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Impact of Lifetime Evaluated Need on Mental Health Service Use among African American Emerging Adults

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Introduction

Nearly 62 million U.S. adults age 18 years and older experience mental illness annually (National Alliance on Mental Illness, 2013). Yet more than 23 million of these individuals fail to utilize mental health services (Kessler, Chiu, Demler, Merikangas, & Walters, 2005b; National Institute of Mental Health [NIMH], 2006; Reeves et al., 2011; US Department of Health and Human Services [US DHHS], 2001). Race and age have been cited as contributing factors to even lower utilization rates of mental health services. African-Americans and emerging adults (age 18–29), respectively, are less likely than Caucasians and older adults (age 30+) to utilize mental health services when needed (Blanco et al., 2008; Hunt & Eisenberg, 2010; Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005a; Masuda et al., 2009). Research indicates that African-American adults are half as likely as Caucasians to utilize mental health services (Bender et al., 2007; Broman, 2012; Buser, 2009; Thornicroft, 2008) while emerging adults have utilization rates of 40% or less compared to rates of over 60% among adults age 26 and older (Blanco et al., 2008; Hunt & Eisenberg, 2010; Kessler et al., 2005a; Ringeisen et al., 2009; Rosenthal & Wilson, 2008; Substance Abuse and Mental Health Services Administration, 2009; Tanner, 2010).

While prior literature has investigated factors associated with mental health service use among African-Americans (Eisenberg, Hunt, & Speer, 2013; Holm-Hansen, 2006; Mojtabai et al., 2011; Ojeda & Bergstresser, 2008) and emerging adults (Blanco et al., 2008; Tanner, 2010; Tanner & Arnett, 2009), less is known about reasons for underutilization of mental

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health services among a specific subset of these groups, African-American emerging adults (Arnett, 2000; Broman, 2012; Sly et al., 2011). This gap in the literature is particularly concerning considering that African-American emerging adults are especially at-risk due to the cumulative influences of disproportionate burden of mental illness experienced by African Americans in general (Myers, 2009; Snowden, 2012; US DHHS, 2001) as well as their greater likelihood of experiencing persistent illness once diagnosed (Breslau, Kendler, Su, Gaxiola-Aguilar, & Kessler, 2005; Snowden, 2012; Williams et al., 2007). Additionally, emerging adults of any race/ethnicity are at increased risk for the onset of severe mental illness (Hunt & Eisenberg, 2010; Tanner & Arnett, 2009; Eisenberg, Golberstein, & Gollust, 2007; Mowbray et al., 2006; Viner & Tanner, 2009), with 75% of all lifetime cases of mental illness beginning by age 24 (Kessler et al., 2005a).

Few studies have sought to examine specific rates of mental illness among African-American emerging adults solely; yet, literature indicates complex interactions between age and race when determining mental illness prevalence (Eisenberg et al., 2013; Jackson et al., 2004). One study found that African-American emerging adults had higher rates of major depression compared with other racial/ethnic and age groups (Jackson et al., 2004). Additionally, Eisenberg and colleagues (2013) found that African American college-attending emerging adults reported higher depression rates than their Caucasian counterparts (19.7% versus 14.9%) and experienced suicidal ideations at greater rates than other students (8.6% compared to 5.9% for Caucasians and 5.1% for Asians). While the precise mental illness prevalence rate among this population is unclear, mental health research that is inclusive of African-Americans and emerging adults provides evidence that African-American emerging adults are at risk of experiencing mental illness, are more likely to be persistently ill once diagnosed, and are less likely than other groups to utilize mental health services when needed (Broman, 2012; Buser, 2009; Neighbors et al., 2007; Snowden, 2012).

Many of the adverse personal and societal consequences of untreated mental illness are disproportionally experienced by African-American emerging adults. For example, this population has lower college graduation rates (Carey, 2008) and higher rates of homelessness and unemployment compared with Caucasian emerging adults (Perl et al., 2014; Russell, 2010). It is noted that the disproportionate rate of these issues among African Americans could be attributed to differences in social positioning and other social determinants such as socio-economic status when compared with Caucasians (Jackson et al., 2004; Mays, Cochran, & Barnes, 2007), rather than mental illness alone. However, given the aforementioned potentially cumulative vulnerabilities of the impact of race and age on incidence of mental illness for African-American emerging adults and their quality of life (Myers, 2009; Snowden, 2012), it is important to examine the impact of need for services on utilization of mental health services in this population.

