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A New Audience Segmentation Tool for African Americans: The Black Identity Classification Scale

RACHEL E. DAVIS,
Department of Environmental Health Sciences and Department of Health Behavior and Health Education, University of Michigan School of Public Health, Ann Arbor, Michigan, USA

GWEN ALEXANDER,
Henry Ford Hospital, Detroit, Michigan, USA

JOSEPHINE CALVI,
Kaiser Permanente of Georgia, Atlanta, Georgia, USA

CHERYL WIESE,
Group Health, Center for Health Studies, Seattle, Washington, USA

SARAH GREENE,
Group Health, Center for Health Studies, Seattle, Washington, USA

MIKE NOWAK,
Center for Health Communications Research, University of Michigan, Ann Arbor, Michigan, USA

WILLIAM E. CROSS JR, and
Program in Psychology/Social Personality and Urban Education, The Graduate Center of the City University of New York, New York, New York, USA

KEN RESNICOW
Department of Health Behavior and Health Education, University of Michigan School of Public Health, Ann Arbor, Michigan, USA

Abstract

Many health communications target African Americans in an attempt to remediate race-based health disparities. Such materials often assume that African Americans are culturally homogeneous; however, research indicates that African Americans are heterogeneous in their attitudes, behaviors, and beliefs. The Black Identity Classification Scale (BICS) was designed as a telephone-administered tool to segment African American audiences into 16 ethnic identity types. The BICS was pretested using focus groups, telephone pretests, and a pilot study (n=306). The final scale was then administered to 625 Black adults participating in a dietary intervention study, where it generally demonstrated good internal consistency reliability. The construct validity of the BICS was also explored by comparing participants' responses to culturally associated survey items. The distribution of the 16 BICS identity types in the intervention study is presented, as well as select characteristics for participants with core identity components. Although additional research is warranted, these findings suggest that the BICS has good psychometric properties and may be an effective tool for identifying African American audience segments.

Address correspondence to Rachel E. Davis, Department of Environmental Health Sciences and Department of Health Behavior and Health Education, University of Michigan School of Public Health, 109 S. Observatory, #6610 Tower, Ann Arbor, MI 48109-2029. reda@umich.edu.

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The persistence of race-based health disparities has led to increased efforts to design and test culturally sensitive health communications targeting African Americans. Such group-targeted materials have been shown to enhance message salience and program effectiveness (e.g., Garza et al., 2005; Gaston, Porter, & Thomas, 2007; Nollen et al., 2007; Resnicow, Baranowski, Ahluwalia, & Braithwaite, 1999; Taylor et al., 2006; Two Feathers et al., 2007); however, such materials do not account for heterogeneity among African Americans. Research suggests that African Americans vary widely in their attitudes about race, ethnicity, and African Americans as a referent group (e.g., Cross, 1991; Jones, Cross, & DeFour, 2007; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). Many of these attitudes are captured in the construct of ethnic identity. As per Cokley (2007, p. 225), ethnic identity is defined as "the subjective sense of ethnic group membership that involves self-labeling, sense of belonging, preference for the group, positive evaluation of the ethnic group, ethnic knowledge, and involvement in ethnic group activities." Yet, despite growing evidence that ethnic identity may influence the health behaviors of many African Americans (Belgrave, Brome, & Hampton, 2000; Belgrave, Marin, & Chambers, 2000; Brook & Pahl, 2005; Caldwell, Sellers, Bernat, & Zimmerman, 2004; de Groot et al., 2003; Herd & Grube, 1996; Klonoff & Landrine, 1997; Klonoff & Landrine, 1999; Kreuter et al. 2005; Marsiglia, Kulis, & Hecht, 2001), the ability of health communications to accommodate within-group ethnic variability has not been adequately explored.

One strategy for addressing ethnic diversity among African Americans is audience segmentation. Segmentation creates subgroups from a larger population that are similar in selected characteristics, thereby increasing communication effectiveness by enabling the delivery of targeted health messages (Slater, 1996). Health communications programs often employ segmentation strategies that define subgroups according to demographic and geographic variables; however, methods that utilize psychosocial and behavioral variables are more likely to be effective (Slater, Kelly, & Thackeray, 2006). Segmentation tools range from resource-intensive methods such as decision-tree analyses to low-resource methods such as the utilization of findings from literature reviews and focus groups. However, no existing tool is appropriate for segmenting African American audiences on ethnic identity.

Several researchers have explored the association between ethnic self-labels and health behaviors (e.g., Marsiglia, Kulis, & Hecht, 2001). Hecht and colleagues (2003) studied the meaning and use of ethnic self-labels by African Americans. They found that African Americans described "Black" as a generally acceptable, slightly patriotic and status quo-endorsing label that conveyed a specific racial membership and pride, while "Black American" signified pride in a consciously dual heritage and origin of being both Black and from America (Hecht et al., 2003). In contrast, the label "African American" emphasized a specific ethnic and cultural heritage originating outside of America and was less indicative of a racial membership. Marsiglia and colleagues (2001) found that ethnic identity and ethnic labeling functioned as interacting but distinct constructs among a multi-ethnic sample of youth, suggesting that ethnic labeling is related to but not interchangeable with ethnic identity.

Several measures of ethnic identity have been developed for African Americans (Baldwin & Bell, 1985; Cross & Vandiver, 2001; Landrine & Klonoff, 1994; Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Resnicow & Ross-Gaddy, 1997; Resnicow, Soler, Braithwaite, Selassie, & Smith, 1999; Worrell, Cross, & Vandiver, 2001), but these are often unsuitable for use in practical applications as segmentation tools for health communication interventions. Most African American identity measures were developed with college students, so survey items are sometimes inappropriate for use with adult or community samples. No existing African American identity measure was designed for telephone administration, which is a popular mode for public health data collection (Kempf &

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Remington, 2007). And, most importantly, extant measures assess components of racial and ethnic identity as continuous constructs, while segmentation requires the discrete classification of respondents into subgroups.

The Black Identity Classification Scale (BICS) was developed as a telephone instrument capable of segmenting an adult, African American audience into up to 16 ethnic identity subgroups. The BICS was recently used in a health communication trial called *Eat for Life*, in which changes in dietary behavior were compared between participants receiving newsletters tailored to their BICS identity type versus participants receiving newsletters tailored only on sociodemographic characteristics (Resnicow et al., in press). No differences in dietary behavior were observed between the two groups; however, identity type moderated the findings. Participants with Afrocentric and Cultural Mistrust identity components reported greater behavior changes when receiving ethnic identity tailoring. These findings suggest that health communications addressing within-group ethnic variability may be more effective that those treating African Americans as a culturally homogeneous group. This paper describes the creation of the BICS, its psychometric properties, evidence of construct validity, and the distribution and characteristics of the 16 BICS identity types. It is hoped that this paper will engender further research and refinement of the BICS as a tool for segmenting African Americans into meaningful health communication subgroups.

