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Ethnic Identity and Regional Differences in Mental Health in a National Sample of African American Young Adults

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Abstract

Prior research has found that a strong positive ethnic identity is a protective factor against anxiety and depression in African Americans. In this study ethnic identity is examined in a geographically representative sample of African American young adults ($n = 242$), using the Multigroup Ethnic Identity Measure (MEIM) [1]. The two-factor structure of the measure [2] was analyzed using a structural equation model and displayed an acceptable fit only when multiple error terms were correlated. A multi-group confirmatory factor analysis revealed measurement equivalence of the two-factor structure between African Americans from Southern and non-Southern regions of the U.S. We found that significantly higher levels of ethnic identity were present among African American in the South compared to other regions, and region significantly predicted total ethnic identity scores in a linear regression, even when controlling for gender, age, urbanicity, and years of education. Furthermore, among African Americans, living in the South was significantly correlated with less help-seeking for diagnosed depression, anxiety, and/or obsessive-compulsive disorder, where help-seeking was defined as obtaining a diagnosis by a professional. The role of ethnic identity and social support are discussed in the context of African American mental health.

Graphical Abstract

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INFORMED CONSENT: Informed consent was obtained from all individual participants included in the study.

Keywords

Ethnic identity; African Americans; measurement; assessment; ethnic differences; regional differences; mental health

1 Introduction

1.1 Ethnic Identity

Ethnic identity is a multifaceted construct consisting of how people develop and experience a sense of belonging to their culture. Customs and feelings about one's heritage are important factors in ethnic identity development [3, 2]. Individuals progress through different stages as they learn to identify with their culture, whereby they come to understand the group customs and values, and ultimately identify with their ethnic group. Different models have been studied, and it is widely agreed that in order to achieve a strong sense of ethnic identity, people first go through a thorough process of growth marked by cultural exploration [4]. This process has different stages, and the strength of an individual's ethnic identity will be affected by the stage where one is within the process.

Phinney [3] described three stages: an unexamined stage, a searching stage, and an achieved or integrated stage. People who have not explored their culture and have not examined their cultural links remain in the unexamined stage, which is also characterized by negative feelings toward their ethnicity due to the lack of direct connection to it [5, 2]. The searching stage occurs when people become interested in joining their ethnic group and begin to develop their own ethnic identity; this is characterized by a process where efforts are focused on the expression of their commitment to their identity. After carefully building their place within their ethnicity, they become more acquainted with the existence of others' identities and appreciate that they have an ethnic heritage to share. This is when they are said to be in an achieved or integrated stage.

The development of ethnic identity has been researched across different cultures, primarily in adolescents [2, 6, 4]. Most studies focused on younger participants, due to the idea that ethnic identity develops in early adolescence [3, 5]. As a result, relatively less is known about the ethnic identity processes in older populations [7, 3, 8]. However, ethnic identity continues to develop after adolescence, thus there is still a need to better understand how different groups develop a sense of ethnic identity across the lifespan and what factors may contribute to greater levels of ethnic identity in adulthood [9, 10, 2].

1.2 Ethnic Identity Development

Tajfel and Turner [11] developed the idea that group identity is inherently a social event. In studying the development of ethnic identity in different cultures, the work of Erik Erickson on the ego identity model [12, 8, 13, 3, 2] is a starting point to viewing identity development as a continuous process. A sense of self is found by how group members reflect and observe their surroundings over time. Ideally, the interaction between context and individual experiences presents the kind of subjective choices necessary to develop an “achieved identity” [14]. Marcia [15] later expanded on Erikson’s identity theory by examining the idea that both exploration and commitment had different influencing factors in determining the individual’s position in identity development [8]. Marcia proposed four levels in the process of ethnic identity, including identity achievement, demonstrating high levels of both exploration and commitment; identity moratorium, with high levels of exploration paired with low commitment; identity foreclosure with low exploration and high commitment; and diffusion, with low exploration and commitment, respectively. Nevertheless, ethnic identity is seen as the development of an ethnic self within a group rather than an individual’s development of a personal self [3, 11].