This study utilized the Behavioral Model for Vulnerable Populations (BMVP; Gelberg, Andersen, & Leake, 2000) as a framework to explore mental health service use among African-American emerging adults. This model posits that predisposing factors (demographic and social structure characteristics, and health beliefs), enabling factors (resources that facilitate or hinder an individual's service use), and need for services factors (perceived need by the individual or evaluated need as identified by a health professional)

may predict service use in vulnerable populations. Drawing from the BMVP and current mental health literature, this study considered six commonly cited predictor variables of mental health service use. For example, predisposing factors such as gender (Broman, 2012; Masuda et al., 2009), educational attainment, and employment (Neighbors et al., 2007); along with health insurance coverage (Davis & Ford, 2004) and religious/spiritual support (Buser, 2009) as enabling factors and having an evaluated need for services (Cheng & Robinson, 2013) have been associated with increased mental health service use among African Americans and emerging adults, respectively.

Previous literature indicates that females, including African Americans (Broman, 2012; Neighbors et al., 2007) and emerging adults (Yorgason, Linville, & Zitzman, 2008), were more likely to utilize mental health services than their male counterparts. Of the few studies exploring gender differences in mental health service utilization among African American emerging adults, two sampled African American college students and found that males are significantly less likely to utilize services than females (Duncan & Johnson, 2007; Henderson, Geyen, Rouce, Griffith, & Kritsonis, 2007).

Higher educational levels (i.e., number of years in college) have been associated with greater likelihood of receiving any mental health services among African Americans ages 18 and older (Neighbors et al., 2007; Woodward, Taylor, & Chatters, 2011). Neighbors and associates found that African Americans who were college graduates (16 years of education) had the highest use of mental health services conducted by mental health professionals such as social workers and counselors compared to those with less than 16 years of education. Additionally, research among African American emerging adults who are college students indicated that year in college (e.g., being a senior versus being a freshman) may increase a student's willingness to seek mental health services (Henderson et al., 2007; So et al., 2005).

Less is known about the impact of employment on mental health service use among African American emerging adults. Literature speculates that this population may be more likely to experience unstable or unreliable employment that may not offer health insurance (Ringeisen et al., 2009) which may impede service utilization. Having health insurance coverage (which includes mental health coverage) has been associated with higher odds of specialty mental health services among African Americans in general (Villatoro & Aneshensel, 2014). However, other studies have found that having health insurance is not significantly related to increased likelihood of any type of mental health service use, whether among African Americans (Cheng & Robinson, 2013; Neighbors et al., 2007) or emerging adults (Eisenberg et al., 2007; Maulik, Mendelson, & Tandon, 2010). These counterintuitive findings, especially for college-attending emerging adults, are despite about 90% of this population having health insurance provided at minimal to no cost through their educational institutions (Hunt & Eisenberg, 2010). Conversely, many African Americans do not have health insurance or are under-insured (Cheng & Robinson, 2013; Snowden, 2012). The relationship between health insurance and mental health service use among African American emerging adults specifically is unclear, although Maulik and associates (2010) found that having health insurance was not significantly associated with use of mental health services among a sample of predominantly African Americans ages 16–24.

Use of informal sources of support such as friends and family, as well as religious/spiritual leaders, has been cited as influential to mental health service use among African American emerging adults (Buser, 2009). In fact, African American emerging adults, including those attending college, have been found to rely on informal resources more often than specialty mental health services, often citing informal services as more appropriate forms of care compared to more formalized services (Barksdale & Moloft, 2009; Copeland & Butler, 2007; Davis & Ford, 2004).

Need for services, whether evaluated or perceived, has been shown to be a strong predictor of service utilization of any kind (e.g., health or mental health) (Broman, 2012; Hayes et al., 2011; Masuda et al., 2007). Both African Americans and emerging adults have been cited as experiencing mental illness at higher rates than Caucasians and older adults, respectively. African Americans have been found to experience higher rates of depression and serious psychological distress compared to Caucasians (Reeves et al., 2011). Similarly, emerging adults have higher prevalence rates of serious mental illness (e.g., major depression and bipolar disorder) compared to young adults and older adults (NIMH, n.d.).