Methods

Defining Identity Types

The first step in developing the BICS was to define those African American identity components for which it was deemed appropriate and possible to construct conceptually distinct health communication messages. This process was guided by the extant literature on identity formation. The most commonly used ethnic identity assessment tool was developed for use across racial and ethnic groups by Phinney (1992), and several measures have been constructed for specific racial or ethnic groups (e.g., Chung, Kim, & Abreu, 2004; Felix-Ortiz, Newcomb, & Myers, 1994; Helms & Carter, 1990). However, both Phinney and Ong (2007) and Cokley (2007) recommend the use of population-specific measures when assessing within-group ethnic diversity, as in-group oriented measures more appropriately capture variation in group-held values, behaviors, and beliefs. African Americans have endured a unique and difficult history in the U.S. that, for many African Americans today, strongly influences their identity development. For these reasons, the development of the BICS was grounded in the work of those researchers engaged specifically in African American racial and ethnic identity development.

The most prominent and widely tested theories of African American identity formation are Nigrescence Theory (Cross & Vandiver, 2001; Worrell, Cross, & Vandiver, 2001) and the Multidimensional Model of Black Identity (MMBI) (Sellers, Smith, Shelton, Rowley, & Chavous, 1998). In consultation with the authors of these theories, six core identity components were recognized *a priori* for their capacity to yield distinct health intervention materials: Assimilated, Black American, Afrocentric, Bicultural, Multicultural, and Cultural Mistrust (Table I). A person with an Assimilated identity was defined as having low racial salience and placing little importance on membership in a racial or ethnic group. In contrast, being Black was viewed as an integral aspect of personal identity for individuals with the other five identity components. A Black American component was defined as having a strong connection to Black American people and culture, whereas an Afrocentric component denoted emotional, intellectual, or spiritual connections to Africa. A Bicultural component indicates a person who perceives the world using a hybrid Black/White perspective, while a Multicultural person is curious about and appreciates cultural diversity. These first five

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components were primarily based on Nigrescence Theory (Worrell, Cross, & Vandiver, 2001). However, the distinction of Assimilated from the remaining categories was influenced both by the MMBI, which conceptualizes racial salience as a variable state (Sellers, Smith, Shelton, Rowley, & Chavous, 1998), and Nigrescence Theory, which considers racial salience as the importance than an individual ascribes to being Black and to Black culture (Cross & Vandiver, 2001). Nigrescence Theory further proposes that a subset of African Americans will endorse anti-White sentiments. Since these anti-White sentiments may influence some African Americans' receptivity and responses to health communications, it was deemed important to assess and tailor on this construct. However, since all participants in the *Eat for Life* intervention trial were health maintenance plan customers, it was decided that the risk of offending customers with survey items from the anti-White subscale of the Cross Racial Identity Scale (CRIS) (Worrell, Cross, & Vandiver, 2001) was unacceptably high. In an effort to assess what was considered to be the most influential aspect of anti-White sentiments on a health communications intervention, items adapted from Terrell and Terrell's (1981) Cultural Mistrust Inventory were adopted instead. Cultural Mistrust was defined as a generalized mistrust of Whites and White society. However, since fears of customer offense from measuring this construct were also high, a conservative approach was taken, and only the Black American and Afrocentric identity components, which were assumed to have the highest levels of Cultural Mistrust, were tailored on the Cultural Mistrustconstruct.

Identifying Survey Items

An initial battery of survey items was created from several existing measures of African American identity: the CRIS (Worrell, Cross, & Vandiver, 2001), the Multidimensional Inventory of Black Identity (MIBI) (Sellers, Rowley, Chavous, Shelton, & Smith, 1997), the Survey of Black Life (SBL) (Resnicow & Ross-Gaddy, 1997; Resnicow, Soler, Braithwaite, Selassie, & Smith, 1999), and the Cultural Mistrust Inventory (CMI) (Terrell & Terrell, 1981). New items were developed in consultation with experts on African American identity formation. These new items included those comprising the Bicultural subscale, which were intended to capture the duality of respondents who are proud of being Black but who are also comfortable with and proud of their ability to succeed White society. All new items explored differences among the core identity components that might yield distinct health education messages.

Pretesting Survey Items

A 93-item battery was pretested in four focus groups with 32 African American adults recruited through two healthcare systems in Atlanta and Detroit. All items were presented with a 7-point, "Strongly Disagree"/"Strongly Agree", Likert-style response scale. Cultural Mistrust items and those Assimilated items that attempted to distinguish "African American" from "American" were the most likely to be noted as offensive or confusing. For example, many participants disliked the CRIS item: "If I had to put a label on my identity, it would be 'American' and not 'African American'" (Worrell, Cross, & Vandiver, 2001) and voiced that they saw no difference between being "African American" versus "American". Several Afrocentric items were also rejected by the groups. A few participants noted that their ancestors were not from Africa, whereas others felt little connection to Africa. This feedback led to the deletion of 47 items, revisions to remaining items, and the creation of new items to further distinguish the identity components.

In order to pretest a telephone administration, the items were piloted over the telephone to 21 African American volunteers from the University of Michigan and healthcare systems in Detroit and Atlanta. These pretests led to numerous item revisions; for example, items with double-negatives were particularly difficult for respondents to interpret over the telephone.

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Psychometric Pilot Study

A pilot study was conducted from July-November 2004 to explore the psychometric properties of the items, reduce instrument length, and assess the potential for adverse participant reactions. Recruitment letters containing $2 bills were mailed to 900 randomly selected members of a healthcare system serving a large African American population in Detroit. In order to be included in the sample pull, individuals had to have been members of the healthcare system for at least one year and identified as African American. Further study eligibility was defined at the beginning of the telephone survey, followed by informed consent. Eligible participants self-identified as “Black” or “African American”, were not Hispanic or multiracial, had lived in the U.S. for half of their lives, were 21-70 years old, and had at least 12 years of education. Post-incentive $20 gift cards were mailed to all participants upon completion of the interviews.

The survey contained 57 ethnic identity items with 7-point “Strongly Disagree”/“Strongly Agree” response options and two 11-point disagree-agree racial salience items. A total of 306 participants completed the pilot survey (response rate=34.0%), of whom 298 were included in analyses. Only 6% of respondents said that they found any items disturbing.