To quantify this construct Phinney [1] developed the Multigroup Ethnic Identity Measure (MEIM). Originally, this measure was composed of three factors, ethnic identity search (a person’s attempts to become identified and connected with their ethnicity); affirmation, belonging, and commitment (feelings and attitudes related to their ethnic membership), and other group orientation (behaviors that are connected to their group membership). Two items of the scale were dropped, yielding the current 12-item version, which does not include the other group orientation factor. Roberts et al. [2] conducted a factor analysis with a culturally diverse sample of young adolescents to assess its construct validity and structure. Results indicated that ethnic identity was separated into two factors known as exploration and affirmation/belonging. Avery et al. [7] conducted a study with a culturally diverse sample of students and other adults. They found that the ethnic identity scores on the measure were greater among African American participants in comparison to European Americans, Hispanic Americans, and Asian Americans. Finally, Phinney and Ong [14] revised the MEIM and formulated a similar finding that concurred with Marcia’s view on ethnic identity development being composed of both exploration and commitment factors [16].

1.3 Ethnic Identity in African Americans

Several studies have focused on the ethnic identity experience in African Americans, due to ethnic identity being a critical factor in their cultural experience as a historically stigmatized and disenfranchised population. Due to the dominance of European American culture in the

United States, ethnic minorities may find ethnic identity more salient. As hypothesized, Roberts et al. [2] observed that African Americans had significantly higher levels of ethnic identity than European Americans. Furthermore, when observing how ethnic identity correlated with different measures of psychological well-being, for African Americans ethnic identity had a strong relationship to salience of ethnicity, coping, and self-esteem. However, the sample included only participants between 12 and 14 years old.

Using a similar sample of young African Americans, Cokley [9] attempted to define a clearer distinction between racial identity, ethnic identity, and Afrocentric values, with a specific focus on how they interact in influencing African American identity. Results indicated that African Americans may develop racialized or non-racialized beliefs, and MEIM scores had strong relationships with both sets of beliefs. In addition to a need for research to determine the causes of such findings, it is also important to examine different variables that may be relevant to African American individuals from varied geographical locations. For example, it seems likely that ethnic identity is stronger in the South due to the larger size of the African American community and the greater racial struggles experienced by those in that region, but this has not been the subject of much study.

1.3 Mental Health in African Americans

Mental health continues to be a major concern among African Americans, with lifetime prevalence rates of anxiety disorders at 14.76% and mood disorders at 14.78% [17]. These rates tend to be lower than what is observed among non-Hispanic White Americans, and cultural factors are thought to play a role in promoting resilience. For example, positive ethnic identity has been correlated to higher levels of self-esteem, development of stronger coping mechanisms, and greater optimism in African Americans [2, 18]. Williams et al. [19] found that in adults ethnic identity was negatively correlated with depressive and anxious symptomology, and postulate that it serves as a protective factor. Significant relationships have been found between low levels of ethnic identity and elevated symptoms of depression [20, 2, 21–23]. Furthermore, negative ethnic identity in African Americans has been linked to poor self-esteem, problems with adjustment, poor achievement, delinquency, eating disorders, and substance abuse [24, 25].

Racial discrimination has been found to play a role in the mental health of minorities, resulting in a broad range of negative psychological and physiological outcomes [26]. In their analysis of the National Survey of American Life (NSAL), Chae, Lincoln, and Jackson [27] found higher rates of serious psychological distress among African and Caribbean Americans who experienced comparatively more discrimination. Upon examining the strength of the participants' racial group identification, they concluded that high racial group identification may somewhat mitigate the negative mental health effects of discrimination. Thus, there appears to be a link between ethnic identity and mental health. African Americans in the South show lower levels of depression, anxiety, and OCD [28–30], despite living in an environment marked by greater racism [31], thus it is possible that regional differences in the strength of ethnic identity account for this finding.