To adequately address the paucity of research targeting this population, this study included these predictor variables while focusing exclusively on African-American emerging adults and utilized a nationally representative sample to examine within-group differences that may affect service utilization in this group. Moreover, this study focused on African Americans between 18 and 29 years of age given Arnett's (2007) extensive empirical research highlighting the unique needs and challenges of emerging adults in this developmental stage and assists with generalizability to future studies of emerging adults of any race/ethnicity. To date, most research investigating mental health service use provides comparisons by either race/ethnicity or age (Kessler et al., 2005b; Kessler et al., 2005a); therefore, it has been difficult to clearly ascertain the factors that may facilitate or hinder service use as this specific subgroup transitions to adulthood. This study addresses an additional gap in the literature by broadening its sample to include African American emerging adults who may not be currently attending college (Broman, 2012). Furthermore, this study examines lifetime service use in order to better encompass every possibility of service use among this underserved population, given that they typically have lower utilization mental health service rates compared to other populations. It is likely that some emerging adults may have initiated services prior to turning 18 years of age; nevertheless, investigation of factors that may be associated with service use among this population is timely and warranted. Thus, the primary objective of this study was to examine the impact of lifetime evaluated need on mental health service utilization among a heterogeneous sample of African-American emerging adults, while controlling for predisposing and enabling factors.

Methods

Sample

This study analyzed data from the National Survey of American Life (NSAL), a national household probability sample of 6,082 English-speaking African-American, Afro-Caribbean, and non-Hispanic Caucasian adults, age 18 years and older and residing in the continental United States. Data were collected between February 2001 and March 2003 and

focused on mental disorders and formal or informal service use among racial-ethnic minority groups (Jackson et al., 2004; Griffith, Neighbors, & Johnson, 2009). This study was approved by the institutional review board (IRB) at the University of Michigan. A determination of exemption was later obtained from Washington University in St. Louis' IRB. Further details of the NSAL can be found elsewhere (Jackson et al., 2004). For the purposes of this study, a subset of the African-American respondents from the original NSAL adult interviews was analyzed: emerging adults ages 18 to 29 (N=806).

Measures

Mental health service utilization—Lifetime mental health service use was a dichotomous variable (yes/no) constructed using three items from the original NSAL survey. Respondents were initially asked screener questions about a broad range of potential DSM-IV disorders including anxiety ("Have you ever in your life had an attack of fear or panic when all of a sudden you felt very frightened, anxious, or uneasy?"), alcohol/drug use ("Did you ever use alcohol or drugs so much that your family or friends worried about you or repeatedly complained about your use?"), and depression ("Have you ever had a period of time lasting several days or longer when most of the days you felt sad, empty, or depressed?"). Respondents who answered in the affirmative during the screener portion of the survey were then asked "whether they had ever seen a professional for problems with their emotions, nerves, or use of alcohol or drugs" and "whether they had ever talked to a general medical doctor or any other professional about their problems with a specific disorder" (such as depression, panic disorder, substance use, or attention-deficit hyperactivity disorder [ADHD]). In addition, all respondents were asked whether they had talked to a professional about their mental health at any time. Professionals included psychiatrists, psychologists, psychotherapists, social workers, counselors, or mental health nurses, family doctors, any other medical doctors, any other health professionals, and any other healers. If the respondent indicated ever utilizing any professional for any reason, they were coded as "yes" for lifetime mental health service use. If they responded no to each item, they were coded as "no", indicating they had never utilized mental health services.

Independent variables—The authors examined the following sociodemographic correlates of mental health service utilization: gender, education (11 years, 12 years, 13–15 years, 16 years), and employment status (employed, unemployed, or not in labor force). Respondents indicated having health insurance (either private [through their employer's or their family's insurance] or public [including any federal government health insurance programs]), or no health insurance. Religious/spiritual support was a dichotomous variable (yes/no) constructed from two items from the original NSAL survey. Respondents were asked if they had "ever seen or talked to a religious or spiritual advisor for problems with their emotions, nerves, or use of alcohol or drugs", or for a specific disorder (such as depression, panic disorder, substance use, or ADHD). If the respondent indicated seeing or talking to a religious/spiritual advisor for any problem, they were coded as "yes" for religious/spiritual support, while those who indicated that they had not spoken or talked to a religious/spiritual advisor were coded as "no".

