University of California, Berkeley*

We examined the structural validity, internal consistency (alpha and omega), and test–retest reliability of scores on the Cross Racial Identity Scale (CRIS; Vandiver et al., 2000; Worrell, Vandiver, & Cross, 2004), as well as the relationship between CRIS scores and several variables related to psychological adjustment. Participants consisted of several groups of African American college students ( $34 \leq n \leq 340$ ) attending a predominantly White university in a Western state. Confirmatory factor analyses indicated an acceptable fit of the data to the theoretical model, and alpha and omega coefficients indicate that CRIS scores have moderate to high internal consistency. CRIS scores also demonstrated stability over periods between 2 and 20 months in ranges that suggest long-term stability of racial attitudes. As predicted by the expanded nigrescence model (Cross & Vandiver, 2001), only self-hatred attitudes had consistent, meaningful relationships with psychological adjustment.

Black racial identity refers to a set of attitudes held by individuals of African descent, and includes how these individuals view (a) themselves as Blacks, (b) other individuals of African descent, and (c) individuals from other racial and ethnic groups. These attitudes have been linked theoretically to a number of important outcomes including academic achievement (e.g., Ogbu, 2004) and psychological well-being (Cross, 1971, 1991; Whittaker & Neville, 2010). The study of Black racial identity attitudes has increased over the last three decades and racial identity is one of the most frequently examined psychological constructs in African Americans (Cokley, 2002; Cokley, Caldwell, Miller, & Muhammad, 2001).

The research in this area burgeoned in the 1980s (Ponterotto & Mallinckrodt, 2007) and continues to increase through today, in part due to the publication of four instruments developed to operationalize theoretical models of Black racial identity. These instruments are the Racial Identity Attitude Scale (RIAS; Helms & Parham, 1990, 1996; Parham & Helms, 1981), the African Self-Consciousness Scale (ASCS; Baldwin, 1996; Baldwin & Bell, 1982, 1985), the Multidimensional Inventory of Black Identity (MIBI; Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Sellers, Smith, Shelton, Rowley, & Chavous, 1998), and the Cross Racial Identity Scale (CRIS; Cross & Vandiver, 2001; Vandiver et al., 2000; Vandiver, Cross, Worrell, & Fhagen-Smith, 2002; Worrell, Vandiver, & Cross, 2004).

As research in this area continues to evolve, new theoretical and empirical questions remain on the horizon. Examples of such questions include the following: Do youth have racial identity attitudes and profiles that match the profiles of their parents? Are racial identity profiles stable over time, in the absence of a life event leading to a major questioning of one's understanding of racial identity? Are racial identity profiles consistently

related to academic and psychological functioning in important ways? Questions like these can only be answered if the racial identity scores on which the profiles are based are themselves reliable and stable.

However, critiques of the psychometric properties of scores on three of these scales—the RIAS, the ASCS, and the MIBI (e.g., Cokley, 2007; Ponterotto & Mallinckrodt, 2007; Sabnani & Ponterotto, 1992)—raise questions about whether they can be used to answer such new questions. The RIAS (Helms & Parham, 1990, 1996; Parham & Helms, 1981) was developed to assess Cross's (1971) original nigrescence model (NT–O), and has four subscales: Pre-Encounter, Encounter, Immersion-Emersion, and Internalization. Despite its frequent use, the reliability and validity of some RIAS scores have not been supported in several studies (Burlew & Smith, 1991; Chappell, 1995; Fischer, Tokar, & Serna, 1998; Lemon & Waehler, 1996; Morrow, 1998; Ponterotto & Wise, 1987; Tokar & Fischer, 1998; Yanico, Swanson, & Tokar, 1994).

The ASCS (Baldwin & Bell, 1982) was developed a year after the first version of the RIAS. Based on Africentric theory (Baldwin, 1981), the ASCS assesses four dimensions of African self-consciousness: Personal Identification with the Group, Self-Reinforcement Against Racism, Racial and Cultural Awareness, and Value for African Culture. As with the RIAS, empirical studies have raised questions about reliability and validity of ASCS scores (Dixon & Azibo, 1998; Myers & Thompson, 1994; Simmons, Worrell, & Berry, 2008), with some researchers (e.g., Pierre & Mahalik, 2005; Simmons et al., 2008) reporting internal consistency estimates close to zero for some subscale scores. Another concern is that factor structures have ranged from two to seven, and in the single study that provided support for a theoretical four-factor structure (i.e., Stokes, Murray, Peacock, & Kaiser, 1994), only 21 of the 42 items had coefficients greater than .40.

The MIBI (Sellers et al., 1997; Sellers, Smith, et al., 1998) was developed to operationalize the multidimensional model of racial identity and measures seven Black racial identity attitudes: Centrality, Private Regard, Public Regard, Assimilation,

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Address correspondence to Frank C. Worrell, Cognition and Development, Graduate School of Education, University of California, Berkeley, CA 94720-1670; Email: frankc@berkeley.edu

Humanist, Nationalist, and Oppressed Minority. The MIBI has been conceptualized as (a) a seven-factor first-order model, (b) a second-order hierarchical model, and (c) a third-order hierarchical model (see Sellers, Shelton, et al., 1998). However, as with the RIAS and the ASCS, empirical studies of MIBI scores have also raised validity concerns. Research has not provided support for the seven-factor first-order structure (see Cokley & Helm, 2001; Helm, 2002; Simmons et al., 2008; Vandiver, Worrell, & Romero-Delgado, 2009) nor the two hierarchical models (Vandiver et al., 2009). Vandiver et al. (2009) noted that structural validity evidence is strongest for interpreting scores on the Assimilation, Public Regard, and Oppressed Minority factors.

To date, the CRIS (Vandiver et al., 2000) is the only Black racial identity instrument that has not been criticized for the psychometric properties of its scores. Indeed, the CRIS has been described as an exemplar of cultural scale development (e.g., Burkard & Ponterotto, 2008; Ponterotto & Park-Taylor, 2007), and Cokley (2007) recommended its use for studying racial identity attitudes based on the expanded nigrescence framework (NT-E). Additionally, recent studies using the CRIS have yielded several important findings. First, racial identity should be conceptualized as attitudinal rather than developmental (Worrell, 2008). Second, the nigrescence attitudes measured by CRIS scores are the same from adolescence through adulthood in terms of constructs assessed and the pattern of means (Worrell, 2008). Third, there are generalizable profiles of Black racial identity attitudes in the African American population (Korell, 2008; Whittaker & Neville, 2010; Worrell, Vandiver, Schaefer, Cross, & Fhagen-Smith, 2006). Fourth, racial identity profiles have differentiated and meaningful relationships with other psychological constructs (Korell, 2008; Whittaker & Neville, 2010). These findings all have major implications if racial identity attitudes and profiles are stable over long periods of time.