Since the pilot survey contained many new ethnic identity items, principal components analysis with a varimax rotation was used to explore the presence of discernable subscales. The resulting eigenvalues yielded seven conceptually meaningful subscales. However, two of these subscales were believed to comprise related aspects of a Black American identity type: Surface Structure and Deep Structure. According to Resnicow and colleagues (Resnicow, Baranowski, Ahluwalia, & Braithwaite, 1999), “surface structure” elements of a health communication program concern more superficial factors such as the look and feel of an intervention. “Deep structure” elements tap into the cultural, historical, and environmental forces that shape an individual’s core behaviors and beliefs. Surface structure elements are believed to enhance initial message attentiveness and receptivity, but deep structure elements are essential for establishing message salience and motivating behavior change. Since an effective health communication intervention would address both surface and deep structure elements, the Surface Structure and Deep Structure subscales were combined to form a unified Black American subscale. The resulting six subscales demonstrated good reliability: Black American (0.71), Afrocentric (0.78), Bicultural (0.74), Multicultural (0.70), Cultural Mistrust (0.43), and Racial Salience (0.78).

The BICS

The pilot data were used to construct the first full version of the BICS, which contained 32, 7-point “Strongly Disagree”/”Strongly Agree” items, one 11-point racial salience question, and two intervention preference questions. The 7-point items included 17 items created by the study team, nine items adapted from the SBL, five items from or adapted from the MIBI, three items created by African American identity experts, and one item adapted from the CMI. The 7-point items were divided into six subscales: Afrocentric, Black American, Bicultural, Multicultural, Racial Salience, and Cultural Mistrust. The 11-point racial salience question asked “How important is being Black to your overall identity?”, with responses ranging from 0 (“Not at All Important”) to 10 (“Very Important”). The preference questions asked respondents to select the ethnic orientation they would most prefer for their tailored newsletters (e.g., a focus on Black Americans vs. all Americans vs. many cultures, etc.). Responses to all 35 items were used in an algorithm to classify participants into the following 16 categories representing an Assimilated subgroup and combinations of the remaining, high racial salience identity components:

- Assimilated

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- Black American
- Black American with Cultural Mistrust
- Bicultural
- Multicultural
- Bicultural/Multicultural
- Black American/Bicultural
- Black American/Bicultural with Cultural Mistrust
- Black American/Multicultural
- Black American/Multicultural with Cultural Mistrust
- Afrocentric/Black American
- Afrocentric/Black American with Cultural Mistrust
- Afrocentric/Bicultural
- Afrocentric/Bicultural with Cultural Mistrust
- Afrocentric/Multicultural
- Afrocentric/Multicultural with Cultural Mistrust

The creation of 16 categories was both pragmatically and conceptually driven. Two issues limited the number of final BICS identity types from a pragmatic vantage. First, the number of identity types was constrained by our limits in tailoring. As in all tailored communications, each additional tailoring variable results in an exponential increase in the number of health message variations. Therefore, the study team decided to restrict the number of identity types to those yielding the greatest differences in message content, which were felt to similarly yield the greatest differences in audience receptivity and salience. Second, the study team decided that a single health communication evincing more than three distinct ethnic identity components could be fractured and potentially dissonant to the reader. In order to produce intelligible, well-written health materials, only up to three identity types were allowed. From a conceptual angle, the inclusion of more than one identity component was an important goal of the BICS, as it was recognized that any individual African American may have strong affinities with more than one identity component rather than a single, determinant identity type (Worrell, Vandiver, Schaefer, Cross, & Fhagen-Smith, 2006). Allowing for multiple identity components in the BICS would enable health educators to accommodate program participants with high BICS scores on more than one core component. The final roster of 16 BICS identity types represented the maximum number of ways that up to three core identity types could be combined while still permitting the creation of conceptually distinguishable health materials for the *Eat for Life* intervention trial. These 16 types were identified by combining up to three of the core identity components, with the following exceptions: (1) an identity type consisting of solely an Afrocentric component was not allowed, as the prevalence of this type was insufficiently low in the psychometric pilot study (< 2%) to warrant the allocation of resources to develop a unique intervention variant in the *Eat for Life* trial; (2) only those identity types with a Black American or Afrocentric identity component were allowed to have a Cultural Mistrust component, for reasons previously described; and (3) for conceptual reasons, it was decided that the Assimilated component would not co-exist with any other identity component, since the Assimilated component differed from all other BICS identity components in that it was the only low-racial salience component and may have resulted in contradictory health message styles if combined with other identity components.

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The Eat for Life *Trial*

Participants in the *Eat for Life* trial were recruited from the memberships of two healthcare systems in Atlanta and Detroit. Recruitment letters containing $2 bills were mailed to 2,018 healthcare system members, followed by baseline telephone surveys. Participants were African American adults aged 21-70 who self-identified as Black or African American, were not Hispanic or multiracial, ate fewer than ten servings of fruit and vegetables per day, were not in skilled care facilities, had lived in the U.S. for more than half of their lives, and had no health conditions that would be aggravated by their participation. In addition to study-specific outcome variables, the baseline survey included the first full version of the BICS (35 items, including the 32 7-point items), as well as items querying preferences for racial and ethnic self-reference labels (Black American, Black, African American, or American).

Following completion of the baseline survey, two-thirds of participants were randomly assigned to an Ethnic Identity (EI) Group. As described elsewhere in more detail (Resnicow et al., in press), EI Group participants received three newsletters containing both targeting and tailoring on their ethnic identity type. For example, all EI Group participants with an Afrocentric identity component received some graphics depicting persons with Afrocentric clothes and hairstyles. But, these images were interspersed with images targeting each recipient's other core identity type/s and tailored to show images of people matching the participant's age, gender, and family structure. The newsletter text was similarly interwoven with targeting and tailoring. Sample messages targeting identity component are shown in Table II. One-third of respondents were randomly assigned to a Control Group. These participants received newsletters containing only socio-behavioral tailoring.

Participants completed a follow-up telephone survey at approximately three months post-baseline. The follow-up survey contained the 11-point racial salience question and, since there was not room for the entire BICS measure, a subset of BICS items. These items were selected to represent the six subscales. These items are noted in Appendix A and, in most cases, comprise 13 of the highest-loading BICS items from factor analyses of the pilot data.

Analysis

Analyses utilized *Eat for Life* trial data to fulfill four objectives: (1) to assess the reliability of the BICS; (2) to explore the construct validity of the BICS; (3) to explore descriptive data for participants from each identity type; and (4) to propose revisions to the BICS, as appropriate, for future applications. Analyses for the first three objectives were conducted using SAS 9.1 for Windows (SAS Institute, Inc., 2002-2003). Analysis for objective four was completed using AMOS 16.0 (SPSS, Inc., 2001).