Lifetime evaluated need for services was determined with the World Health Organization Composite International Diagnostic Interview (WHO-CIDI), a comprehensive, fully structured interview designed to be used by trained lay interviewers for the assessment of mental disorders according to the definitions and criteria of the DSM-IV (Jackson et al., 2004). Consistent concordance between the CIDI and the Structured Clinical Interview for DSM-IV has been shown in individual and aggregate-level analyses (Kessler et al., 2004). Additionally, CIDI-generated diagnoses have been empirically equated with evaluated need (Goodwin & Andersen, 2002) and have been shown to have high concordance with diagnoses made by clinical psychiatrists (Reed et al., 1998). Respondents were asked questions about physical and emotional well-being in their lifetime (for example, "Have you ever in your life had an attack of fear or panic when all of a sudden you felt very frightened, anxious, or uneasy?"). If they answered yes to specific screener questions, respondents were asked additional questions about the specific disorder to further determine whether they met the DSM-IV criterion for the disorder. If the respondent met the criterion for a particular disorder, he or she was considered as having "endorsed" the disorder (e.g., Neighbors et al., 2007).

Statistical analysis

Multivariable logistic regressions were constructed to assess the independent associations of each predictor variable with lifetime mental health service use. All analyses were performed with the survey command using an unconditional subclass approach in Stata 13.1/SE (Heeringa et al., 2004; StataCorp, 2013), which accounted for the complex multistage clustered survey design of the NSAL sample, unequal probabilities of selection, nonresponse, and post-stratification to calculate weighted, nationally representative population estimates and standard errors. All percentages reported were weighted for the NSAL-only sample.

Results

Table 1 shows the weighted percentages of the entire sample (N=806), those respondents with a lifetime evaluated need (n=373), and those with lifetime evaluated need who used mental health services within their lifetime (n=160). The mean age of the entire sample was 23 years, a majority (56%) were women, and nearly three-fourths (72%) were employed and had health insurance (75%). Nearly half (46%) were high school graduates, and less than one-tenth (8%) were college graduates. Almost one-half (47%) of the sample demonstrated an evaluated need for services in their lifetime. Thirty-seven percent of the sample endorsed for anxiety disorders, followed by 19% for impulse control disorders, 15% for mood disorders, and eight percent for substance use disorders. Only a quarter (25%) of the entire sample had ever utilized mental health services in their lifetime, while 42% of individuals with a lifetime evaluated need used services in the same timeframe. Similar percentages were found among respondents with a lifetime evaluated need and those with a need who utilized services. Having religious/spiritual support was a notable difference among groups, with 8% of the entire sample reporting religious/spiritual support compared to 15% of those with an lifetime evaluated need and about a third (32%) of those who utilized services in their lifetime.

After adjusting for all other variables, gender, religious/spiritual support, and lifetime evaluated need were significantly associated with an increased likelihood of mental health service utilization (Table 2). Among respondents who had utilized mental health services in their lifetime, women were twice as likely as men to utilize services (odds ratio [OR]=2.1, 95% CI=1.4,3.2, p .001). Respondents who reported religious/spiritual support were 36 times more likely to have utilized services in their lifetime compared to those without such support (OR=36.4, 95% CI=6.6,199.7, p .001). Similarly, having a lifetime evaluated need for services increased the likelihood of service use, with those respondents being five times more likely to have utilized services compared with those who did not have a need (OR=5.4, 95% CI=3.2,9.3, p .001).