In this study, we examined the stability of racial identity attitudes operationalized with CRIS scores over a period of 2 to 20 months. However, because this is the first study using the CRIS in a sample from the Western United States, which has the lowest percentage of African Americans in the country, we also examined the structural validity and internal consistency of CRIS scores. Finally, we examined the relationship between CRIS scores and psychological adjustment. By way of background, we provide a brief overview of the evolution of nigrescence theory (Cross, 1971, 1991; Cross & Vandiver, 2001; Vandiver & Worrell, 2001), and review the extant evidence supporting the interpretation of CRIS scores. We also expand on recent developments that make the stability of CRIS scores an important and timely concern.

#### THE EVOLUTION OF CROSS'S NIGRESCENCE THEORY

By 1985, there were several theories of Black racial identity in the literature (see Helms, 1990b, for an overview). However, the publication of the RIAS (Parham & Helms, 1981) provided Cross's (1971) NT-O with a viable operationalization. The RIAS was used extensively (Cokley, 2007), and became the predominant Black racial identity instrument in the literature, and concomitantly, NT-O became the predominant theoretical framework. From the mid-1980s to the turn of the century, almost every discussion of Black racial identity has referenced NT-O, and the model is still cited frequently by contemporary scholars (e.g., Belgrave & Allison, 2010; Cokley &

Chapman, 2009; Ford & Whiting, 2009). Although the African self-consciousness framework and the ASCS (Baldwin & Bell, 1982, 1985), which are attitudinal and more in line with contemporary theorizing, were developed almost contiguously with the RIAS, the model never achieved the prominence of NT-O.

NT-O (Cross, 1971) had two major tenets. First, the model postulated that African Americans went through five stages of racial identity development, from Pre-Encounter to Internalization Commitment. Second, NT-O contended that the movement from Pre-Encounter to Internalization Commitment resulted in changes in individual adjustment from Black self-hatred to Black self-acceptance and from low to high self-esteem. The ability to examine these tenets of NT-O afforded by the RIAS began the chain of events that led to the current version of nigrescence theory (Cross & Vandiver, 2001). First, data collected using the RIAS led to a decoupling of racial identity and self-esteem. Cross (1991) reviewed this literature and pointed out that the studies played "havoc with traditional assumptions about the relationship of PI [personal identity] and RGO [reference group orientation] in the dynamics of Black identity" (p. 112). Cross concluded that racial identity stages had no consistent relationship with self-esteem or psychological adjustment.

Second, ongoing research did not support a stage interpretation of racial identity. Helms (1990a) observed that questions were being raised about whether the RIAS measured "a stage-wise process," and concluded that the pattern of intercorrelations among RIAS subscale scores was "consistent with theoretical descriptions of the relevant stages" (p. 37). However, shortly thereafter, Helms (1992; Helms & Piper, 1994) began to question the notion of stages, and in 1995, argued that "the construct of stages has been inadequate for describing the developmental processes surrounding issues of race" (Helms, 1995, p. 183). Helms (1992, 1995) began to use identity *status* rather than *stage* as the preferred term in her conceptualization. Although Helms (1995) conceptualized statuses as more fluid and dynamic than stages, she maintained the notion of developmental change, contending that "statuses range from the least developmentally mature or sophisticated to the most mature or sophisticated" with maturation in status being "triggered by a combination of cognitive-affective complexity within the individual and race-related environmental stimuli" (p. 184).

At least three lines of research provide an empirical challenge to a developmental conceptualization of racial identity scores based on a multidimensional nigrescence framework. Gardner-Kitt and Worrell (2007) provided strong validity evidence for interpreting CRIS scores in adolescents (see Scottham, Sellers, & Nguyễn, 2008, for similar work with the MIBI). Worrell (2008) examined the developmental hypothesis directly in a cross-sectional study of adolescents (*M* age = 14), emerging adults (*M* age = 19), and adults (*M* age = 34). He argued that a stage or developmental interpretation of nigrescence theory predicts that (a) adolescents should have the highest scores on the Pre-Encounter subscales (representing Stage 1), (b) emerging adults should have their highest scores on the Immersion-Emersion subscales (representing Stage 3), and (c) adults should have their highest scores on the Internalization subscales (representing Stage 4).

Worrell (2008) found that the pattern of means of the six CRIS scores did "not support a developmental interpretation" (p. 172), with all three groups having their lowest scores on

Self-Hatred (Pre-Encounter) and Anti-White (Immersion-Emersion) attitudes and their highest scores on Multiculturalist Inclusive (Internalization) attitudes. The profiles of scores across adolescents, emerging adults, and adults were remarkably similar, and the racial identity constructs measured by the CRIS were congruent across the three groups (Worrell, 2008). Finally, research based on NT-O (Cross, 1971) has not found support for a developmental progression of racial identity attitudes (e.g., Neil, 2003; Parham & Williams, 1993; Plummer, 1996), leading Quintana (2007) to conclude that current findings in racial identity research are “inconsistent with [the] presumed developmental hypothesis” (p. 266).

The third factor leading to the development of NT-E (Cross & Vandiver, 2001) was a growing consensus in the literature that racial identity should be conceptualized as attitudinal. Other theorists had already been labeling racial identity scores as attitudes. For example, Helms (1990a) described RIAS scores as measures of attitudes, and the MIBI (Sellers et al., 1997; Sellers, Smith, et al., 1998) and the CRIS (Vandiver et al., 2000) were developed specifically to measure multiple Black racial identity attitudes. What distinguishes NT-E (Cross & Vandiver, 2001; Worrell, Cross, & Vandiver, 2001), the third major iteration of Cross's nigrescence model from Cross's (1971, 1991) earlier models and Helms's (1992, 1995) conceptualization is the movement away from the notion of development.