Despite the prominence of mental illness among African American communities, cultural and systemic barriers continue to limit access to and utilization of mental health care.

Potential explanations for the under-utilization of formal mental health care services include the financial burden, culturally-based shame/guilt for seeking services, cultural mistrust of providers, fears of being misdiagnosed, and a dearth of ethnoracial minority providers [32, 33]. It has been theorized that an individual's ethnic identity can influence the manifestation of cultural-based barriers to care, such as the degree of trust in traditional forms of mental health care [34, 35]. Specifically, Carter [34] proposed that individuals low in ethnic identity yet highly assimilated will be most willing pursue mental health care. In light of these mental health care disparities there is a need to better understand variables related to mental health service utilization. To that end, this study examines the construct of ethnic identity and geographic region as it relates to receiving mental health services, which in this study can be conceptualized as help-seeking, utilizing the MEIM in a geographically representative sample of African American young adults. We hypothesize that the MEIM will show good psychometric properties in the young adult national sample, with higher levels of ethnic identity in African Americans compared to European Americans. We predict higher levels of ethnic identity in the South, and predict that lower levels of ethnic identity will be correlated with fewer mental health diagnoses from professionals. We also predict that Southern residency will predict more help-seeking after accounting for ethnic identity, since in the South greater amounts of racism should contribute to more mental illness.

2 Methods

2.1. Participants

Data were collected via a project called Time-sharing Experiments for the Social Sciences (TESS; www.tessexperiments.org). TESS is an NSF-funded infrastructure that offers investigators a large, diverse, randomly-selected population as a means of testing experimental ideas. TESS collects data for research projects by providing access to large-scale data collection instruments, one of these via the Internet, administered by Knowledge Networks. After a description of the study is provided to participants, written informed consent is obtained. Participants are provided with free Internet access (via WebTV) and are given the necessary hardware for as long as they remain in the sample. This facilitates the participation of subjects from varied socioeconomic backgrounds. This study was approved by the university institutional review board (IRB).

The sample consisted of 242 non-Hispanic African American participants between the ages of 18–35 (mean age 28.71 years, SD = 5.11) who had lived in the US for at least ten years. We also included a smaller similar sample of European Americans ($n = 56$) for comparison (age 27.5, SD = 5.20), recruited through the same process. Respondents comprised a geographically representative sample based on the US Census for race and geography, meaning that we had participants from all 50 states in numbers proportional to their population in those states. All participants completed a comprehensive survey of demographic information in advance of participating in the study where they were asked to provide information about race and ethnicity separately. People indicating two or more races were excluded from the dataset. Geographic region and household income for our sample approximated that of the US for this age group, with a mean income of \$27,400 (SD \$4,235) for African Americans and \$41,400 (SD \$3,685) for European Americans. Educational

attainment, homeownership, and employment status indicates that our African American sample may be of a slightly higher socioeconomic status (SES) than average and also had more females than the national average. For example, according to US Census Bureau data, 19.5% of African American's have a college degree whereas 29.8% in our sample did. Our sample was 67.7% female, whereas among the current African American population between ages 18–34, 50.7% are female. See Table 1 for demographic details. The study had a response rate of 64%.

2.2. Measures

To quantify identification to ethnic group, we administered the MEIM [1]. The MEIM, which is suitable for use with any ethnic group, contains items about degree of ethnic identification and race. The 12-item ethnic identity scale was utilized [2], along with one fill-in question about the subjects' race and a multiple choice item about race. Items were scored from 1 (strongly disagree) to 4 (strongly agree). In the validation sample for the 12-item version, the mean item score for African Americans was 3.07 (SD = 0.56) and for European Americans 2.71 (SD = 0.59) [2].