Discussion

This study sought to examine the impact of lifetime evaluated need as a predictor of lifetime mental health service utilization among some African-American emerging adults. Results from this sample indicated that being female, having religious/spiritual support, and having an evaluated need were associated with increased likelihood of utilizing mental health services in one's lifetime. These results are consistent with previous research, which has found that among both African Americans (Woodward et al., 2011) and emerging adults (Yorgason et al., 2008) in general, women were generally more likely than men to utilize mental health services. This within-group disparity is evident despite the fact that in this sample, men had similar lifetime evaluated need as women (42% versus 49%, respectively). It is possible this gender difference in service utilization is explained by African-American emerging adult men being more likely to rely solely on informal support when seeking assistance (Woodward, Taylor, & Chatters, 2011) or being more self-reliant, desiring to handle the problem on their own (Buser, 2009). However, it is important to note that Maulik and associates (2010) found no gender difference in use of formal mental health services or other human services among a predominantly African American sample of 16-24 year olds. Further research is needed to fully unpack and understand the possible relationship between gender and service use among both older youth (ages 15–17) and emerging adults.

Additionally, prior literature indicates that African Americans in general were more likely to utilize specialty mental health services in conjunction with informal supports including family, friends, and religious/spiritual leaders (Woodward, Chatters, Taylor, Neighbors, & Jackson, 2010). This study's findings are similar, revealing that contact with a religious/spiritual leader improved the likelihood of formal mental health service use. Although it is not clear from these results if these events are linear or concurrent in nature, it is possible that respondents found that talking with someone familiar about their problem and having that person suggest more specialized care may mitigate the stigma that is often associated with utilization of mental health services among this population.

Consistent with previous literature (Andersen, 2008; Cheng & Robinson, 2013; Neighbors et al., 2007; Williams, 2014), evaluated need was found to be significantly associated with increased mental health service utilization. In particular, 47% of those respondents with an evaluated need used services in their lifetime. However, over half of those individuals did not utilize mental health services in the same timeframe. This underutilization of services

could be explained by a number of factors. For example, research indicates that this population often does not perceive a need for services (Eisenberg et al., 2007; Mowbray et al., 2006; Williams, 2014); thus, it is possible that many African American emerging adults who may have an evaluated need may not readily identify symptoms of mental illness or do not take the initial step to seek formal or specialized mental health services. In addition, stigma related to experiencing a mental illness or seeking services, feelings that mental health services may not be beneficial, and lack of racially/ethnically diverse service providers may prevent some African American emerging adults from seeking and eventually utilizing services (Broman, 2012; Buser, 2009; Ojeda & Bergstresser, 2008).

This study showed that employment, health insurance coverage, and number of years in college were not significantly associated with increased odds of mental health service utilization among this sample. Previous research examining the relationship between employment and mental health service use has been contradictory (Ringeisen et al., 2009, whereas having health insurance coverage has been found to be a predictor of service utilization among some African Americans (Villatoro & Aneshensel, 2014). While the majority of this sample was employed and had health insurance, it is possible that other enabling factors such as support from religious/spiritual leaders may have a greater impact on service use among this population. Another possible explanation for these findings is that a portion of the sample may have only received services prior to turning 18 years of age, and therefore were not employed or in college at the time that services were received.

Similarly, although higher educational attainment (i.e., more years in college) has been associated with greater likelihood of receiving mental health services among African-American emerging adults in general (Henderson et al., 2007), further analyses of this sample found that only male African American emerging adults who were college graduates were more likely to have utilized mental health services in their lifetime compared to those who had some college or less. These results are consistent, at least in part, with previous research (Neighbors et al., 2007) and may indicate that the more exposure some individuals have to mental health services (e.g., access to services through their college campus or information about services), the more likely they may be to eventually utilize those services.

These results should be considered in light of several limitations. First, the NSAL is a cross-sectional design which impedes the ability to make causal inferences about factors that may be associated with mental health service utilization among this population. It is possible that additional factors that are beyond the scope of this particular study (e.g., stigma and perceived benefit of services) may further influence service use among African-American emerging adults. Second, emerging adults who were college students living on campus at the time of the survey were not interviewed (Jackson et al., 2004). Those individuals could have provided additional information about service utilization among this population that was not explored. Third, the smaller subgroup analysis (such as the respondents who received religious/spiritual support) led to wide confidence intervals and may have generated unreliable results (du Prel et al., 2009). Despite having a large sample size, examination of subsets of service use can have some of the same limitations of smaller studies (Jackson et al., 2004). Fourth, recall (for example, recalling symptomatology or speaking to any professional about a problem) was also an issue with this study. Most responses were

retroactive reports of events that occurred more than a year ago, and reliability of the details of the problem or service utilization may be subject to potential recall bias (Buser, 2009; Maulik et al., 2010). A final limitation is the fact that mental health service use was evaluated over one's lifetime, which included use prior to age 18. It is possible that unaccounted factors experienced earlier in life may have contributed to (or hindered) service use among this sample. However, 36% of respondents initiated services at age 18 or older so it is believed that this study does add to the literature by examining and highlighting factors that may be associated with service use among this population.