According to NT-E (Cross & Vandiver, 2001), measurable racial identity attitudes are held by all individuals of African descent living in the United States, at least from adolescence onward (Worrell, 2008). All attitudes are assumed to be cognitively available in all African Americans, albeit at varying levels, and an individual's racial identity might be best determined by the profile of his racial identity attitude scores (Cross & Vandiver, 2001; Worrell et al., 2006). Moreover, the types of racial identity profiles found in African American adolescents will not differ from profiles found in African American college students or adults. The six attitudes that are assessed by CRIS subscales are Pre-Encounter Assimilation, Pre-Encounter Miseducation, Pre-Encounter Self-Hatred, Immersion-Emersion Anti-White, Internalization Afrocentricity, and Internalization Multiculturalist Inclusive. The adjectives—Pre-Encounter, Immersion-Emersion, and Internalization—were formerly designations of stages (Cross, 1971, 1991). In NT-E (Cross & Vandiver, 2001); these adjectives refer to the thematic content of the attitudes. Pre-Encounter attitudes reflect low or negative salience with regard to being Black, Immersion-Emersion attitudes are emotionally charged and extreme, and Internalization attitudes are grounded in Black self-acceptance.

Pre-Encounter Assimilation attitudes assess low race salience on the part of the individual and reflect a view of the self as American rather than African American. Pre-Encounter Miseducation attitudes reflect an acceptance or endorsement of the negative stereotypes that are present in society about African Americans. Pre-Encounter Self-Hatred attitudes are the most personally negative; these attitudes reflect unhappiness with being African American and having physical characteristics reflecting an African heritage. In keeping with NT-E (Cross & Vandiver, 2001), Self-Hatred attitudes have negative correlations with self-esteem (Awad, 2007; Vandiver et al., 2002) and are the only attitudes hypothesized to be related to psychological adjustment (cf. Wester, Vogel, Wei, & McLain, 2006).

Immersion-Emersion Anti-White attitudes refer to profound negative views of European Americans. Internalization Afrocentricity attitudes reflect an acceptance of pro-Black views that are perceived to be African in origin (i.e., Afrocentric), and Internalization Multiculturalist Inclusive attitudes reflect pro-Black attitudes coupled with a willingness to respect and engage with other cultural groups. NT-E postulates that there are other possible racial identity attitudes, but the six proposed by NT-E are thought to be among the most common. For example, several Black racial identity attitudes (e.g., Humanist, Oppressed Minority, Public Regard) proposed in the multidimensional model of racial identity (Sellers et al., 1997) are not assessed by the CRIS.

## PSYCHOMETRIC SUPPORT FOR CRIS SCORES

### *Development of the CRIS*

The CRIS (Vandiver et al., 2000) was developed to operationalize NT-E (Cross & Vandiver, 2001). It was developed over a 5-year period (1995–2000) in a process that involved six phases (see Cross & Vandiver, 2001; Vandiver et al., 2002; Vandiver & Worrell, 2001). Phase 1 involved the development of items related to the major attitudes that were conceptualized by NT-O (i.e., assimilation, miseducation, self-hatred, anti-White, nationalist, and multiculturalist). The initial item development process yielded 250 items, which were reduced to 126 by the development team (Vandiver, Fhagen-Smith, Cokley, Cross, & Worrell, 2001). The group of 126 items were rated by 20 experts on racial identity, and on the basis of these ratings, 57 items were used for data collection in Phase 2. Across Phases 2 to 4, items were refined and additional items were written on the basis of the data collected as scores were examined to establish minimal levels of internal consistency as well as structural validity of individual subscales. The number of items ranged from 57 to 76 and reliability estimates across subscale scores ranged from .59 to .91 (Vandiver et al., 2001).

Phases 5 and 6 were used to identify the items that had the highest coefficients in structural analyses (Vandiver et al., 2002). On the basis of exploratory factor analyses (EFAs), five items with factor coefficients  $>.50$  were identified for each of the subscales in Phase 6 and these were used to examine the structural validity using confirmatory factor analysis (CFA), as well as convergent and discriminant validity. The Black Nationalism subscale was renamed Afrocentricity as the five items retained were all items that focused on that aspect of nationalism. Internal consistency estimates for the 30-item version of the CRIS (i.e., six 5-item subscales) ranged from .78 to .89 ( $Mdn = .84$ ), and intercorrelations ranged from |.04| to |.42|. Only two intercorrelations were greater than .30: Anti-White/Afrocentricity (.42) and Anti-White/Multiculturalist (–.35). Several models were examined in the CFA: one-factor to six-factor first-order models and two higher order models, one with a single higher order factor (labeled Racial Identity) and one with two higher order factors labeled Pre-Discovery (consisting of the Pre-Encounter Assimilation, Miseducation, and Self-Hatred factors) and Post-Discovery (consisting of the Anti-White, Afrocentricity, and Multiculturalist factors). The six-factor model had the best fit (comparative fit index [CFI] = .94, root mean square error of approximation [RMSEA] confidence interval [.043,.055]; Vandiver et al., 2002).

### Structural Validity

Subsequent to the final scale development study (i.e., Vandiver et al., 2002), other EFAs have supported the six-factor model in adolescents (Gardner-Kitt & Worrell, 2007), emerging adults (primarily college students; Helm, 2002; Simmons et al., 2008), and adults (Worrell, Vandiver, Cross, & Fhagen-Smith, 2004), and a recent CFA (Worrell & Watson, 2008) replicated the results of the CFA by Vandiver et al. (2002), providing support for six first-order factors in another sample of college students. Worrell and Watson (2008) concluded that “the CRIS is a viable operationalization of NT–E” (p. 1054).

### Convergent Validity

Convergent validity of CRIS scores has been examined with scores on two other Black racial identity scales, the ASCS (Baldwin & Bell, 1982, 1985) and the MIBI (Sellers et al., 1997; Sellers, Smith, et al., 1998). Vandiver et al. (2002) found that Assimilation scores on the CRIS had moderate positive correlations with Assimilation and Humanist scores on the MIBI, and moderate negative correlations with Centrality and Nationalist scores on the MIBI. Anti-White and Afrocentricity scores on the CRIS had correlations in the .50 range with Nationalist scores on the MIBI. Simmons et al. (2008) reported similar correlations between CRIS and MIBI scores, as well as moderate correlation ( $r = .55$ ) between Afrocentricity scores on the CRIS and Personal Identification with the Group scores on the ASCS.