Items in the MEIM are represented in two factors. The Affirmation & Belongingness subscale includes items referring to the commitment and belonging one feels within their ethnicity, as well as positive emotions that come from having healthy attachments to one's ethnic group. The Exploration subscale includes items regarding the efforts that individuals put towards being or becoming more involved in their ethnic groups. A previous study using a combined college student and community adult sample found an adequate internal consistency with these MEIM items ($\alpha = 0.76$; 19). We also included an additional item as a test of convergent validity, "How much of your free time do you spend exclusively with people from your own ethnic group?" anticipating that this would be positively correlated with ethnic identity.

Participants were also asked to list any mental health conditions, such as anxiety, depression, or OCD, for which they consulted a health care professional. This was asked as an open-ended question where participants were invited to list the mental health conditions, and then each response was individually coded based on the participants' response. A binary value (1 for "yes" or 0 for "no") was assigned for report of consulting a health care professional for an anxiety, depressive, and/or OCD condition separately; representing the outcome variable for help-seeking behaviors. Participants completed measures via the Internet.

2.3 Statistical Procedure

Pearson correlations were used to explore the relationship between MEIM scales. Cronbach's alpha was computed for each scale to assess reliability. T-tests were used to make comparisons between regional and racial groups on MEIM scales. Spearman's correlations were used to examine relationships between the MEIM and demographic variables and history of anxiety, depression, and OCD. Linear regression was used to predict total MEIM score based on demographic variables, and logistic regression was used to predict help-seeking based on region and MEIM scores. These analyses were conducted using SPSS, version 22.

Responses from the MEIM served as the model indicators for the measurement model. A latent factor was created from the subscales of the MEIM, which served as the measure of ethnic identity in the measurement model. To examine the factor structure of the MEIM, a structural equation model (SEM) was employed with a maximum-likelihood solution. Global fit was measured by the chi-square goodness-of-fit test. A significant p -value of the chi-square expresses an unacceptable fit of the model, whereas a nonsignificant value denotes an acceptable fitting model. Due to the chi-square vulnerability to sample size, possibly rejecting the model for a significant p -value, goodness of fit was also assessed by the use of a root mean square error of approximation (RMSEA) and a comparative fit index (CFI) with acceptable fit values being close to .08 for RMSEA and CFI value greater than .95 [36]. Both are alternative forms of chi-square where the former replaces a p -value to determine fit for values that when closer to 0 represent the most favorable result, and the latter replaces chi-square for a range where a value closer to 1.00 is the most favorable result.

After establishing a good fitting model within our full sample, we conducted a multigroup confirmatory factor analysis according to guidelines outlined by Byrne [37] and Kline [38] to compare the overall fit of the MEIM factor structure between our sample of Southern ($n=150$) and non-Southern ($n=145$) African Americans. Such analyses “systemically compares the unstandardized solutions of measurement models with differing constrained parameters (e.g., factor loadings) to identify any non-equivalence between groups” [39]. Specifically, the authors first constrained factor loadings to be equal between the two samples and compared the model fit to an unconstrained model (i.e., all parameters allowed to vary freely between the two samples). Next, two additional models with increased parameter restrictions were examined (i.e., constrained item intercepts and structural covariances). In addition, to a nonsignificant chi-square difference test, changes in RMSEA, CFI, and AIC values were also utilized to determine measurement invariance at each level of the analysis.

3 Results

3.1 Confirmatory Factor Analysis

To replicate the two-factor model found by Roberts et al. [2], a confirmatory factor analysis was conducted using the full sample. The initial solution was non-admissible although modification indices from the initial solution revealed potentially acceptable fit (based on the suggested modifications). Specifically, modifications primarily consisted of correlating items comprising the Exploration subscale that reflect participation in ethnically-based activities, such as eating special foods, and engaging in conversations about ethnic group, participation in organizations (i.e., items 2 and 4, items 8 and 12). All item correlations were significant at $p < .03$. Once such items were allowed to be correlated within the two factor model and a double loaded item (e.g., item 3) was changed to only load onto one factor, the global fit for the nested model resulted in an acceptable fit $\chi^2(49) = 138.96$, $p < .001$; RMSEA = .079; CFI = .952, with factor loadings ranging from a low of .491 and a high of .779. Though model fit did not yield a nonsignificant chi square, the RMSEA and CFI values fell within the parameters of acceptable fit according to Hu and Bentler [36]. Results

suggest that the data from the current adult sample of African Americans supports a two-factor structure similar to the model with 12 items (shown in the Appendix), proposed by Roberts et al. [2].