Despite these limitations, this study adds to the literature addressing mental health service utilization among an underserved and under-studied population, African American emerging adults. Drawn from the NSAL, one of three large epidemiological studies that addressed the need for comprehensive data regarding mental illness among racial/ethnic minorities (Alegría et al., 2008), this study's sample included a nationally representative subsample of African Americans. This data provided a diverse sample of African American emerging adults and the ability to examine within-group differences. It also allowed for greater, though not absolute, generalizability of findings to African American emerging adults by utilizing a sample of 18 to 29 year olds, as opposed to previous research that may have focused solely on African American college students (Barksdale & Moloft, 2009; Broman, 2012) or limited their age range of emerging adulthood (e.g., Chow, Jaffee, & Snowden, 2003; Maulik et al., 2010).

Conclusions

This study's findings suggest several general conclusions. First, sample respondents who received support from a religious/spiritual leader were more likely to utilize mental health services. Historically, churches have served as a source of emotional support within the African American community. For example, among a sample of African Americans with serious personal problems, respondents indicated ministers as their first-line of mental health assistance compared to more formalize mental health services (Chatters et al., 2011). Furthermore, African American college students have reported using church or religious activities as a coping mechanism when concerned about grades and relationship issues (Chiang, Hunter, & Yeh, 2004). It is important, and even appropriate, to include these available informal resources, who are already being utilized by this population, into the mental health discussion in order to improve the use of more specialized services when needed (Maulik et al, 2010; Newhill & Harris, 2007; Woodward et al., 2011).

In fact, research has found that integrating health and mental health services with known community venues such as churches, beauty salons and barber shops, and community centers has been effective for outreach and services among African American emerging adults (So, Gilbert, & Romero, 2005; Newhill & Harris, 2007). Moreover, some African Americans believe these community resources and leaders to be more accessible, reliable, and credible sources of mental health information (Mishra et al., 2009). African American participants in focus groups exploring needs and preferences in receipt of mental health messages and services indicated that receiving information from someone who looked like them caused them to be more likely to believe the provided messages and feel more assured

that the information was relevant to them (Mishra et al., 2009). It is possible, then, for African American emerging adults, that information about mental health which comes from religious/spiritual leaders as well as community leaders or known celebrities with similar backgrounds could increase their knowledge and likelihood of mental health service use.

Second, additional outreach and education about mental illnesses that are prevalent among this population are needed, particularly among male African-American emerging adults who were less likely to use mental health services compared to females. Extensive outreach/educational efforts could be conducted in a few ways. For instance, given respondents' age and access to technology, incorporating mental health messages into social media outlets such as Facebook, Twitter, and smart phone applications (apps) (Burns et al., 2010; Hanson, Thackeray, Barnes, Neiger, & McIntyre, 2008) may be more appropriate avenues than traditional means (e.g., paper brochures) for improving understanding of mental illness and its symptomatology in this population. These methodologies, when provided early and often, may also be helpful for informing African American emerging adults, specifically those who are attending college or are recently employed, about their health care coverage as well as the benefits of utilizing formal mental health services.

As aforementioned, it is essential that any mental health messages, whether in social media or in person, by offered by individuals who look like and may come from a similar background as African American emerging adults. Health and mental health research show that messages that are targeted to a specific group (e.g., African Americans) have been more effective in increasing disease awareness and screening (Mance, Mendelson, Byrd, Jones, & Tandon, 2010; Thompson, Kalesan, Wells, Williams & Caito, 2010). Thus, it is important that messages about mental illness, its symptoms, as well as the benefits of using mental health services include images of African American emerging adults, or familiar faces from the community or media. It is likely that these messages would have a more powerful impact on educating this population about the reality of mental illness among and preventative mental health services for African American emerging adults.