Worrell and Gardner-Kitt (2006) examined the relationship between racial identity and ethnic identity, a social identity construct similar to racial identity but focused on ethnic rather than racial identification. Racial identity was operationalized with the CRIS (Vandiver et al., 2000) and ethnic identity was operationalized with the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). These researchers found that Assimilation and Self-Hatred scores on the CRIS had negative relationships with Ethnic Identity scores on the MEIM, whereas the CRIS's Afrocentricity scores were positively related to Ethnic Identity scores. The authors also found that Multiculturalist scores on the CRIS were positively related to Other Group Orientation (i.e., the willingness to engage with ethnic groups other than one's own) scores on the MEIM, whereas Anti-White scores on the CRIS were negatively related to Other Group Orientation scores. All of these findings are in keeping with hypotheses based on NT–E.

### Discriminant Validity

Personality is an important aspect of psychological functioning. Consequently, it is prudent to ascertain that other psychological constructs such as racial identity attitudes are different from personality constructs. One of the most widely accepted models of personality is the Five-Factor model (Aguilar, Kaiser, Murray, & Ozer, 1998; Hull, Beaujean, Worrell, & Verdisco, 2010). Thus, Vandiver et al. (2002) examined the relationship between the racial identity attitudes assessed by the CRIS and the Big Five—neuroticism, extraversion, openness, conscientiousness, and agreeableness—assessed with the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991; Worrell & Cross, 2004). Correlations between CRIS and BFI scores ranged from .101 to .121, indicating that Black racial identity attitudes are distinct constructs.

Vandiver et al. (2002) also examined the relationship between CRIS scores and social desirability (assessed with the Balanced Inventory for Desirable Responding [BIDR; Paulhus, 1984, 1991]) to see if CRIS scores reflected actual attitudes about race or socially acceptable racial attitudes. The BIDR contains two subscales that measure self-deception and impression management (or other deception), and correlations between CRIS and BIDR scores ranged from .101 to .123, indicating that these constructs are also distinct from racial identity attitudes. Most CRIS scores were also not related to global self-esteem (Rosenberg, 1965), with the exception of Self-Hatred attitudes, which had a moderate negative relationship in the .30 range.

### Reliability

Examinations of the internal consistency of CRIS scores have also been supportive. Across more than 10 studies of the CRIS (see Worrell & Watson, 2008), alpha estimates (Cronbach, 1951) for the scores on the six subscales have ranged from .70 to .89, with median values ranging from .78 to .86. Omega (McDonald, 1999) estimates have been in the same range, with values across the subscales ranging from .69 to .87 (Gardner-Kitt & Worrell, 2007; Simmons et al., 2008; Worrell, Vandiver, Cross, et al., 2004). Vandiver (2007) reported moderate to high stability coefficients in an interval range of 2 to 6 weeks ( $Mdn = 21$  days): Assimilation (.86), Miseducation (.77), Self-Hatred (.80), Anti-White (.79), Afrocentricity (.79), and Multiculturalist Inclusive (.73).

### THIS STUDY

As can be seen, the current psychometric evidence supporting the interpretation of CRIS scores is generally strong. In this study, we examined CRIS scores in several cohorts of African American students attending a predominantly White research university in a Western state. In response to Helms's (2007) concern that examinations of internal consistency of racial identity scores use Cronbach's (1951) alpha almost exclusively, we examined internal consistency of CRIS scores using both alpha and omega (McDonald, 1999). We also examined the stability of CRIS scores over longer time frames than is typical in studies of test–retest reliability. Although the short-term stability of CRIS scores is an important concern from a measurement perspective, as noted earlier, there are also theoretical reasons to examine the stability of these scores over longer periods of time. Finally, NT–E suggests that only scores on the Self-Hatred factor will be related to psychological adjustment (Vandiver et al., 2002), as self-hatred occurs at the intersection of personal and social identity. Thus, we examined the relationship between CRIS scores and scores on Derogatis's (1993) Brief Symptom Inventory (BSI).

Based on the previous literature, it was hypothesized that CRIS scores would be (a) structurally valid (i.e., fit indexes in the acceptable range and coefficients  $>.40$  for all items), (b) internally consistent (i.e., alpha and omega estimates in the .75 to .90 range), and (c) stable in the short term (i.e., test–retest correlations  $>.60$ ). We also speculated that CRIS scores would show moderate stability (i.e., test–retest correlations  $>.50$ ) over the longer time frame as well, setting the stage for examinations of the stability of racial identity profiles and longitudinal studies of racial identity attitudes beginning in adolescence akin to longitudinal studies focusing on personality (e.g., Roberts &

TABLE 1.—Descriptive statistics on internal consistency samples.

	Fall 2006 1 <sup>a</sup>	Spring 2007 2 <sup>b</sup>	Fall 2007 3 <sup>c</sup>	Spring 2008 4 <sup>d</sup>	First Time <sup>e</sup>
Age	20.7	22.0	21.3	20.9	21.3
Grade-point average	3.3	3.3	3.2	3.1	3.2
% Female	93.2	77.7	71.4	76.1	74.6
% Self-designating AA/Black	70.4	59.7	58.7	57.9	60.8
% Self-designating African	20.5	21.8	23.1	23.5	21.1
% Self-designating CA/Black	3.4	1.7	5.0	4.9	4.2
% Self-designating HI/Black	1.1	0.8	1.2	1.1	0.9
% Self-designating mixed (race)	4.5	14.4	10.6	11.5	11.9
% from rural community	3.4	3.4	7.5	4.4	5.9
% from suburban community	67.0	56.4	59.6	61.2	59.6
% from urban community	28.4	36.1	31.1	29.0	30.9
% Poor/working class	27.3	27.5	24.2	29.9	27.1
% Middle class	72.7	71.6	72.7	69.5	72.3
% Upper class/wealthy	0.0	1.0	3.1	0.5	0.6
% Mothers with at least a bachelor's	58.0	53.4	58.2	53.1	53.5
% Fathers with at least a bachelor's	45.7	52.2	48.4	49.7	48.6

Note. AA = African American; CA = Caribbean; HI = Hispanic.

<sup>a</sup>*n* = 88. <sup>b</sup>*n* = 119. <sup>c</sup>*n* = 162. <sup>d</sup>*n* = 185. <sup>e</sup>*n* = 340.

DelVecchio, 2000). With regard to the BSI, we hypothesized that Pre-Encounter Self-Hatred scores would have positive and meaningful relationships with the subscale scores on this measure (i.e.,  $r > .30$ ), as higher BSI scores indicate greater maladjustment.