The reliability analyses had three components. First, the internal consistency of the BICS subscales was assessed by computing Cronbach's coefficient alphas with data from the baseline survey. Next, six subscale means were calculated using data from responses to the 13 BICS items in the follow-up survey. Test-retest reliability was then estimated by correlating these six subscale means with: (1) six comparable subscale means that were created by averaging subscale responses to the same 13 items from the baseline survey; and (2) six subscale means created by averaging subscale responses to the 32 7-point items in the full baseline measure.

Construct validity was explored by testing associations between identity components and responses to three survey items hypothesized to vary by identity component. All three items used a 1-7, "Strongly Disagree" to "Strongly Agree" response scale. The first two items were "Being Black strongly influences the foods I choose to eat" and "In general, I like to eat soul food." For these analyses, binary variables were created to represent five of the core identity components: Black American, Afrocentric, Bicultural, Multicultural, and

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Assimilated. Each respondent was rated a "1" if they had that component in their identity classification and a "0" for each component that was not in their identify classification (e.g., a person with a Black American/Bicultural identity classification would have a "1" for the Black American variable, a "1" for the Bicultural variable, and a "0" for the Afrocentric, Multicultural, and Assimilated components). In this way, the variables accounted for the presence of more than one core identity component. However, it should be noted that some respondents are represented in more than one identity category. The ratings of these items were predicted to range from highest to lowest in the following order of identity components: Black American, Afrocentric, Bicultural, Multicultural, and Assimilated. These hypotheses were testing using Kruskal Wallis tests to compare within each ethnic identity group (e.g., Afrocentric versus non-Afrocentric), followed by an analysis of variance comparison across the five identity groups while controlling the experiment-wise error rate with a Tukey adjustment. The third construct validity item, "The fast food industry is poisoning the Black community", was used to compare responses between those participants classified with versus without Cultural Mistrust. Since the Cultural Mistrust classifications were exclusive, each respondent was represented in only one of these two groups. Respondents with Cultural Mistrust were expected to provide higher ratings than respondents without Cultural Mistrust. This hypothesis was examined using the Kruskal Wallis test.

Due to the rarity of some identity types, the sample size used in this study yielded too few participants to warrant descriptive analyses for all 16 BICS identity types. However, in order to provide some descriptive information about the audience segments that can be identified using the BICS, the means and frequencies for select variables were explored for participants having each of the six core identity components. These variables included: age; gender; marital status; income; education; whether the participant had children ages 2-18 living in their home; mean self-efficacy for fruit and vegetable intake (based on responses to four items scored on a 1-4 scale from "Not at All Confident" to "Very Confident"); extrinsic and intrinsic motivational disposition to eat more fruit and vegetables (each based on responses to four items scored on a 1-7 scale from "Strongly Disagree" to "Strongly Agree"); high blood pressure or hypertension; body mass index; mean proclivity against trying new foods (based on responses to two items scored on a 1-7 scale from "Strongly Disagree" to "Strongly Agree"); self evaluation of whether the participant exercises more than, the same amount, or less than most men/women their age; satisfaction with one's health maintenance plan (scored on a 1-10 scale from "Not At All Satisfied" to "Extremely Satisfied"); and preferences for racial and ethnic self-reference labels.

Both a principal components analysis and a confirmatory factor analysis were used to explore the viability of the BICS subscales in the *Eat for Life* baseline survey data.

Results

Sample Characteristics

A total of 625 participants completed the baseline survey for a response rate of 31%. Of these, 560, or 28% of the original sample, provided complete data and were included in the factor analyses. The test-retest reliability and three-item validity analyses were conducted with 468 of the 471 participants who completed the follow-up survey (Note: Only those participants with complete baseline data were recruited for follow-up; response rate = 83.5%). These 468 participants represent 23% of those who were originally approached through the recruitment letter mailing.

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The gender and site affiliations of the baseline (n=560) and follow-up cohort (n=468) samples were quite comparable (Table III). Approximately three-quarters of both samples were female, with a nearly even distribution between the two healthcare delivery sites.

The baseline distribution of BICS identity types is presented in Table IV (n=560). The Afrocentric/Black American type was the most prevalent, comprising 15.2% (n=85) of the total sample. The Black American/Bicultural type was the second most prevalent identity type (13.9%; n=78), followed by Bicultural/Multicultural (11.6%; n=65). Identity types with Cultural Mistrust tended to be the least prevalent. The Afrocentric/Bicultural with Cultural Mistrust (n= 3), Afrocentric/Multicultural with Cultural Mistrust (n=4), Black American with Cultural Mistrust (n=6), Multicultural (n=9), and Black American/Multicultural with Cultural Mistrust (n=11) types each represented 2.0% or less of the total sample.

Reliability

Cronbach's coefficient alphas from the baseline BICS administration (n=560) were 0.74 for the Black American subscale, 0.80 for the Afrocentric subscale, 0.72 for the Bicultural subscale, 0.67 for the Multicultural subscale, 0.80 for the Racial Salience subscale, and 0.34 for the Cultural Mistrust subscale.

Using the follow-up cohort dataset (n=468), test-retest reliability analyses of those subscale items measured at both baseline and follow-up resulted in Pearson correlation coefficients of 0.60 for the Black American subscale, 0.60 for the Afrocentric subscale, 0.32 for the Bicultural subscale, 0.53 for the Multicultural subscale, 0.46 for the Racial Salience subscale, and 0.51 for the Cultural Mistrust subscale. Test-retest reliability analyses using the full subscales from the baseline survey and the partial subscales from the follow-up survey resulted in similar reliability estimates: 0.55 for the Black American subscale, 0.59 for the Afrocentric subscale, 0.33 for the Bicultural subscale, 0.50 for the Multicultural subscale, 0.56 for the Racial Salience subscale, and 0.49 for the Cultural Mistrust subscale.

Validity

Mean responses to the item querying the importance of being Black to food choices by identity component are detailed in Table V. Differences across the five groups were significant at $p<.0001$. Participants with Afrocentric and Black American components had the highest mean ratings at 4.8 and 4.7, respectively. The order of these ratings was the opposite of that which was hypothesized. As predicted, the Assimilated type had the lowest rating (2.6). However, Multicultural types rated the item higher (4.1) than Bicultural types (3.7). Participants with an Afrocentric component were significantly more likely to agree that being Black influenced their food choices than participants without an Afrocentric component ($p<.0001$) (not all comparison data shown). Participants with a Black American component were similarly more likely to agree with the food choices item than participants without this component ($p<.0001$). In contrast, participants with Bicultural and Assimilated components were significantly less likely to agree that being Black influenced their food choices than participants without these components ($p=.0003$ and $p<.0001$, respectively). No significant differences were found between participants with and without a Multicultural component.

