Alcohol Use and Mental Health Conditions Among Black College Males: Do Those Attending Postsecondary Minority Institutions Fare Better Than Those at Primarily White Institutions?

Adam E. Barry, PhD¹, Zachary Jackson, BS¹, Daphne C. Watkins, PhD², Janelle R. Goodwill, MSW², and Haslyn E.R. Hunte, PhD³

Abstract

While there is a sizeable body of research examining the association between alcohol use and mental health conditions among college students, there are sparse investigations specifically focusing on these Associations among Black college students. This is concerning given Black college students face different stressors compared with their non-Black peers. Black males appear especially at risk, exhibiting increased susceptibility to mental health issues and drinking in greater quantities and more frequently than Black females. This investigation examined the association between alcohol consumption and mental health conditions among Black men attending institutions of higher education in the United States and sought to determine differences between Black men attending predominantly White institutions (PWIs) compared with those attending postsecondary minority institutions. Final sample included 416 Black men, 323 of which attended a PWI. Data were from the National College Health Assessment. Black men attending a PWI reported significantly greater levels of alcohol consumption and significantly more mental health conditions. Attendance at a minority-serving institution was associated with fewer mental health conditions among Black men. Future studies should seek to replicate these findings and conduct culturally sensitive and gender-specific research examining why Black men at PWIs report greater alcohol consumption and more mental health conditions than their peers attending postsecondary minority institutions.

Keywords

alcohol, mental health, Black, males, college

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Student mental health problems are a growing concern on college campuses (Castillo & Schwartz, 2013). As emerging adults, college students experience new opportunities and challenges, and this transitional period increases their vulnerability and susceptibility to stress and mental health disorders (Goldstein & Rosselli, 2003; Hefner & Eisenberg, 2009). Unmanaged stress and untreated mental health conditions can negatively affect college students’ academic success, substance use, and social relationships (Kessler, Foster, Saunders, & Stang, 1995; Kessler & Walters, 1998; Weitzman, 2004). Although a growing body of research focuses on the mental health status of college students, limited research focuses on Black college students (Hunt & Eisenberg, 2010; Negga, Applewhite, & Livingston, 2007; Watkins, Green, Goodson, Guidry, & Stanley, 2007; Watkins & Neighbors, 2007).

Black college students face different stressors when compared with their non-Black peers, despite the shared college experience (Greer & Chwalisz, 2007). For instance, Black college students may encounter racism, cultural conflict, and lack academic and social support, all of which would increase their vulnerability to mental health disorders (Dzokoto, Hicks, & Miller, 2007; Swail, 2016).

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between alcohol use and mental health conditions among Black men attending institutions of higher education in the United States. In particular, this investigation sought to determine differences between Black men attending PWIs compared with those attending PMIs.

**Method**

**Instrument and Procedures**

This investigation was a secondary data analysis of the American College Health Association’s (ACHA) NCHA II (ACHA, 2009). Conducted since 2000, the NCHA collects data on an array of college student health and risk behaviors, such as alcohol and illicit substance abuse, sexual activity, dietary habits, physical activity, and mental health. Self-selecting institutions administer the survey to their students once a year. Among participating schools, random sampling techniques are employed to obtain participants, followed by a mixture of Web-based and classroom-based (paper form) surveying. ACHA (2009) collects and collates all completed surveys, analyzes the data, creates executive summaries, reference group reports, and makes available deidentified aggregate data sets. This study was exempted from the standard institutional review board process, as it serves as a secondary analysis of deidentified national data.

**Sample**

The sample reference group consisted of 26,685 students, and included both private and public institutions of varying student body sizes ranging from 2,500 to 20,000+ students, and 2- and 4-year institutions offering both graduate and undergraduate degree programs. Moreover, schools from a variety of geographic regions (e.g., Northeast, Midwest, South, West) and of different religious affiliations (e.g., secular, Catholic, Protestant) were represented. The subsample utilized in this investigation included 416 Black men attending any of the participating 40 institutions of higher education.

**Measures**

**Institutional Minority Status.** Given the primary aims of this study, the minority status of included institutions and its effect on drinking behavior and mental health status was the primary measure of interest. While aggregate data sets provided by ACHA are deidentified on both the individual and institutional level, ACHA does provide indices which document the minority status of institutions. If ACHA labeled an institution as a PMI, HBCUs, HHEs, HS, TCU ANSI, or NHI, the Black men attending were grouped and compared with the Black college men attending PWI. Table 1 outlines the representation of
Table 1. Number of Black Male College Students by Institution Type.

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominately White Institutions</td>
<td>323</td>
</tr>
<tr>
<td>Postsecondary Minority Institutions</td>
<td>93</td>
</tr>
<tr>
<td>HBCU</td>
<td>66</td>
</tr>
<tr>
<td>HHE</td>
<td>4</td>
</tr>
<tr>
<td>HS</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>416</td>
</tr>
</tbody>
</table>

Note. HBCU = historically Black colleges and universities; HHE = high Hispanic enrollment; HS = Hispanic-serving institutions.

Black college men at each type of institution included in the analyses.