The two-factor model generated from the aforementioned CFA was utilized as the base model for our measurement equivalence analyses. At each level of the analyses, a nonsignificant chi-square difference test, a change in CFI values less than .005, decrease in Akaike Information Criterion (AIC) values, and changes in RMSEA values falling within the 90% confidence interval of the less restricted model were used as indicators of parameter invariances between Southern and non-Southern African American samples [39–40]. As shown in Table 2, the two-factor model exhibited measurement invariance (or relatively equal fit the two-factor structure of the MEIM) as model parameters were progressively constrained to be equal between the two samples. Importantly, such measurement invariance warrants the use of the two factor structure to compare mean ethnic identity scores between samples [39]. In our final invariant model, the Affirmation/Belonging and Exploration subscales were positively correlated ($r = .774$, $p < .001$).

3.2 Reliability and Validity

Among African Americans, on the Robert's scale, the mean total scores for total ethnic identity were 35.50 ($SD = 8.02$), with excellent reliability ($\alpha = .91$); mean item score was 2.96 ($SD = 0.67$). Additionally, the MEIM was significantly correlated with the amount of time the individual reported spending with members of their own group ($r = .33$, $p < .001$). Furthermore, comparing ethnoracial groups on the MEIM indicated significant differences in the expected direction, with African Americans reporting significantly higher levels of ethnic identity ($t[283] = 5.39$, $p < .001$) than European Americans (mean total 29.11, $SD = 7.08$; mean item score 2.43, $SD = 0.59$).

In terms of the two subscales, the seven-item Affirmation & Belongingness subscale ($\alpha = .90$) exhibited stronger reliability in African Americans than the six-item Exploration subscale ($\alpha = .81$). The mean score for the Affirmation & Belongingness subscale was 22.58 (4.99) in African Americans, which was significantly greater than mean in European Americans of 18.64 (4.72), ($t[287] = 5.36$, $p < .001$). Likewise, the mean for the Exploration subscale was 16.19 (4.29) in African American, which was significantly greater than mean in European Americans of 12.91 (3.73), ($t[288] = 5.20$, $p < .001$).

3.3 Correlational Analyses

Spearman's correlations were conducted to examine differences in the MEIM between African American participants located in the South (mean 36.78, $SD = 7.77$) versus a composite of those located in the Northeast, Midwest, and West areas of the United States (mean 34.39, $SD = 8.22$). We also examined correlations between prior reported helping-seeking for anxiety, depression, and OCD conditions, and potentially salient demographic variables (gender, age, education, urbanicity, and Southern region). Help-seeking for anxiety, help-seeking for depression, gender, race, urbanicity, and Southern status were dummy coded (0 or 1), and education was categorized on a 1–4 ordinal scale (1 = “Less than High School,” 2 = “High School/GED,” 3 = “Some College,” and 4 = “College Graduate”).

Ethnic identity was positively correlated with level of education and was significantly stronger in Southerners. Southern region was negatively correlated with help-seeking from a professional for anxiety and depression. People in the South were more likely to live in non-urbanized areas. Help-seeking for each condition was predictably positively correlated with each other, but not ethnic identity. Results are shown in Table 3.

3.4 Regression Analyses

Linear regression analysis was used to test how demographic variables (region, urbanicity, education, age, and gender) predicted ethnic identity total scores in African Americans. Dichotomous variables were coded as 1 and 0. All of these factors together explained a significant part of the variance in MEIM total scores ($\text{Adj } R^2 = .06$, $F[5, 225] = 3.95$, $p = .002$), and region significantly predicted MEIM total scores, even when age, gender, urbanicity, and education were accounted for. See Table 4.