Mean responses to the soul food preferences item are also shown in Table V. The model testing differences in means across the five ethnic identity groups was significant at $p<.0001$. As predicted, those with Black American components had the highest values (5.7), and the Assimilated type had the lowest value (4.3). The groups with Afrocentric and Multicultural components had similar responses (5.3 and 5.2, respectively), whereas the Bicultural group provided a slightly lower rating (5.1). Participants with a Black American

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component were significantly more likely to say they liked soul food than participants without this component (p<.0001). However, Assimilated participants were significantly less likely to say they liked soul food than non-Assimilated participants (p<.0001).

As expected, respondents with Cultural Mistrust expressed more agreement with the fast food poison item than respondents without Cultural Mistrust (p=.0002). Mean responses to this item for participants with and without Cultural Mistrust were 5.5 and 4.5, respectively.

BICS Core Identity Component Group Characteristics

Participants with core BICS identity components are described in Table VI. Mean age ranged from 47.7 years for participants with a Black American component to 50.4 for the Multicultural group. All groups were majority female, but the percentage of women varied from 60.6% for the Afrocentric group to 75.4% for participants with a Cultural Mistrust component. Nearly half (44.7%) of those with an Afrocentric component were married, compared to only 31.0% of those in the Assimilated group. Participants in the Multicultural group were least likely to have children living in the home (29.7%). The Cultural Mistrust group tended to report the lowest household income, whereas the Bicultural group reported the highest income. Participants with an Afrocentric identity component were the most likely to have a college or graduate degree (41.2%). The Assimilated and Multicultural groups reported the lowest percentages of college or graduate degrees at 31.0% and 31.4%, respectively.

The percentage of participants reporting high blood pressure or hypertension ranged from 37.9% in the Assimilated group to 49.3% in the Cultural Mistrust group. Participants with a Black American component were the least likely to say they exercised more than others their age (26.2%), as compared to a third of Cultural Mistrust participants (34.8%). There was little variance in body mass index. The Bicultural group rated their satisfaction with their health care plan the highest at 8.1. The lowest satisfaction was registered by the Cultural Mistrust group at 7.6. Self-efficacy for fruit and vegetable intake was similar across the six groups. The Cultural Mistrust group was slightly more likely to report a proclivity against trying new foods (5.7), while the Multicultural group was the least likely to resist new foods (5.3). Participants with an Assimilated identity reported the lowest mean extrinsic and intrinsic motivation scores at 2.5 and 6.2, respectively. The Afrocentric group reported the highest extrinsic motivation score of 3.6, and the Multicultural group reported the highest intrinsic motivation score at 6.7.

Although no group preferred the label “American”, more members of the Assimilated (15.5%) group preferred this term than in any other group. This label was least favored by the Black American group (3.7%). “African American” was preferred by more of the members of the Afrocentric (42.4%), Black American (41.4%), Multicultural (43.4%), and Cultural Mistrust (40.6%) groups than any other term. Members of the Bicultural group (39.4%) preferred “Black American” more than any other label. This term was tied for first preference for the Assimilated group and rated second in preference for the Afrocentric, Black American, Multicultural, and Cultural Mistrust groups. No majorities preferred “Black”, but 15.4-29.3% of each group reported a preference for this term.

The Revised BICS

Factor loadings from principal components analyses of the psychometric pilot survey data and the *Eat for Life* baseline telephone survey data were used to revise the BICS (Appendix A). For the most part, the factor loadings (Appendix A) presented a similar pattern across the two BICS administrations. However, one Racial Salience item (“I think of myself as African American more than American”) exhibited low and variable loadings across the

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Racial Salience, Afrocentric, and Black American Surface Structure subscales and was deleted from the revised measure. The second change reflected in the revised BICS is the movement of one of the Black American Deep Structure items ("I have a strong sense of belonging to the Black community") to the Racial Salience subscale, where it demonstrated a substantially higher loading in the *Eat for Life* trial. Four other items yielded higher loadings in subscales they were not assigned to either the pilot or the *Eat for Life* data, but not in both datasets. For conceptual reasons, it was decided to keep these items in their original subscales. The revised BICS contains 31, 7-point "Strongly Disagree"/"Strongly Agree" items, one 11-point racial salience question, and two intervention preference questions. The latter item should be adapted for use with different health interventions.

The confirmatory factor analysis supported an overall goodness of fit for the revised BICS with an acceptable ratio for the chi-square statistic to degrees of freedom of 2.65 (χ^2 = 1092.3; df = 413; $p < 0.05$; TLI = 0.84; CFI = 0.87; factor loadings listed in Appendix A). The root mean square error of approximation was 0.055 and indicates a good fit (confidence interval = 0.050, 0.058). Of the 31 items in the revised BICS, 6 items had a coefficient of determination (R^2) of 0.50 of higher, 8 items had an R^2 between 0.40-0.50, 10 items had an R^2 between 0.30-0.40, 6 items had an R^2 between 0.19-0.30. The only item with a nonsignificant regression weight and an R^2 of zero was the single reverse-coded item in the BICS: "The United States government is trying to make things better for Blacks."

Discussion

This study presents information about the development and performance of a new African American audience segmentation tool, the Black Identity Classification Scale (BICS). Although grounded in prior research on Black racial and ethnic identity, the BICS augments the roster of currently available Black identity measures by enabling telephone administration and allowing the discrete classification of respondents into ethnic identity segments.

Use of the BICS in a randomly selected sample indicates that the measure has good internal consistency for the Black American, Afrocentric, Bicultural, Multicultural, and Racial Salience subscales (0.67-0.80). Although there is room for improvement, particularly for the Multicultural (0.67) and Bicultural (0.72) subscales, these reliability indicators compare similarly to those of pre-existing Black identity subscales, which range from 0.60-0.79 for the MIBI (Sellers, Rowley, Chavous, Shelton, & Smith, 1997), 0.78-0.89 for the CRIS (Worrell, Vandiver, & Cross, 2000), and 0.53-0.81 for the SBL (Resnicow & Ross-Gaddy, 1997; Resnicow, Soler, Braithwaite, Selassie, & Smith, 1999). However, the low reliability for the Cultural Mistrust scale (0.34) indicates that this subscale needs further development. This subscale includes the only reverse-scored item in the BICS, since all others were weaned out during pretesting, and participants may have had difficulty with this item. The confirmatory factor analysis results indicate that the deletion of the reverse-scored item should be considered in future applications of the BICS. Deleting the reverse-scored item and adding the mistrust of fast food item to the Cultural Mistrust subscale increases its internal consistency reliability to 0.47. Adding more Cultural Mistrust items, such as those from the CMI, should also be considered. However, we recommend including this subscale, since the Cultural Mistrust identity component yielded borderline significant results in the *Eat for Life* intervention trial despite obvious measurement problems and the relatively small size of this subgroup in the trial. These findings suggest that Cultural Mistrust may be a particularly influential identity component and warrant additional efforts to improve its assessment.

