INTRODUCTION

A growing literature consistently documents the high prevalence of numerous illnesses among African Americans, along with higher morbidity rates and poorer prognoses related to chronic conditions. For example, several studies have indicated that African Americans experience disproportionate rates of cardiovascular diseases, diabetes and renal failure, and obesity. Such data contribute to the disturbing conclusion that, as a group, African Americans are not well. Many of the chronic diseases and conditions that contribute to African-American morbidity and mortality have clearly established links to diet. It is not surprising, then, that more research has begun to focus on African-American diet and dietary behavior. Using a recent USDA report indicated that only 5% of African Americans have what is considered a "good" diet. Studies have also indicated that, compared to European Americans, African Americans report fewer health-promoting dietary behaviors—a finding that is especially pronounced among women.

Our review of the literature suggests that most researchers have indicated factors related to socioeconomic status, neighborhood ecology, and income inequality to be primary determinants of dietary behavior. Potter noted that irrespective of race and age, poverty is related to a lower intake of fruits and vegetables. Similarly, Diez Roux and colleagues studied dietary patterns among 13,095 individuals enrolled in a prospective study of atherosclerosis and concluded that, although differences in neighborhood characteristics contributed a small proportion of the variance in nutrient intake, higher individual incomes were more strongly related to greater consumption of fruits and vegetables, and lower intakes of meat. However, recent studies that have focused specifically on African-American populations have reported divergent findings. Bronner et al reviewed 29 nutrition studies composed exclusively of African-American samples, and found that poor dietary patterns persisted across income groups, which suggests that diets were comparable for African Americans across the socioeconomic spectrum. Resnicow et al reported that daily intake of fruits and vegetables was not associated with education or income in their sample of 1,000 African-American adults. In light of the wealth of published articles proposing a relationship between socioeconomic factors and nutrition, these findings make it difficult to articulate the precise role that socioeconomic variables play as determinants of African-American diets. Given the economic diversity that exists in African-American communities, it is surprising that few researchers have attempted to identify determinants of dietary behavior beyond socioeconomic variables. Findings from recent work in African-American health psychology, briefly summarized below, suggest that certain characteristics of the African-American cultural experience may shape perceptions about health that subsequently affect dietary behavior. Our intent in this study is to investigate a con-
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connection between sociocultural variables and dietary behavior.

**Cultural Identity and Health Promoting Behaviors**

A significant advance in African-American psychological thought centers on evaluating the meaning that African Americans attribute to their cultural identity, and the role that such meaning plays in their lives.\textsuperscript{24-25} “Culture” represents the cumulative experiences of a particular society or group, and the portion of those experiences that the society or group deems worthy to transmit to future generations.\textsuperscript{26} In this way, culture not only underscores a wide range of behaviors that reflect ways in which individuals express themselves, experience the world, and act in the world. It is our contention that factors related to culture may shed light on African-American dietary behaviors. For example, a study conducted by Siegel, Yancey, and McCarthy\textsuperscript{27} implicate cultural identity as an important mediator of depressed mood and overweight in a sample of African-American women. Although Siegel et al did not examine the phenomenology of cultural identity, their results imply that women in their sample who reported a greater identity connection to an African-American reference group were less likely to be depressed (and subsequently, fewer pounds overweight) than those with a weaker connection. Other research has demonstrated an association between various aspects of Black identity and decreased consumption of alcohol.\textsuperscript{28} In sum, empirical evidence supports the general idea that cultural identity exerts an influence on African-American health behaviors and outcomes.