A logistic regression analysis was conducted to predict a self-reported help-seeking for African Americans based on region (Southern vs. non-Southern) and ethnic identity (MEIM), our main variables of interest. To increase our ability to detect differences, help-seeking for each condition was collapsed and coded as a 1 for any reported diagnosis (anxiety, depression, and/or OCD) and 0 for having no help-seeking (not ever having received a diagnosis from a professional). Thirty two participants (15.8%) reported help-seeking for these conditions. Furthermore, to account for the likelihood that time spent with other African Americans is greater in the South due to the larger Black population in the South (which may equate to more social support - a potential buffer against mental illness), percentage of time spent exclusively with those from one's own ethnic group was included as a separate variable in the regression. The overall model was significant ($\chi^2 [3] = 9.701$, $p = 0.021$), and Southern region negatively predicted help-seeking for these conditions. There was a trend in the direction of ethnic identity being negatively related to help-seeking. See Table 5 for details.

4 Discussion

4.1 Psychometric Properties of the MEIM in African American Adults

We examined the psychometric properties of the 12-item MEIM in a geographically representative sample of African American adults. All scales exhibited good to excellent reliability. When asked about the amount of free time participants spend exclusively with members of their own ethnic group, responses from African American participants were related significantly with their total MEIM scores and subscale scores. African Americans reported a significantly stronger ethnic identity than European Americans, as expected since the construct of ethnic identity tends to be more salient to stigmatized minorities [2, 19]. Upon examining the factor analytic results, a two-factor model yielded a good fit within the current sample [2]. Although the Roberts model yielded acceptable fit in the current sample, it should be noted that several error terms had to be correlated in order to achieve acceptable fit. Nonetheless, all scales and subscales correlated appropriately with the results observed in the sample, giving evidence for the reliable use of the MEIM with African American young adults.

4.2 Regional Differences in Ethnic Identity and Mental Health Help-Seeking

When examining ethnic identity in African Americans, one important area of difference was found between participants located in the South in comparison to those located in a composite of the Northeast, Western, and Midwestern areas of the United States. Southern African Americans had higher levels of ethnic identity than those located in the other geographical regions. Phinney [41] explains that contrary to the post-modern belief that ethnic identity gains structure according to the presence of ethnic difference, ethnic identity primarily develops a structure from the status of the group that surrounds the individual. Also, it is understood that historical and context-based experience may affect how ethnic identity develops in individuals. It is observed across time that when historical events that affect a particular community occur, the unification of that community may become stronger, for example, the Civil Rights Movement was a catalyst for more interest in ethnic exploration and commitment. Tolnay [42] notes that part of “The Great Migration” that occurred in the twentieth century, where Southern African American communities migrated North in search for better social, economical, and living opportunities, was partly based in how the South had disadvantaged African Americans via of segregation, racial inequality, and low position on the social hierarchy. As African American communities in the South experienced more oppression historically, it can be assumed that the inclination to explore, belong, and commit to their ethnicity was heightened.

Vandello, Cohen, and Ransom [43] note that an area of marked difference between African Americans in the South and the North is related to a higher endorsement of a culture of honor in the South. They explain that historically the South has been ridden with more cultural and social difficulties, which have reinforced individuals in developing a defensive posture in protecting themselves, their values, and their family. Furthermore, the use of violence as an instrument to enforce honor is seen more in the South rather than other locations in the United States [43]. Therefore, the heightened levels of ethnic identity in samples located in the South may also be related to a greater need to defend themselves and values that support their ethnic group.