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The BICS subscales demonstrated low to moderate test-retest reliability (0.33-0.59) using the full subscales at baseline, with the lowest reliability resulting from the Bicultural subscale (0.33). However, only a subset of items from each subscale was included in the follow-up survey. Since a lower number of items will usually lower reliability statistics, these results should be interpreted with caution. The follow-up data may also have been impacted by the baseline survey and intervention materials, which may have prompted participants to think differently about their identities. Additional research is needed to explore the reliability and state-vs.-trait aspects of the BICS.

Validity analyses provide some evidence in support of the construct validity of the BICS as an audience segmentation tool. Those identity types with the strongest pro-Black orientations (Afrocentric and Black American) demonstrated higher agreement with the food choices and soul food items, while those identity types with weaker pro-Black orientations (Bicultural and Assimilated) evinced lower agreement with these items. As predicted, respondents with Cultural Mistrust were significantly more likely to report a mistrust of the fast food industry, suggesting that the Cultural Mistrust subscale taps some dimension of mistrust of corporate America and White society.

The distribution of identity types obtained in this sample indicates that the majority of African Americans have more than one identity component. These results imply that culturally homogeneous, group-targeted health communications may inadequately address the multidimensionality of ethnic identity in African American populations. This may be particularly true for smaller audience segments and for those whose racial and ethnic orientations deviate the most from the African American population as a whole. For example, despite being in the same age range as members of the other groups, the *Eat for Life* data suggest that African Americans with an Assimilated identity component are the least prevalent and may be more likely to live alone, be less educated, have healthier weight and cardiovascular indicators, and be less motivated than African Americans with other identity orientations to engage in dietary behavior change. Participants with a Cultural Mistrust identity component comprised the second-smallest group in the *Eat for Life* sample. This group had the highest prevalence of hypertension, lowest satisfaction with their health care plan, and least proclivity to try new foods. The Cultural Mistrust group might be better characterized as having more health issues (e.g., hypertension) than the Assimilated group but less willingness to make behavior changes or to trust their health care providers in assisting with such changes. Thus, while health communication messages to an Assimilated population might focus on strengthening motivation for behavior change, messages to a Cultural Mistrust population might emphasize message trustworthiness and in reassuring recipients about the process of behavior change.

Other groups were similarly characterized by differences that may impact the design of health communications. The Afrocentric group was the most educated and had the highest extrinsic motivation to eat more fruit and vegetables, suggesting that health communication messages focused on extrinsic motivators might have more impact on this audience than on other groups. The Black American group had the lowest preference for the term “American”. Thus, this group may be the least likely to be responsive to a general health communication campaign targeting a generic American audience. Participants with a Bicultural identity component reported the highest satisfaction with their health care plan. In contrast with the Cultural Mistrust group, doctors and other health care plan representatives might serve as appropriate and trustworthy message sources for the Bicultural group. The Multicultural group differs from the others in reporting the highest proclivity for trying new fruit and vegetables and highest intrinsic motivation. Effective health messages for this population might capitalize on individuals’ willingness to make behavior changes while strengthening their intrinsic motivation to make such changes.

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Simply asking respondents to choose which ethnic self-labels they prefer would be far less resource-intensive than measuring ethnic identity. However, this research indicates that ethnic identity type is not interchangeable with self-identification labeling (e.g., “Black”, “African American”, “American”, etc.). Participants in our solely African American sample did not evince strong or distinctive associations between the four labels queried by ethnic identity component. For example, “African American” was the strongest preferred label for participants across the Afrocentric, Black American, Multicultural, and Cultural Mistrust identity component groups. And, within each identity component, no more than 43% of respondents indicated a preference for any single label. These findings support earlier research by Marsiglia and colleagues (2001), who found that ethnic identity and ethnic labeling functioned as interacting but distinct constructs. The present data indicate substantial individual variation in self-labeling, which, particularly for African Americans, may vary in accordance with other factors such as generational status more so than by attitudinal identity affiliation as measured in the BICS. Health researchers should therefore be wary of modeling associations between within-group ethnic self-labels and health behaviors and beliefs as a substitute for ethnic identity within African American populations.

This research has several limitations. The BICS was developed with African American adults from Atlanta and Detroit. Other populations may differ in their reactions to BICS items and yield different identity type distributions with different health-related characteristics. Health professionals are advised to explore their target population’s receptivity to the BICS and to collect appropriate background data when designing health communications. Due to *Eat for Life* resource limitations, the current BICS was created for use with African Americans who are not Hispanic or multiracial. Future refinement of the BICS should consider expanding the number of subscales to account for additional ethnic and racial identities beyond those currently included. These additions would broaden the applicability of the BICS to a wider African American audience. Other researchers using the BICS likely have different goals that those of the *Eat for Life* trial and, as a consequence, should also consider combining the subscales in different ways to yield their own preferred number of final identity types. It is possible that higher survey response rates would have yielded different findings. However, the rates that were obtained were considered acceptable for a telephone survey about a potentially sensitive topic. There are no indications that nonresponse in the pilot or *Eat for Life* surveys produced nonresponse bias in the data. It is possible that receipt of the *Eat for Life* intervention may have influenced may have increased participants’ racial consciousness and affected the test-retest reliability of the BICS. The revised BICS is a 34-item measure and may be too long for many practical applications. Efforts to identify a predictive shortcut item, such as the sole use of the newsletter preference item, have not been successful; however, it is hoped that further research will uncover a shorter method of classifying respondents. Future work with the BICS should explore the validity of the measure in more detail and assess the state-vs.-trait aspects of the subscales. Research using the BICS to date has focused on dietary behaviors. More research is needed to explore the applicability of the BICS in communicating with audiences about other types of behavior change. Researchers should also consider demarking a single-identity Afrocentric identity type if this identity type is expected to be particularly prevalent or meaningful in their study populations. Due to concerns of customer dissatisfaction with the healthcare plans from whom participants in this research were being recruited, survey items with a high potential of causing offense were not used in the pilot or *Eat for Life* intervention surveys. These deletions primarily included items from the Cultural Mistrust and Afrocentric subscales. Future revisions of the BICS should consider adding more Afrocentric and Cultural Mistrust items, as these additions may result in different distributions of BICS subtypes.