## METHOD

### Participants

Participants consisted of several groups of African American students attending a major research university in a Western state. As data were collected across four semesters (Fall 2006–Spring 2008), we used five groups ranging in size from 88 to 340 (*Mdn* = 162) to examine internal consistency estimates. These included four within-semester cohorts, and a fifth group consisting of all students completing the CRIS for the first time regardless of semester. Students who completed the measure in more than one semester (34–89) were used to test the measure's stability. Data from all students who completed the CRIS for the first time, irrespective of semester (i.e., the first time group,  $n = 340$ ), were used to examine internal consistency and structural validity of CRIS scores, as well as the relationships with the personality variables. Descriptive statistics on the within-semester groups and the first time group are presented in Table 1.

The majority of participants ( $\approx 60\%$ ) from Spring 2007 forward self-designated as African American, with about 20% of each group self-designating as African and 10% to 14% indicating mixed race. In contrast, the Fall 2006 cohort (the smallest cohort) was 70% African American, 20% African, and 5% mixed race. These figures are comparable to previous studies of the CRIS, which have had samples with African American self-identification ranging from as low as 45% to over 90%. Also, as in previous studies of the CRIS, the majority of participants were female (more than 70% in each semester), and participants were largely from suburban and urban communities. About 25% of the sample indicated that they were from working-class backgrounds, and approximately half of the participants indicated

that their mothers and fathers had bachelor's degrees. To date, examinations of racial identity attitudes have yielded either inconsistent results or small differences on the basis of community type, gender, or socioeconomic status (Fhagen-Smith, Vandiver, Worrell, & Cross, 2010). In the only study using the CRIS, Fhagen-Smith et al. found one meaningful difference: higher multiculturalist attitudes for females relative to males with an effect size in the medium range ( $d = .43$ ).

Test–retest samples consisted of individuals who took the CRIS on at least two occasions, and included six sets of comparisons. There were three one-semester periods (Fall 2006–Spring 2007, Spring 2007–Fall 2007, Fall 2007–Spring 2008), with the test–retest interval ranging from 2 to 7 months; two two-semester periods (Fall 2006–Fall 2007, Spring 2007–Spring 2008), with the test–retest interval ranging from 9 to 15 months; and one three-semester period (Fall 2006–Spring 2008), with the test–retest interval ranging from 14 to 20 months.

### Measures

**Racial identity.** Racial identity attitudes were assessed with the CRIS (Vandiver et al., 2000; Worrell, Vandiver, & Cross, 2004). The CRIS consists of 40 items consisting of six subscales of five items each and 10 filler items. As described earlier, median internal consistency estimates in the literature for scores on the six subscales range from .78 to .86 (Worrell & Watson, 2008), and the structural validity of CRIS scores has been supported in EFAs (Gardner-Kitt & Worrell, 2007; Simmons et al., 2008) and CFAs (Vandiver et al., 2002; Worrell, Vandiver, Cross, et al., 2004). Convergent validity was established with racial identity (Simmons et al., 2008; Vandiver et al., 2002) and ethnic identity (Worrell & Gardner-Kitt, 2006), and discriminant validity was demonstrated with the Big Five and social desirability (Vandiver et al., 2002). Individuals respond to the items using a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) and averages are computed for each subscale.

**Brief Symptom Inventory.** The BSI (Derogatis, 1993) is a 53-item instrument that assesses symptoms related to nine dimensions: Somatization (7 items), Obsessive–Compulsive (6 items), Interpersonal Sensitivity (4 items), Depression (6 items), Anxiety (6 items), Hostility (5 items), Phobic Anxiety (5 items), Paranoid Ideation (5 items), and Psychoticism (5 items). Four items are not included in scoring. Respondents rate their agreement with items on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*), with higher scores indicating greater endorsement of the symptoms. Raw scores are converted to T scores for interpretation.

Derogatis (1993) reported internal consistency estimates for subscale scores ranging from .71 to .85, and 2-week stability coefficients ranging from .68 to .91. The Global Severity Index, a composite BSI score, had a stability coefficient of .90. Derogatis also reported evidence of structural and convergent validity with the Symptom Checklist–90–Revised (SCL–90–R; Derogatis & Cleary, 1977), and predictive validity for BSI score interpretation. Internal consistency estimates in the sample reported here were as follows: Somatization (.78), Obsessive–Compulsive (.78), Interpersonal Sensitivity (.78), Depression (.83), Anxiety (.74), Hostility (.79), Phobic Anxiety (.63), Paranoid Ideation (.72), and Psychoticism (.69).

*Procedure*

In each of the four semesters, participants were recruited using both targeted recruiting as well as a snowball method in which participants were encouraged to tell their friends about the study. An African American graduate research assistant with knowledge of student organizations and events contacted leaders of both formal and informal African American student organizations to advertise the study. To facilitate completion of the survey at the students' leisure, the survey was offered online using secure university servers. Thus, access was restricted to students enrolled in the university, as students had to log in using their university ID to participate in the study.

Customized survey software commissioned by the university to administer surveys more generally was used for this survey. Participants were offered \$20 in return for completion of the study. At the conclusion of the survey, participants were provided with a completion certificate that they presented to a staff member in the Psychology Department so that they could be paid. Participants were also offered the option to complete a paper-and-pencil version of the study if they chose by arranging an appointment with a research assistant. In such cases, participants were paid directly at the end of the session.

The survey, called the African American Student Life Survey, consisted of several questionnaires that included the CRIS and the BSI. After logging in to the study, participants were assigned a unique ID code generated by the computer and tied to their university ID. Participants had to sign a consent form online before being routed to the survey. Participants could log out and return to complete the survey at a later time. Following completion of the survey, participants were shown a debriefing form and were then given directions for payment. At the end of each semester, the researchers obtained the survey responses. The same recruitment methods were followed every semester with one exception: Students who had completed the survey in a previous semester and who had not graduated were contacted via e-mail and invited to participate in the subsequent semester. The researchers followed guidelines approved by the university's institutional review board to maintain confidentiality of students' electronic records.

RESULTS

*Descriptive Statistics*

Means and standard deviations are reported in Table 2. As can be seen, Multiculturalist Inclusive means are highest and most of the other means are in the range of 2.0 to 3.0 across semesters. Skew and kurtosis values for the scores were all less than 12.01, with the exception of the kurtosis for Self-Hatred scores in Fall 2006, which had a value of 3.2. Many of the subscale intercorrelations were less than .30. However, there were some exceptions. Anti-White and Afrocentricity scores were positively correlated in all five groups ( $.42 < r < .54$ ,  $Mdn = .44$ ), in keeping with previous research. Table 3 contains correlations among the six subscales for the first time sample.