Although few in number, some studies have demonstrated a connection between cultural identity and African-American dietary behavior. Airhihenbuwa and colleagues\textsuperscript{29} reported that cultural identity factors reflecting participation in, and belonging to, African-American culture were related to low-fat diets. Thompson and Chambers\textsuperscript{30} hypothesized that cognitions related to an affirmative African-American cultural identity would correlate with behavioral outcomes that included physical health-promoting behaviors. These authors reported a significant relationship between African self-consciousness (a commonly used measure of cultural identity) and several health-promoting behaviors, including dietary behavior. This finding is particularly relevant to the present study. According to Kambon, a leading proponent of African-centered psychology, the African self-consciousness (ASC) construct represents the conscious-level organizing principle of the “African personality.”\textsuperscript{31} A significant body of correlational data collected by Kambon and associates suggests that a broad array of cognitive and behavioral outcomes in educational and interpersonal domains are associated with ASC.\textsuperscript{32} To our knowledge, however, Thompson and Chambers’\textsuperscript{30} work was the first to offer empirical evidence of the association between an affirmative orientation to African-American identity and health-promoting behaviors, in particular.

Despite evidence that supports the notion that there is an association between culture and health-promoting behavior, the underlying processes that determine this relationship are unclear. One possible explanation is that individuals with an affirmative cultural identity are more likely to be health conscious. It is plausible that individuals who hold a high value for the well-being of the group (a characteristic component of African-American identity) would be more likely to engage in health-promoting behaviors in order to contribute to, and advance, the group’s overall well-being. Therefore, in the present study, we compared cultural identity to a more “mainstream” variable, health consciousness, and evaluated both constructs as predictors of dietary behavior. Health consciousness is the degree to which individuals focus on their health through states of attention to cognitive and affective cues, and has been found to relate positively to healthy behaviors, and negatively to non-healthy behaviors.\textsuperscript{33} If we assume that cultural identity is, indeed, a sociocultural factor that has a health-promoting component, then it would be necessary to assess its relationship to health consciousness. Are cultural identity and health consciousness identical constructs? What is the degree of overlap between them?

This research seeks to evaluate the following questions:

- Is there a significant, positive relationship between cultural identity and health-promoting dietary behavior?
- Is there a significant, positive relationship between cultural identity and health consciousness?
- Does a significant relationship between cultural identity and health-promoting dietary behavior persist after controlling for variance associated with health consciousness?

**Method**

**Participants**

Data for this study were analyzed for African-American adults residing in a mid-sized urban community in the
Southeast who had participated in 3 separate community health studies conducted by the first and third authors between 1996 and 1998. All participants were recruited at public locations (i.e., barber/beauty shops, community centers, and churches), and provided informed consent of their rights as research participants according to ethical procedures established by the American Psychological Association. Participants volunteered to take part in the study without receiving payment or any other form of remuneration, and completed a questionnaire assessing cultural identity, health behaviors, health consciousness, and demographic variables. One hundred fifteen (58.4%) participants were female, and 82 (41.6%) were male. The mean age of the sample was 28.75 years (SD = 4.58 years), with a range of 18–55 years. Thirty-nine participants (19.8%) reported that they had completed between 2 to 4 years of college, while 60 (30.5%) indicated that they had completed a bachelor's degree. Twenty participants (10.2%) had a master's degree, and 12 (6%) had completed a doctorate or professional degree. The remaining 66 participants (33.5%) had not attended college; of these, 4 were still in high school.

**Measures**

**African Self Consciousness**

The African Self-Consciousness Scale (ASCS), developed by Baldwin and Bell, is a 42-item questionnaire designed to evaluate 4 dimensions of the African-American experience: 1) awareness and recognition of one's identity and heritage; 2) general ideological and activity priorities placed on Black survival, liberation, and proactive/affirmative developmental; 3) specific activity priorities placed on self-knowledge and self-affirmation; and 4) a posture of resistance toward anti-Black forces and threats to Black survival. Sample items are "Blacks in America should try harder to be American rather than practicing activities that link them up with their African cultural heritage" (reverse scored), and "It is good for Blacks in America to wear traditional African-type clothing and hair styles if they desire to do so." Responses were scored on an 8-point Likert-type scale, ranging from "strongly disagree" to "strongly agree," and alternated between negative and positive skewing for African self-consciousness. African Self-Consciousness Scale (ASCS) scores were computed as means, ranging from a low score of 1 to a high score of 8, with higher scores indicating greater self-consciousness. Test-retest reliability estimates have produced coefficients in the \( r = .90 \) range. The Cronbach alpha for the ASCS was .92 in the present study.