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This paper aimed to provide an effective audience segmentation tool for health professionals engaged in designing health communications for African Americans. The data presented contribute further evidence for the presence of great cultural variability among African Americans and support the use of segmenting African American audiences for effective health communication interventions. The BICS appears to have adequate reliability properties, with the exception of the Cultural Mistrust subscale, and is seemingly valid. It is hoped that the BICS will not only prove useful to health professionals committed to improving health outcomes among African Americans, but also that its development will inform those health professionals seeking to guard and promote the health of other racially and ethnically defined populations.

Appendix A

The Revised Black Identity Classification Scale (BICS)

The revised BICS contains three single items and six subscales: Afrocentric, Black American, Bicultural, Multicultural, Racial Salience, and Cultural Mistrust. However, the Black American subscale can be divided into Surface Structure and Deep Structure components. The 31 subscale items are offered in conjunction with a 1-7, “Strongly Disagree” to “Strongly Agree” response scale. Items can be administered in random order with the exception of the following:

- Items Q17 and Q18 are yoked. Item Q17 should always be administered immediately prior to Q18
- Items Q30, Q34, and Q35 should be administered in order after all of the 7-point items

The original source for each survey item is noted in **bold**. Sources include the Cross Racial Identity Scale (CRIS) (Worrell, Cross et al. 2001), the Multidimensional Inventory of Black Identity (MIBI) (Sellers, Rowley et al. 1997), the Survey of Black Life (SBL) (Resnicow, Soler et al. 1999), the Cultural Mistrust Inventory (CMI) (Terrell and Terrell 1981), personal communications with other researchers (PC), and the *Eat for Life* study team (EFL). Those items administered in the *Eat for Life* study follow-up survey are indicated by an asterisk (*). The scoring algorithm for the BICS is available from the authors. Exploratory (EFA) and confirmatory (CFA) factor loadings from the psychometric pilot survey and *Eat for Life* trial baseline survey are denoted after each item (pilot EFA loading /*Eat for Life* EFA loading/*Eat for Life* CFA loading). Loadings for those items not included in the pilot are listed as “NA”.

Afrocentric Subscale

1 It is important to me to celebrate Kwanzaa. **(EFL)** (NA / .70 / .56)

2* I feel a strong emotional connection to Africa. **(EFL)** (.74 / .65 / .74)

3 Black people should give their children African names. **(SBL)** (.63 / .67 / .51)

4 I am involved in Black political activities. **(Adapted from the SBL)** (.60 / .58 / . 44)

5 It is important to learn about African culture. **(SBL)** (.56 / .35 / .64)

6 I believe that it is important for African Americans to learn about spiritual beliefs in Africa. **(EFL)** (.74 / .61 / .71)

7* It is important for African Americans to get back to their African roots. **(EFL)** (. 63 / .41 / .66)

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Black American Subscale

Surface Structure Items

8* When I watch television, I usually watch Black television shows. **(Adapted from the SBL)** (.78 / .70 / .67)

9* When I read magazines, I read mostly Black magazines such as Jet and Ebony. **(Adapted from the SBL)** (.71 / .71 / .73)

10 When I listen to the radio, I usually listen to Black radio shows. **(Adapted from the SBL)** (.63 / .71 / .60)

11 Most of my friends are Black. **(SBL)** (.48 / .55 / .53)

Deep Structure Items

12* It is important for Black people to educate their children about Black art, music, and literature. **(Adapted from the MIBI)** (.79 / .49 / .58)

13 A thorough knowledge of Black history is very important for Blacks today. **(MIBI)** (.65 / .46 / .64)

14 It is important to be involved in the Black community. **(SBL)** (.48 / .62 / .58)

Bicultural Subscale

15 I am proud of my ability to succeed in both the Black and White worlds. **(EFL)** (NA / .61 / .48)

16* I feel at ease with Whites and Blacks. **(EFL)** (.81 / .70 / .57)

17 I feel comfortable in both worlds. **(EFL)** (.76 / .84 / .76)

18* I feel comfortable interacting with both Blacks and Whites. **(EFL)** (.79 / .80 / .78)

Multicultural Subscale

19 I feel strongly about American social issues such as women's rights, the environment, and animal rights. **(EFL)** (.46 / .42 / .61)

20* I feel strongly about international human rights issues in places such as the Middle East and Tibet. **(EFL)** (.65 / .65 / .67)

21* I care deeply about the needs of other groups such as Native Americans, Whites, Latinos, and Asian Americans. **(EFL)** (.61 / .59 / .58)

22 I respect the cultural traditions of many groups – for example, Native Americans, Whites, Latinos, and Asian Americans. **(EFL)** (.41 / .70 / .44)

Racial Salience Subscale

23 Being Black has a lot to do with how I feel about myself. **(Adapted from the MIBI)** (.71 / .72 / .66)

24 Being Black is an important part of my self-image. **(Adapted from the MIBI)** (.71 / .69 / .65)

25 Many things that are important to me are connected to my Black identity. **(PC)** (.69 / .66 / .77)

26* Both in my public and private thoughts, race is an important part of who I am. **(PC)** (.77 / .62 / .59)

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27* Many things that make me happy are connected to the fact that I am Black. **(PC)** (.50 / .66 / .69)

28 I have a strong sense of belonging to the Black community. **(Adapted from the MIBI)** (.23 / .48 / .62)

Cultural Mistrust Subscale

29* When I think about race relations in America, I get angry. **(EFL)** (.62 / .62 / .44)

30* Many White politicians deliberately pass laws designed to block the progress of Blacks. **(Adapted from the CMI)** (.76 / .65 / .55)

31 The United States government is trying to make things better for Blacks. **(Adapted from the SBL)** (.55 / .54 / -.01) ** **Note: This item is reverse-scored. Dropping this item increased the internal consistency reliability of the scale from 0.34 to 0.42 with *Eat for Life* study data. Adding the fast food item to the scale increased the reliability to 0.47. Adaptations to this scale should be considered in future use.)**

Racial Salience Single item

32 For this next question, I'd like you to think of a number between zero and ten with zero meaning "Not at All Important" and ten meaning "Very Important". By choosing any number between zero and ten, how important is being Black to your overall identity? **(EFL)**

Newsletter Preference Items

This item should be adapted to fit the health intervention.