Several other positive and meaningful (i.e.,  $\geq .30$ ) correlations were found between subscales in some groups, with coefficients in the .30 to .50 range, including Assimilation and Miseducation (four of five), Assimilation and Self-Hatred (three of five), Self-Hatred and Anti-White (three of five), and Miseducation and Self-Hatred (one of five). In Spring 2007, Anti-White scores were negatively correlated with Multiculturalist Inclusive scores

TABLE 2.—Descriptive statistics for Cross Racial Identity Scale scores.

Scales	Fall 2006 <sup>a</sup>		Spring 2007 <sup>b</sup>		Fall 2007 <sup>c</sup>		Spring 2008 <sup>d</sup>		First Time <sup>e</sup>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Assimilation	2.06	1.08	2.27	1.24	2.41	1.26	2.36	1.38	2.29	1.25
Miseducation	2.69	1.18	2.71	1.25	3.02	1.32	3.02	1.25	2.83	1.26
Self-Hatred	2.37	1.48	2.36	1.39	2.48	1.43	2.44	1.42	2.40	1.40
Anti-White	1.81	1.22	2.17	1.33	2.08	1.23	2.11	1.34	2.04	1.25
Afrocentricity	2.90	1.26	3.12	1.26	3.02	1.34	3.10	1.36	3.04	1.32
Multiculturalist Inclusive	5.49	1.23	5.32	1.24	5.35	1.29	5.23	1.29	5.42	1.23

<sup>a</sup>*n* = 88. <sup>b</sup>*n* = 119. <sup>c</sup>*n* = 162. <sup>d</sup>*n* = 185. <sup>e</sup>*n* = 340.

( $-.41$ ). The pattern of correlations was similar to previous studies, as was the fact that Multiculturalist Inclusive means were the highest. With the exception of Self-Hatred scores, which have been lower in some college samples (i.e., means between 1 and 2), the distributions are similar to those in previous studies of the CRIS.

*Internal Consistency*

Table 4 contains the internal consistency estimates for the CRIS subscale scores. Cronbach's alpha ranged from .78 to .91 across all subscales, with median estimates for the six subscales ranging between .81 to .89. None of the 95% confidence intervals fell below .70. Omega estimates were quite similar, ranging from .81 to .91. Omega coefficients were either identical to the alpha coefficients, or higher by .01 to .03 for 13 of the 25 coefficients.

*Structural Validity*

The structural validity of CRIS scores was examined using EQS, Version 6.1 (Bentler, 2005). Only the six-factor model was examined given the strong support for this structure in previous studies (e.g., Simmons et al., 2008; Vandiver et al., 2002; Worrell, Vandiver, Cross, et al., 2004; Worrell & Watson, 2008). Maximum-likelihood extraction procedures were used to analyze the covariance matrix of raw scores, and the Satorra-Bentler scaled chi-square (Satorra & Bentler, 1994), which corrects for nonnormality in the data, was used for the analysis. Several criteria were used to assess goodness of fit (Hu & Bentler, 1998), including (a) the chi-square to degrees of freedom ratio, (b) the nonnormed fit index (NNFI), (c) the CFI (Bentler, 1990), (d) the standardized root mean square residual (SRMR), and (e) the RMSEA, with a 90% confidence interval.

Although Hu and Bentler (1999) have suggested NNFI and CFI values greater than .95 are indicative of acceptable fit, other

TABLE 3.—Correlations among Cross Racial Identity Scale subscales.

Subscales	PA	PM	SH	AW	IA	IM
Pre-Encounter Assimilation (PA)	1.00					
Pre-Encounter Miseducation (PM)	.35*	1.00				
Pre-Encounter Self-Hatred (SH)	.29*	.28*	1.00			
Immersion-Emersion Anti-White (AW)	.01	.09	.28*	1.00		
Internalization Afrocentricity (IA)	-.17	.20*	.12	.42*	1.00	
Internalization Multiculturalist (IM)	-.08	-.06	.01	-.26*	.00	1.00

\**p* < .001.

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TABLE 4.—Internal consistency estimates for Cross Racial Identity Scale scores.

Subscales (5 Items Each)	Fall 2006 <sup>a</sup>	Spring 2007 <sup>b</sup>	Fall 2007 <sup>c</sup>	Spring 2008 <sup>d</sup>	First Time <sup>e</sup>
Alpha ( $\alpha$ ; 95% CI)					
Assimilation	.82 [.75, .87]	.84 [.79, .88]	.86 [.82, .89]	.89 [.86, .91]	.85 [.82, .87]
Miseducation	.78 [.70, .85]	.85 [.80, .89]	.84 [.79, .87]	.80 [.76, .85]	.81 [.78, .84]
Self-Hatred	.90 [.86, .93]	.88 [.85, .91]	.88 [.85, .91]	.88 [.85, .91]	.87 [.85, .89]
Anti-White	.90 [.86, .93]	.89 [.85, .92]	.89 [.86, .92]	.91 [.89, .93]	.88 [.86, .90]
Afrocentricity	.85 [.80, .90]	.87 [.83, .90]	.90 [.87, .92]	.91 [.88, .93]	.88 [.86, .90]
Multiculturalist Inclusive	.84 [.78, .89]	.82 [.77, .87]	.86 [.83, .89]	.83 [.79, .87]	.82 [.79, .85]
Omega ( $\omega$ )					
Assimilation	.83	.84	.86	.89	.85
Miseducation	.81	.86	.84	.82	.83
Self-Hatred	.90	.88	.88	.88	.87
Anti-White	.90	.89	.89	.91	.88
Afrocentricity	.87	.88	.90	.91	.89
Multiculturalist Inclusive	.86	.84	.88	.85	.84

Note. Omega coefficients based on coefficients from a principal axis single-factor extraction for individual semesters and on standardized coefficients from a confirmatory factor analysis for the first time group. CI = confidence interval.

<sup>a</sup>*n* = 88. <sup>b</sup>*n* = 119. <sup>c</sup>*n* = 162. <sup>d</sup>*n* = 185. <sup>e</sup>*n* = 340.

researchers (e.g., Byrne, 2006, 2008; Marsh, Hau, & Wen, 2004) have suggested that NNFI and CFI values in the .92 to .95 range, and SRMR and RMSEA values in the .05 to .08 range indicate acceptable fit for item-level scales, especially for ones assessing attitudes. To scale the latent variables, a single indicator for each of the factors was set at unity. A chi-square to degrees of freedom ratio between 1 and 2 was also used as an acceptable fit criterion (Hair, Anderson, Tatham, & Black, 1995). The model allowed for covariances among the six factors.