Individually, the help-seeking variables were not directly correlated with ethnic identity. This could be due in part to greater barriers to treatment for African Americans [44], which resulted in lower numbers of participants receiving professional help for mental health issues, and subsequently inadequate power to detect a relationship between ethnic identity and specific categories of mental disorders. However, when examining help-seeking more broadly by combining these variables, a relationship (trend) became evident between ethnic identity and help-seeking. Interestingly, Southern region emerged as negatively correlated with a history of help-seeking for anxiety, depression, and/or OCD even after accounting for levels of ethnic identity and amount of free time spent with other African Americans. The NSAL found lower base rates of depressive and anxious disorders in Southern African Americans compared to those in the Northeast and Midwest [28–30], thus it could be that Southern communities provide some protection against mental illness that cannot be completely explained by higher ethnic identity or greater opportunities for support from other African Americans. It is possible that the larger and tighter Southern communities offer more non-medical options for early intervention, such as churches and extended family,

which may be more effective for African Americans in distress [45]. Southern Blacks are also more likely to use religious coping (prayer, trust in God) effectively against problems like depression [46]. Finally, our assessment of help-seeking behaviors relies on the respondents knowledge of anxiety, depression, and OCD symptomology, which is notable given that mental health literacy has a positive relationship with help-seeking and service utilization [47]. More research is needed to explore these and other factors that may explain regional differences in help-seeking behaviors among African Americans.

4.4 Limitations

Due to the sample size, it was not possible to fully compare all regional groups, nor was it possible to examine ethnic identity and its correlates in European Americans. Additionally, the help-seeking variables utilized were somewhat limited as we relied on self-report of prior history consulting with health professionals for mental health concerns, rather than actual medical records or a clinical evaluation. Since this required both self-identification of a psychiatric disorder and professional help-seeking, these questions do not consider mental health literacy of respondents and will only capture a portion of individuals experiencing depression, anxiety, or OCD symptoms [48]. Future studies should conduct a full psychiatric interview with a representative sample of African Americans, and in greater numbers to facilitate examining findings using a mediational model. Finally, the sample used in this study was limited to a specific age bracket that only included younger adults, therefore there is no insight into an elderly population.

4.5 Future Directions

More research is needed to understand how ethnic identity and social support may contribute to resiliency in African Americans. The experience of discrimination is thought to be both a stressor and a catalyst that promotes a stronger ethnic identity, so measurement of perceived racism and discrimination would be important to include in future investigations. Additionally, examining how ethnic identity may change as an individual ages may shed light onto the developmental nature of this construct. Therefore, longitudinal studies that could focus on the process of ethnic identity development from early adolescence through adulthood may be useful.

Finally, further research assessing how long African Americans have lived in the South, and reasons for being there would also add some depth to our findings. Why do African Americans choose to live in the South in the face of greater racism? Examining the heritage of Black American participants (*i.e.*, African vs. Caribbean) may shed light on differences in ethnic identity in reference to other cultural factors. Measuring acculturation and amount of time participants have been in the US to determine how levels of ethnic identity are affected may also provide a further area of interest related to mental health in Black individuals of different ethnicities.

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Appendix

Appendix:

Twelve-Item Multigroup Ethnic Identity Measure from Roberts et al. (1999)

Subscale	Number	Item
Exploration	1	spent time trying to find out more about my ethnic group
	2	active in groups that include mostly members of own ethnic group
	3 *	have a clear sense of my ethnic background and what it means
	4	think a lot about how life will be affected by group membership
	8	have often talked to other people about my ethnic group
	10	participate in cultural practices of my group
Affirmation & Belongingness	3 *	have a clear sense of my ethnic background and what it means
	5	am happy that I am a member of group
	6	have a strong sense of belonging to own ethnic group
	7	understand what my ethnic group membership means
	9	have a lot of pride in my ethnic group and accomplishments
	11	feel strong attachment towards my own group
	12	feel good about my cultural/ethnic background