34 As you know, our program involves creating personalized newsletters about health and diet. For your newsletter, which types of newsletters would you like to receive? Please answer "yes" or "no" to each of the types I describe. Would you like to receive a newsletter that focuses on the food and culture of: (Response options include "Yes", "No", and, if volunteered, "I don't care.") **(EFL)**

- **34a** Black people in America
- **34b** African Americans and their connections to Africa
- **34c** Both Black and White Americans
- **34d** People of many racial and cultural backgrounds, including those such as Latinos and Asian Americans
- **34e** Americans, without any references to Black culture

35 (Only ask this question if R answered "Yes" more than once on questions 34a-34e:) You've indicated that you would like to receive a newsletter that focuses upon the food and culture of **(**insert all of the following that apply: Black people in America; African Americans and their connections to Africa; Both Black and White Americans; people of many racial and cultural backgrounds, including those such as Latinos and Asian Americans; Americans, without any references to Black culture**)**. Of these categories, which type of newsletter would you most prefer to receive? (Select one response) **(EFL)**

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Table I

Definitions of BICS Core Identity Components

Black Identity Component	Definition
Assimilated	Low racial salience; places little importance on being a member of a racial or ethnic group
Afrocentric	High racial salience; feels connections with Africa
Black American	High racial salience; feels connected to Black American people and culture
Bicultural	High racial salience; values ability to connect with and successfully interact with both Black and White people
Multicultural	High racial salience; appreciates and feels connected to persons from diverse racial, ethnic, and cultural orientations
Cultural Mistrust	High racial salience; mistrusts White people and White society

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Table II

Sample Newsletter Messages for BICS Identity Types

Black Identity Type	Sample Newsletter Text
Assimilated	*You may already know that Americans have a higher risk of diabetes, heart disease, high blood pressure, and cancer if they don't eat a healthy diet.*
Afrocentric/Black American	*Have you ever wondered why Africans often have lower rates of obesity, diabetes, high blood pressure, and cancer than African Americans?*
Black American	*You may already know that Black Americans have a higher risk of diabetes, heart disease, high blood pressure, and cancer than people from other ethnic backgrounds.*
Bicultural	*You may already know that Black Americans have a higher risk of diabetes, heart disease, high blood pressure, and cancer than Whites.*
Multicultural	*You may already know that African Americans have a higher risk of diabetes, heart disease, high blood pressure, and cancer than people from other ethnic backgrounds.*

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Table III

Gender and Healthcare System Affiliation for Baseline and Cohort Samples

	Baseline Sample (n = 560)	Cohort Sample (n = 468)
Female (%)	70.7%	72.9%
Healthcare System – Detroit	47.7%	48.7%
Healthcare System – Atlanta	52.3%	51.3%

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Table IV

Distribution of BICS Identity Types

BICS Identity Type	Percent of Study Sample (n = 560)
Assimilated	10.4% (58)
Black American	8.8% (49)
Black American with Cultural Mistrust	1.1% (6)
Bicultural	8.0% (45)
Multicultural	1.6% (9)
Bicultural/Multicultural	11.6% (65)
Black American/Bicultural	13.9% (78)
Black American/Bicultural with Cultural Mistrust	3.4% (19)
Black American/Multicultural	8.9% (50)
Black American/Multicultural with Cultural Mistrust	2.0% (11)
Afrocentric/Black American	15.2% (85)
Afrocentric/Black American with Cultural Mistrust	4.6% (26)
Afrocentric/Bicultural	2.9% (16)
Afrocentric/Bicultural with Cultural Mistrust	0.5% (3)
Afrocentric/Multicultural	6.4% (36)
Afrocentric/Multicultural with Cultural Mistrust	0.7% (4)

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Table V

Mean Responses to Culturally Associated Validity Items by BICS Identity Type (n = 560)

	Mean Response to the Food Association Item[1]	Mean Response to the Soul Food Item[1]	Mean Response to the Fast Food Poison Item[2]
Assimilated Group (n=58)	2.6 *	4.3 *	NA
Afrocentric Group (n=169)	4.8 *	5.3	NA
Black American Group (n=323)	4.7 *	5.7 *	NA
Bicultural Group (n=226)	3.7 *	5.1	NA
Multicultural Group (n=175)	4.1	5.2	NA
With Cultural Mistrust Group (n=69)	NA	NA	5.5
Without Cultural Mistrust Group (n=491)	NA	NA	4.5

[1] = Significance level for comparison across all five groups: $p<.0001$; $R^2 = 0.15$.

[2] = Significance level for comparison between groups: $p=.0002$; $R^2 = 0.11$.

* = Significance level for comparison within each group: $p \leq .05$.

NA = Not applicable

Note: The identity groups are overlapping, as some participants have more than one identity component.

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Table VI

Select Characteristics of African Americans with Core BICS Identity Components (n = 560) [1]

	Assimilated (n=58)	Afrocentric (n=170)	Black American (n=324)	Bicultural (n=226)	Multicultural (n=175)	Cultural Mistrust (n=69)
Mean Age (Years)	49.3	49.9	47.7	48.0	50.4	48.3
Female (%)	70.7	60.6	71.0	74.8	68.6	75.4
Married/Living with Partner (%)	31.0	44.7	41.1	40.7	38.9	37.7
Children Ages 2-18 Living in the Home (%)	36.2	36.5	37.0	32.7	29.7	37.7
Income Under $40K (%)	33.9	35.8	36.7	37.9	37.4	32.8
College Graduate (%)	31.0	41.2	35.8	33.2	31.4	40.6
High Blood Pressure/Hypertension (%)	37.9	45.6	41.5	41.6	44.0	49.3
Exercises More Than Others Their Age (%)	31.0	34.1	26.2	30.5	28.6	34.8
Body Mass Index	30.3	31.0	31.2	32.2	31.2	31.0
Satisfaction with Health Maintenance Plan	7.7	7.9	8.0	8.1	7.7	7.6
Mean Self-Efficacy for F&V Intake	3.0	3.1	3.0	3.1	3.1	3.0
Mean Proclivity Against Trying New Foods	5.6	5.4	5.6	5.4	5.3	5.7
Mean Extrinsic Motivation	2.5	3.6	3.1	2.8	2.9	2.8
Mean Intrinsic Motivation	6.2	6.5	6.5	6.5	6.7	6.6
Prefers “Black” (%)	29.3	17.7	18.8	16.4	15.4	21.7
Prefers “African American” (%)	24.1	42.4	41.1	35.8	43.4	40.6
Prefers “Black American” (%)	29.3	30.6	33.3	39.4	30.9	27.5
Prefers “American” (%)	15.5	5.9	3.7	6.6	6.9	5.8

[1] = Participants may be in more than one category if their BICS identity type has more than one core component.

Key: F&V = fruit and vegetable