Although the model yielded a significant chi square,  $\chi^2(390) = 582.56, p < .001$ , as is typical with sample sizes in the hundreds, the fit indexes provided strong support for the six-factor model:  $\chi^2/df = 1.49$ ; NNFI Robust = .947, CFI Robust = .952, SRMR = .059, RMSEA Robust = .038 (90% confidence interval [.032, .044]). Standardized coefficients were generally high for the six subscales, with only one falling below .50: Assimilation (.58–.82), Miseducation (.52–.79), Self-Hatred (.66–.85), Anti-White (.70–.82), Afrocentricity (.54–.90), and Multiculturalist Inclusive (.47–.90). Intercorrelations among the factors ranged from  $-.27$  to  $.47$  (*Mdn* = .13).

**Stability**

Stability coefficients are presented in Table 5. Coefficients for the one-semester retest intervals ranged from .46 to .75 (*Mdn* = .64), .57 to .73 (*Mdn* = .69), and .64 to .75 (*Mdn* = .66), for the three consecutive time periods, respectively. With regard to the two-semester retest intervals, coefficients are lower for the Fall 2006 to Fall 2007 period (.14–.68, *Mdn* = .52), but the Spring 2007 to Spring 2008 coefficients are similar to the one-semester intervals with coefficients ranging from .51 to .71 (*Mdn* = .65). The longest interval (Fall 2006–Spring 2008) had a median coefficient of .53. The median coefficients for the individual subscales across all of the periods did not differ substantially: Assimilation (.62), Miseducation (.62), Self-Hatred (.66), Anti-White (.58), Afrocentricity (.59), and Multiculturalist Inclusive (.66).

**Relationships With BSI Factors**

Correlations between CRIS and BSI subscale scores are presented in Table 6. As 60 correlations were calculated, the critical

alpha was set at .001 to control Type I error, and only correlations of .30 or greater were interpreted. As can be seen in Table 6, in keeping with our hypothesis, Self-Hatred had interpretable positive correlations with the BSI's Global Severity Index and six of the nine BSI subscales. Correlations with Somatization, Hostility, and Paranoid Ideation were statistically significant, but less than .30. Although not hypothesized, Anti-White scores had statistically significant and meaningful correlations with Hostility and Paranoid Ideation, and also had five other statistically significant associations with BSI scores that did not reach the .30 threshold. The other four CRIS subscales had no significant or meaningful correlations with any personality variable, with correlations ranging from zero to 1.201.

TABLE 5.—Stability coefficients for Cross Racial Identity Scale scores.

	Spring 2007 (2–7 Months)	Fall 2007 (10–15 Months)	Spring 2008 (14–20 Months)
Fall 2006			
Assimilation	.67 (43)	.36 (35)	.76 (35)
Miseducation	.75 (43)	.53 (34)	.52 (34)
Self-Hatred	.60 (42)	.60 (35)	.66 (35)
Anti-White	.47 (43)	.14 (35)	.54 (35)
Afrocentricity	.46 (42)	.50 (35)	.35 (35)
Multiculturalist	.71 (43)	.68 (35)	.44 (34)
Spring 2007 (5–11 months) (9–15 months)			
Assimilation	—	.57 (46)	.53 (43)
Miseducation	—	.69 (45)	.51 (43)
Self-Hatred	—	.71 (46)	.70 (43)
Anti-White	—	.62 (46)	.68 (45)
Afrocentricity	—	.68 (45)	.71 (44)
Multiculturalist	—	.73 (46)	.62 (44)
Fall 2007 (2–7 months)			
Assimilation	—	—	.66 (86)
Miseducation	—	—	.75 (88)
Self-Hatred	—	—	.66 (88)
Anti-White	—	—	.64 (89)
Afrocentricity	—	—	.75 (83)
Multiculturalist	—	—	.64 (85)

Note. Numbers of participants are in parentheses. These numbers vary by subscale within semester as missing data were not imputed for these analyses.



TABLE 6.—Intercorrelations between Cross Racial Identity Scale subscales and personality variables.

BSI Subscales	PA	PM	PSH	IEAW	IA	IMCI
Somatization	.03	.04	.21*	.15	.07	.09
Obsessive–Compulsive	.06	.01	.31*	.17	.09	.09
Interpersonal Sensitivity	.12	.06	.38*	.27*	.10	.05
Depression	.14	.06	.37*	.25*	.10	.07
Anxiety	.06	.02	.30*	.16	.10	.12
Hostility	.09	.04	.21*	.32*	.06	.05
Phobic Anxiety	.13	.11	.30*	.25*	.18	.02
Paranoid Ideation	.03	.11	.26*	.33*	.16	-.01
Psychoticism	.18	.17	.35*	.26*	.15	.02
Global Severity Index	.14	.11	.39*	.27*	.12	.10

Note. BSI = Brief Symptom Inventory (Derogatis, 1993); 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.

\* $p < .001$ .

## DISCUSSION

A conceptualization of personality that can openly incorporate the nature and assessment of racial identity is critical for assessment purposes, particularly in an increasingly globalized, interconnected, and multicultural society (Morris, 2000). Dana (e.g., 1998, 2000) in particular has criticized universal assessment models and tools as lacking usefulness for understanding the experience of ethnic minority populations, and has recommended supplementing standard, global assessment tools and questionnaires with culturally specific tools that can meaningfully address the specific concerns and experiences of minority populations.

There are several theoretical approaches to personality that allow for the incorporation of racial identity conceptualizations. Lewin's (1935, 1939) field theory, for example, was a theory of personality in which people's construals and perceptions mediate the link between environments and behavior. This point of view was espoused by Kelly (1955), whose psychology of personal constructs also emphasized the role of individual cognitions and construals in the conceptualization of dispositions. In a related vein, Tajfel's (1981) social identity theory specifically proposed that the positivity of the self-concept is determined in part by the positivity of one's group memberships, a general notion carried forward by social categorization theory (see, e.g., Turner, Reynolds, Haslam, & Veenstra, 2006).