* Item is included on both subscales

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Table 1:**Demographics**

	African American		European American	
	N	Percentage	N	Percentage
Gender				
Male	78	32.2	26	46.4
Female	164	67.8	30	53.6
Age				
18–24	57	23.6	17	23.6
25–34	159	65.7	34	60.7
35–44	26	10.7	5	8.9
Education				
Less than HS	16	6.6	5	8.9
High School/GED	49	20.2	13	23.2
Some College	105	43.4	18	32.1
College Grad	72	29.8	20	35.7
Home Ownership				
Own Home	77	31.8	41	73.2
Rent Home	127	52.5	10	17.9
Don't Pay for Housing	38	15.7	5	8.9
Urbanicity				
Non-Metropolitan	15	6.2	16	28.6
Metropolitan	227	93.8	40	71.4
Region				
Northeast	33	13.6	9	16.1
Midwest	54	22.3	18	32.1
Southern	133	55.0	18	32.1
West	22	9.1	11	19.6

Table 2:

Steps of the MEIM Confirmatory Factor Analysis Comparing Southern and Non-Southern African Americans

Model	RMSEA (90% CI)	CFI (CFI)	AIC	χ^2 (df)	χ^2 (p value)
1. Base Model	.067 [.056, .079]	.932	391.55	227.55 (98)	
2. Equal factor loadings	.063 [.052, .074]	.934 (.002)	375.99	235.99 (110)	8.44 (.75)
3. Equal item intercepts	.061 [.05, .072]	.930 (.004)	366.95	255.03 (122)	19.04 (.09)
4. Equal correlations	.60 [.05, .07]	.930 (.00)	360.00	260.95 (127)	5.92 (.31)

Note. RMSEA- root mean square error of appropriate; CI - confidence interval; CFI - comparative fit index; AIC - Akaike information criterion; change χ^2 - chi square difference test; df - degrees of freedom. Acceptable model fit indicated by CFI value less than .005, decreases in AIC values, and a nonsignificant χ^2 .

Table 3:

Spearman's correlations for African Americans based on ethnic identity, diagnosis, and demographics.

	MEIM	Anxiety	Depression	OCD	Age	Gender	Educ.	Urban
Anxiety	-.024							
Depression	-.078	.490 **						
OCD	.034	.432 **	.173 **					
Age	-.032	-.027	.037	.006				
Gender	.001	-.047	-.119	.120	.026			
Education	.251 **	-.096	-.061	-.057	.223 **	-.086		
Urbanicity	.047	.015	-.025	.034	.031	-.079	.044	
Southern Region	.123	-.150 *	-.128 *	-.077	.071	.073	.096	-.129 *

*
p < .05,

**
p < .01

Notes. MEIM: Robert's 12-item Multigroup Ethnic Identity measure total score, Gender: 0=female, 1=male. Region: 1=Southern, 0=Northeast +Midwest+West. Urbanicity: 1=urban, 0=rural.

Table 4:

Regression Predicting Total MEIM Score in African Americans

Predictor	B	Std. Error	β	<i>p</i> - value
(Constant)	30.525	3.694		.000
Age	-.179	.103	-.115	.084
Gender	.699	1.105	.041	.527
Education	1.395	.378	.247	.000
Urbanicity	2.681	2.172	.080	.218
Southern Region	2.090	1.048	.130	.047

Notes. MEIM: Multigroup Ethnic Identity measure total score, Gender: 0=female, 1=male. Urbanicity: 1=urban, 0=rural; Southern Region: 1=Southern, 0=Northeast+Midwest+West.

Table 5:

Logistic Regression Predicting Help-Seeking in African Americans

Predictor	B	Std. Error	p - value	Odds Ratio
(Constant)	-.817	.895	.362	.442
Southern Region	-.842	.402	.036	.431
Percentage of Free Time Spent with Own Group	.298	.183	.103	1.347
Ethnic Identity (MEIM)	-.046	.025	.061	.955

Notes. MEIM: Multigroup Ethnic Identity measure total score, Region: 1=Southern, 0=Northeast+Midwest+West. Cox & Snell $R^2 = .041$, Nagelkerke $R^2 = .075$.