**Health Consciousness**

The Health Consciousness Scale (HCS) is a 9-item questionnaire that measures the degree to which one attends to, or focuses on, health. Health consciousness comprises four factors: 1) health self-consciousness; 2) health involvement; 3) health self-monitoring; and 4) health alertness. Items were measured on a 5-point scale (ranging from 0 to 4) with 0 meaning that a statement "does not describe you at all" and 4 meaning that a statement "describes you very well." Sample items are "I reflect about my health a lot," and "I'm constantly examining my health." Health Consciousness Scale (HCS) scores were also computed as means, ranging from a low score of 0 to a high score of 4. As a measure of internal consistency, Gould reported a Cronbach alpha of .92 for all 9 items. In this study, the Cronbach alpha coefficient for the HCS was .91.

**Dietary Behavior**

Dietary behavior was assessed with the nutrition subscale of the Health-Promoting Lifestyle Profile II (HPLP), a 9-item scale that measures self-reported frequency of dietary behaviors. Participants indicated on a 4-point Likert scale (ranging from "never" to "routinely") the extent to which they engaged in specific dietary behaviors, such as eating 2–4 servings of fruit and vegetables each day, and choosing a diet low in fat, saturated fat, and cholesterol. Nutrition subscale scores were reported as means, ranging from a low score of 1 to a high score of 4, with higher scores indicating better dietary behaviors. Test-retest reliability over a 2-week period for the total HPLP has been reported at .93. Alphacoefﬁcients for the nutrition subscale have ranged from .67 to .78 in previously published studies. In the present study, the Cronbach alpha for the nutrition subscale was .71.

**RESULTS**

Participants had a mean ASCS score of 4.38 (SD = .46), indicating a moderate level of African self-consciousness. Means for HCS and dietary behavior scores were 2.99 (SD = .80), and 2.25 (SD = .50), respectively. There were no statistically significant gender differences on the 3 measures. Because the HCS has had limited use in community samples of African Americans, we were unable to compare means reported in this study with those obtained in other studies. However, the HCS mean reflected a high level of health consciousness, based on observation of the possible range of scores (observed range = .22 to 4.00). The nutrition subscale mean score also indicated a moderate level of health-promoting dietary behavior, and approximated means that have been reported in prior studies of African-American health-promoting behavior.

An item assessing self-reported income was provided in 2 of the 3 community studies; therefore, income data was incomplete for 69 participants (35% of the combined sample). The other two studies (\( N = 80 \) and \( N = 48 \)) reported mean self-reported income levels for participants as $21,500 and $23,000, respectively. Pearson product moment correlation coefficients assessing the relationship between self-reported income and the variables under in-
The present study examined relationships between cultural identity, health consciousness, and dietary behavior among a community sample of African-American adults residing in the Southeast. A significant relationship was found between cultural identity and dietary behavior, whereby a stronger African-centered cultural identity was positively related to healthier dietary behaviors. Second, cultural identity and health consciousness were significantly correlated, and the low $r$-value suggests that they are conceptually related, but not identical, constructs. This finding linking cultural identity and health consciousness is concordant with Thompson and Chambers’ supposition that assumes a positive relationship between affirmative aspects of culture and health. However, our findings are also significant in that we show that cultural identity accounted for unique variance in dietary behavior. While general health consciousness accounted for 13% of the variance in dietary behaviors, cultural identity contributed an additional 2%, which we consider important in light of the myriad ecological factors, such as food availability and cost, convenience, and nutrition knowledge, that are also determinants of diet. Others have hypothesized about the probable conceptual links between the influence of African-American cultural beliefs, values, and customs on food and nutrient intake, and this study provides new quantitative evidence in this domain.