Most recently, Mischel and Shoda's (1995, 2008) cognitive-affective personality system theory specifically posits construals, goals, values, and beliefs as the core ingredients of a personality system that can account for both mean-level individual differences in behavior and stable behavioral variability across situations. A consistent theme within each of these theoretical frameworks is the notion that cognitions and belief systems that are heavily shaped by a person's learning history and environment can, in fact, inform our conceptualization of personality. The notion of racial identity fits in well within these frameworks, being constituted as a system of beliefs, values, and ways of construing the world that, despite being able to change over time, nevertheless form part of a stable network of interconnected cognitions and affects that determine a person's stable responses to particular situations.

Working within this broad social-cognitive framework, we examined the psychometric properties of CRIS scores and their re-

lationship to a set of adjustment variables in samples of African American college students, with the hypothesis that only self-hatred attitudes would be related to adjustment. All hypotheses were supported. Internal consistency estimates were in the moderate to high range, and a CFA provided evidence supportive of the CRIS structure. However, two findings are of particular importance: the theoretically consistent relationships between racial identity attitudes and personal adjustment and the stability of the racial identity scores.

## Racial Identity and Personal Adjustment

Tajfel's (1981) view that one's self-concept is in part determined by the positivity of one's group membership was central in the original nigrescence model (Cross, 1971), but was substantially altered in NT-E (Cross & Vandiver, 2001). The finding that Black self-hating attitudes in African Americans are correlated with increased depression, anxiety, and other problem symptoms seems to provide greater support for NT-E than for Tajfel's formulation. Moreover, the two attitudes related to Black self-acceptance—Afrocentricity and Multiculturalist Inclusive—had no meaningful relationships with BSI scores. The relationships between BSI scores and Anti-White scores parallel the BSI/Self-Hatred relationships, which suggests that psychological adjustment might be related to negative racial identity attitudes more generally, whether turned inward like Self-Hatred or turned outward like Anti-White.

Some racial identity theorists (e.g., Vandiver et al., 2002; Worrell et al., 2006) caution against interpreting only bivariate relationships with CRIS scores, and recommending using profiles obtained from procedures like cluster analyses for interpretation. Although the use of profiles was not possible in this study due to sample size, the limited extant literature on racial identity profiles supports both Tajfel's (1981) and Cross and Vandiver's (2001) views. Several examinations of racial identity with the CRIS have yielded interpretable profiles, typically with one particular attitude being substantially higher than the rest. Whittaker and Neville (2010) reported that individuals with a Multiculturalist profile had higher scores on hardiness and psychological well-being and lower scores on psychological distress than individuals with an Anti-White profile, and the differences were statistically and practically (medium effect sizes) significant. In the only study in which a Self-Hatred profile was found (Korell, 2008), there were no personality variables as outcomes, although these individuals did report higher acculturation attitudes. These results suggest that ongoing investigations of racial identity and personality in tandem might provide us with a more complete understanding of ethnic minorities.

## Stability of Racial Identity Attitudes

Stability estimates for CRIS scores in this study were moderate, with values in the .58 to .66 range, suggesting that at least over a 1- to 2-year period, 30% to 40% of the variance in racial identity attitudes is stable. As this is the first examination of long-term stability estimates for CRIS scores, it is not possible to know if these stability coefficients are comparatively high or low. As noted previously, 3-week stability coefficients for CRIS scores were higher than those reported in this study, ranging from .73 to .86. Baldwin and Bell (1982) reported a .90 6-week stability coefficient for ASCS scores. However, this decline of stability coefficients over time

is not unexpected, nor is it limited to racial identity attitudes (McCrae, Terracciano, & Khoury, 2007). Attitudes are sensitive to environmental context (Worrell et al., 2006) and as such are expected to change with time and life experiences. Moreover, these participants are in college, a time when cultural identities can take on greater significance and individuals can go through major shifts in perspective. Indeed, one can even argue that having stability coefficients of this magnitude for attitudes over the time spans in this study is atypical, and could be considered robust.

We note that racial identity attitudes might be more stable than other types of attitudes for several reasons. First, race is a highly salient variable in this societal context, as children become aware of stigma on the basis of cultural group membership by age 10 (McKown & Weinstein, 2003). Second, there is a growing literature indicating some African American parents engage in racial socialization (Hughes et al., 2006). Thus, racial identity attitudes might develop earlier than others and might show greater stability. For example, it is worth noting that the stability coefficients for the racial identity constructs in this study are similar to coefficients reported for Neuroticism and Extroversion over similar time periods (see Conley, 1994), although more recent work suggests that stability coefficients of this magnitude and higher are common after substantially greater time intervals for personality traits (McCrae et al., 2007).

#### Limitations and Future Research

This study had several limitations. First, the test–retest sample sizes are small. Thus, the coefficients might be less stable simply due to sample size, and it is not possible to use the data to calculate racial identity clusters or examine stability of cluster membership. Second, the participants constitute a relatively well-educated group, as all of them were attending a selective university. Third, these individuals are probably not representative of the larger African American population, given the limited geographical location for data collection and the small percentage of African Americans that live in the West. Finally, as is typical in studies of Black racial identity in college students, which mirror the enrollment patterns at institutions of higher education in the United States, females constituted substantial percentages of the samples.

Limitations notwithstanding, the findings of this study (a) indicate that the internal consistency and structural validity of CRIS scores in college students in the West are similar to scores reported from the Northeast, the Midwest, and the South; and (b) provide a baseline of stability coefficients for racial identity attitudes as assessed by the CRIS. Future studies need to ascertain the circumstances in which racial identity attitudes are stable, and the nature of the relationship of racial identity attitudes and attitude profiles with personality variables.

A second question that hinges on the stability of CRIS scores pertains to recent developments in the clustering of racial identity attitudes. Worrell et al. (2006) identified seven racial identity profiles, four of which (Assimilationists, Anti-White, Miseducated, Low Race Salience) generalized across the three samples. In keeping with an attitudinal interpretation of racial identity, a fifth profile (Multiculturalists) was found in samples of African American students attending predominantly White institutions, but not in a sample from historically Black colleges and universities. The majority of these profiles have been replicated in

other studies (Korell, 2008; Whittaker & Neville, 2010), and the individuals with different profiles have been found to differ on cultural and adjustment variables, signaling that an individual's racial identity might have implications for psychological functioning.

Thus, we come back to the question of the stability of racial identity profiles. We conclude by noting that successful research on attitudinal profiles, their stability, and their relationship to adjustment and personality is dependent on the availability of measures that yield reliable and valid scores. This study suggests that the CRIS satisfies these requirements, and as the current data show, also seems to suggest there is some stability in the racial identity attitudes themselves.

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