Alcohol Consumption/Drinking. Quantity of alcohol consumed during one’s most recent drinking episode was assessed via the item “The last time you ‘partied’/socialized how many drinks of alcohol did you have?” Respondents were able to input the exact number and were not restricted to defined response options.

Mental Health Conditions. Prevalence of mental health conditions within the past 12 months were assessed by asking respondents to indicate whether they had ever experienced any of the following: “Felt things were hopeless,” “Felt overwhelmed by all you had to do,” “Felt exhausted (not from physical activity),” “Felt very lonely,” “Felt very sad,” “Felt so depressed that it was difficult to function,” “Felt overwhelming anxiety,” “Felt overwhelming anger,” “Intentionally cut, burned, bruised, or otherwise injured yourself,” “Seriously considered suicide,” and “Attempted suicide.” Possible response options for each item included “No, never” (0), “No, not in the past 12 months” (0), “Yes, in the past 2 weeks” (1), “Yes, in the past 30 days” (1), and “Yes, in the past 12 months” (1). Respondents indicating experiencing a mental health condition at sometime within the past 12 months were coded 1. Those who indicated either never experiencing the mental health condition, or not experiencing the condition in the past 12 months were coded 0. Responses to each of the 11 items were combined to create a composite variable ranging from 0 to 11, with higher scores indicating presence of more mental health conditions in the past 12 months. The Cronbach alpha for this scale was .851.

Analytic Strategy

Using Statistical Package for Social Sciences (SPSS; PASW, Version 22, SPSS, Inc., Chicago, IL) independent sample t tests were first conducted to compare drinking quantities and occurrences of mental health conditions among Black men attending a PMI versus those attending a PWI. Effect sizes (Cohen’s $d$) are reported for all significant mean differences. A follow-up hierarchical (i.e., block) multiple regression was employed to assess the ability of alcohol consumption behaviors and attendance at a minority-serving institution to predict presence of mental health conditions, while controlling for the influence of numerous confounding variables. Specifically, in the first block, all covariates were entered as a control model. The second block added quantity of alcohol consumed during last drinking episode, while the final block added attendance at a minority-serving institution. Four control variables—Greek membership, age, varsity intercollegiate participation, and relationship status—were specifically chosen to be included in the model to account for potential confounding effects. Greek membership status was included as a control given that students who are members of fraternities tend to drink in greater quantities and experience a greater frequency of alcohol-related consequences (Barry, 2007). Age was also included as a control variable given younger students, and in particular first-year students, are more likely to engage in heavy drinking and are generally considered most at risk for alcohol abuse (Borsari, Murphy, & Barnett, 2007; Wechsler, Kuo, Lee, & Dowdall, 2000; White, Kraus, & Swartzwelder, 2006). Since students participating in varsity intercollegiate sports are on average more likely to binge drink than their nonstudent–athlete peers, an indicator variable for participation in a varsity intercollegiate team was included as a covariate (Ford, 2007; Martens, Dams-O’Conner, & Beck, 2006). Finally, whether a respondent was in a dating relationship was also included as a covariate, as college students in a premarital dating relationship experience fewer mental health problems than single college students (Braithwaite, Delevi, & Fincham, 2010), as well as less problematic alcohol use (Whitton, Weitbrecht, Kuryluk, & Bruner, 2013).

Results

An independent samples $t$ test compared alcohol consumption rates for those attending a minority-serving institution with Black men attending a PWI. Black men attending a PWI reported significantly greater levels of alcohol consumption ($M = 2.9, SD = 4.6$) when compared with those attending a minority-serving institution ($M = 1.8, SD = 2.8$) during last drinking episode, $t(413) = 2.08, p < .039$. Similarly, Black men attending a PWI also reported significantly more mental health conditions ($M = 3.8, SD = 2.9$) compared with Black men attending a minority-serving institution, $M = 2.7, SD = 2.8, t(389) = 2.90, p < .004$. The magnitude of the differences in group means for alcohol consumption (mean difference = 1.1,
95% confidence interval [0.06, 2.2]) and presence of mental health conditions (mean difference = 1.1, 95% confidence interval [0.35, 1.83]) was range from large (d = −0.71) to mediums (d = 0.34), respectively.

In total, the regression model explained a significant proportion (7%, \(R^2 = .066\)) of the variance associated with mental health conditions present among Black college men, \(F(7, 367) = 3.71, p < .001\) (see Table 2). Inclusion of number of drinks consumed during most recent drinking episode in the second hierarchal model explained a nominal (0.3%), nonsignificant amount of the variance above and beyond the control model (\(\Delta R^2 = .003, p < .254\)). Inclusion of attendance at a minority-serving institution did account for a meaningful (2%), significant, increase in the variance associated with the presence of mental health conditions of Black college men (\(\Delta R^2 = .017, p < .01\)). Overall, very few of the covariates were statistically significant predictors of mental health with the exception of being an athlete and attendance at a PMI. In particular, being a varsity athlete (\(\beta = −0.19\)) and attendance at a minority-serving institution (\(\beta = −0.13\)) were the only variables significantly associated with the presence of mental health conditions.