A few limitations are to be noted. First, because this study is cross-sectional in design, causality between cultural identity and dietary behavior cannot be established. Second, we assessed dietary behaviors using only subjective self-reports of general dietary patterns rather than assessments such as food frequency questionnaires or serum levels of nutri-

### Table 1. Hierarchical regression of health consciousness and cultural identity on health-promoting dietary behavior

<table>
<thead>
<tr>
<th>Step</th>
<th>HPLP (DV)</th>
<th>HC</th>
<th>ASC</th>
<th>B</th>
<th>$\beta$</th>
<th>$r^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HC</td>
<td>.36*</td>
<td>—</td>
<td>—</td>
<td>.21</td>
<td>.34</td>
<td>.13*</td>
</tr>
<tr>
<td>2. ASC</td>
<td>.19*</td>
<td>.15*</td>
<td>—</td>
<td>.002</td>
<td>.14</td>
<td>.02*</td>
</tr>
</tbody>
</table>

Mean: 2.25, 2.99, 4.38
Standard deviation: .50, .80, .46

Note: $N=197$.

HC=Health Consciousness; ASC=African Self-Consciousness; HPLP=Dietary Behavior.

* $P<.05$.

Investigation were computed for the 128 participants from whom we had sufficient income data (65% of the combined sample). No significant relationships were found between self-reported income and cultural identity ($r=.05$, $P=.38$), health consciousness ($r=-.01$, $P=.64$), or dietary behavior ($r=.04$, $P=.44$). Analyses of variance were also conducted for cultural identity, dietary behavior, and health consciousness by education level. None of the results were significant, with F values of .85, .79, and .81 ($P$ values ranged from .36 to .41) for cultural identity, dietary behavior, and health consciousness, respectively. Neither self-reported income nor education level was related to any of the variables of interest; therefore, they were excluded from subsequent analyses.

Pearson product moment correlations were conducted to determine the relationships between variables. Results demonstrated significant correlations between cultural identity and dietary behavior ($r=.19$, $P<.01$), as well as between cultural identity and health consciousness ($r=.15$, $P<.05$). A significant relationship was also observed between health consciousness and dietary behavior ($r=.36$, $P<.001$). Thus, cultural identity was significantly related to both dietary behavior and health consciousness, answering the first two research questions.

In order to estimate the unique impact of cultural identity on dietary behavior, above and beyond that contributed by health consciousness, a hierarchical multiple regression analysis was conducted in which dietary behavior was the dependent variable. Health Consciousness Scale (HCS) scores were statistically controlled in the first step, and ASCS scores were entered last. Again, demographic variables (income and education) were not entered, as they did not emerge as significant covariates. The results of this analysis yielded $R^2=.15$, $F(1, 194)=4.42$, $P<.05$, and are shown in Table 1. Cultural identity contributed a small, but unique proportion of variance to dietary behavior, therefore answering the third research question. Cultural identity was found to be a unique predictor of dietary behavior, even after statistically controlling for variance contributed by general health consciousness.

## DISCUSSION

The present study examined relationships between cultural identity, health consciousness, and dietary behavior among a community sample of African-American adults residing in the Southeast. A significant relationship was found between cultural identity and dietary behavior, whereby a stronger African-centered cultural identity was positively related to healthier dietary behaviors. Second, cultural identity and health consciousness were significantly correlated, and the low $r$-value suggests that they are conceptually related, but not identical, constructs. This finding linking cultural identity and health consciousness is concordant with Thompson and Chambers’ supposition that assumes a positive relationship between affirmative aspects of culture and health. However, our findings are also significant in that we show that cultural identity accounted for unique variance in dietary behavior. While general health consciousness accounted for 13% of the variance in dietary behaviors, cultural identity contributed an additional 2%, which we consider important in light of the myriad ecological factors, such as food availability and cost, convenience, and nutrition knowledge, that are also determinants of diet. Others have hypothesized about the probable conceptual links between the influence of African-American cultural beliefs, values, and customs on food and nutrient intake, and this study provides new quantitative evidence in this domain.

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Author Contributions
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