### Discussion

The purpose of this study was to examine alcohol use and mental health conditions among Black men attending both PWIs and PMIs of higher learning. In particular, these analyses focused on understanding the differences in alcohol consumption quantities and the presence of mental health conditions among Black men attending PWIs, compared with Black men attending PMIs. These results suggested that Black men who attend PWIs might consume greater amounts of alcohol compared with Black men who attend PMIs. These findings are inconsistent with earlier studies that determined there was no statistically significant difference in the rates of alcohol consumption among Black students enrolled at either type of institution and are contrary to studies that reported Black students at PWIs consumed alcohol at similar rates as their Black counterparts at primarily minority-serving institutions (Kapner, 2008; Meilman, Presley, & Cashin, 1995).

In addition to reporting more alcohol consumption, results indicated that Black men from the PWIs reported more mental health conditions than Black men at PMIs. The combination of increased alcohol consumption and mental health conditions by Black college men at PWIs has not been extensively studied. Therefore, these findings underscore the need for more research on the complexity of mental health and substance use of Black college men at PWIs and how their experiences compare with Black men enrolled at other institutions of higher learning (e.g., community colleges, trade schools, etc.). Future quantitative and qualitative research in this area can target culturally sensitive and gender-specific research and practice efforts aimed at understanding the social determinants influencing the mental health and substance use of Black college men.

It is noteworthy that including the number of alcoholic drinks consumed in the model did not account for a statistically significant portion of the model’s variance, however, attendance at a PMI did. Again, this finding is contrary to previous literature, which detected no differences in alcohol consumption rates when comparing
Black students at a PMI, such as a HBCU, to those at PWIs. Though the rates of binge drinking among Black college students have significantly increased since 1991, Black students are still not drinking at the same rates as White students (Dennhardt & Murphy, 2011; Wechsler et al., 2002). It is worthwhile to note that few studies detected gender differences among Black students at minority-serving institutions, and instead have focused broadly on the experience of Black college students and their overall drinking behaviors (see Boynton, O’Hara, Covault, Scott, & Tennen, 2014; Meilman et al., 1995, for exceptions).

Findings from the current study highlight the need for more tailored efforts aimed at Black college men. Previous work by Mincey et al., 2015, Williams and Justice (2010), and Watkins and Neighbors (2007) specifically underscore the importance of developing tailored resources that are fit for young Black men at both PWIs and PMIs, as some of the life stressors they experience, particularly those pertinent to race relations, are varied and are largely dependent on the demographics of their campus. These varied experiences might also help explain this study’s findings, as the cultures of PWI campuses compared with those of PMIs are notably different.

The current study sought to examine differences in the association between alcohol use and mental health for Black college men who attend PWIs and PMIs. Overall, Black college men who attended PWIs consumed more alcohol and experienced more mental health conditions than Black college men at PMIs. This investigation, unlike previous studies on mental health and substance use of Black college men, simultaneously examined alcohol consumption and mental health among Black male students at PWIs and PMIs. Previous studies have only looked at Black college men’s mental health (Spurgeon, 2009; Watkins et al., 2007; Watkins & Neighbors, 2007), risky health behaviors and alcohol use at PMIs (Boynton et al., 2014; Kapner, 2008; Meilman et al., 1995), or male and female college students’ drinking behaviors broadly (Dennhardt & Murphy, 2011; Wechsler et al., 2002).

Limitations
The findings from this study should be interpreted in light of several limitations. Like all secondary analyses, this investigation inherited the limitations associated with the data set examined. Accordingly, this investigation is limited by the self-report nature of the NCHA data. Additionally, even though participating students are randomly selected, institutions self-select to participate in the NCHA. ACHA member institutions are also overrepresented in the sample as nonmember colleges and universities must pay a fee to participate in the NCHA. Furthermore, the participating institutions are expected to compile an accurate and inclusive sample, which is not always the case. Black men account for approximately 5% of all students enrolled in postsecondary institutions (Snyder & Dillow, 2015), yet Black men only represent 1.5% of the entire NCHA sample. Consequently, the findings are not generalizable to college students nationally nor can the findings accurately represent Black college men. Thus, future examinations seeking to further flesh out the current findings should more systematically identify and select PWIs and comparison PMIs. Finally, this examination is also limited by the manner in which variables were assessed in the NCHA, such that changes could not be made to how questions were asked, the manner in which they were asked, or the response scales associated with each item.

Conclusion
Laudable efforts have been made to further explore the mental health experiences of Black college men. However, additional efforts must be made to uncover the differences and similarities in the drinking behaviors and mental health conditions of Black men who attend PWIs and HBCUs, as this persists as an understudied area in the field of college students’ health and well-being. The current study aims to add to the dearth of the literature surrounding young Black men’s mental health and alcohol consumption. It is important for researchers, practitioners, and administrators alike to understand negative coping behaviors of college Black men to not only increase the likelihood of early detection and prevention of mental health challenges but to also continue working to ensure retention of underrepresented students at institutions of higher learning.

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