Third, research indicates that racial/ethnic and gender matching between client and professional may increase service utilization among African-American emerging adults (Woodward et al., 2011). Equally significant is promotion of a culturally diverse and sensitive environment (Broman, 2012). If it is not feasible for one-on-one matching, Hayes and associates (2011) found that African American college students were more likely to utilize mental health services when there was racial/ethnic diversity within the general student body, not the counseling center only. This finding is key considering that although society is steadily becoming more diverse, this diversity is not necessary evident among health professionals (Williams, 2012). As it relates to mental health services among African American emerging adults, one practical implication of this awareness is that primary care physicians and other professionals, often the first point of contact for this population (Snowden & Yamada, 2005), need to understand the importance of having cultural diversity within their offices. It is essential for practitioners to make every effort made to match these individuals with a provider who is racially/ethnically or gender similar, as it may increase the chances of mental health service utilization and retention.

Several research implications should also be noted. While this study elucidated some of the factors associated with mental health service use among African American emerging adults, further research is needed to explore the impact of other enabling factors on service use such as stigma, self-reliance, racism/discrimination, concerns about the effectiveness of mental health services, and the impact of health insurance (particularly among emerging adults who may receive mental health services beginning at 18 years of age) (Buser, 2009; Ojeda & Bergstresser, 2008; Thornicroft, 2008). It is clear from the literature that African American emerging adults are concerned about how they will be perceived if they are experiencing a mental illness or seeking services (Barksdale & Moloft, 2009; Henderson et al., 2007; Mishra et al., 2009). What is less clear is how factors such as family or religious/spiritual support may mediate the relationship between these factors and service use. In addition, to date, no studies have tested the effect of culturally targeted mental health messages on increasing mental health awareness and service utilization among African American emerging adults, particularly males. Answering these, and other, research questions are critical in gaining a fuller understanding of the reasons for limited use of mental health services among this population as well as developing ways to decrease, and eventually eliminate, disparities in service utilization.

African Americans, in general, experience a disproportionate burden related to mental illness (US DHHS, 2001). More specifically, some African-American emerging adults may be at greater risk given the cumulative vulnerabilities related to race, social positioning, age, and mental illness, which could further contribute to their experiencing a poorer quality of life compared with the general population (Myers, 2009). Despite these potentially adverse outcomes, African-American emerging adults often have some of the lowest rates of mental health service use compared with Caucasian emerging adults as well as older African Americans and older Caucasians (Jackson et al., 2004; Kearney et al., 2003). This study examined the impact of evaluated need on mental health service utilization among African American emerging adults in hopes of better understanding the relationship between predictor variables and service use in this population. Although females, those who received support from religious/spiritual leaders, and individuals with an evaluated need for services are more likely to utilize services, additional work, both in practice and research, is needed to further improve mental health service utilization among African American emerging adults.

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References

Alegría, M.; Jackson, JS.; Kessler, RC.; Takeuchi, D. Collaborative Psychiatric Epidemiology Surveys (CPES), 2001–2003 [United States]. ICPSR20240-v6. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]; 2008-06-19.

Andersen RM. National Health Surveys and the Behavioral Model of Health Services Use. Medical Care. 2008; 46(7):647–653. [PubMed: 18580382]

Arnett JJ. Emerging adulthood: What is it, and what is it good for? Child Development Perspectives. 2007; 1(2):68–73.

Arnett JJ. Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist. 2000; 55(5):469–480. Retrieved from http://www.jeffreyarnett.com/articles/ARNETT_Emerging_Adulthood_theory.pdf. [PubMed: 10842426]

- Barksdale CL, Molock SD. Perceived norms and mental health help seeking among African American college students. Journal of Behavioral Health Services & Research. 2009; 36(3):285–299. [PubMed: 18668368]
- Bender DS, Skodol AE, Dyck IR, Markowitz JC, Shea MT, Yen S, Grilo CM. Ethnicity and mental health treatment utilization by patients with personality disorders. Journal of Consulting and Clinical Psychology. 2007; 75(6):992–999. [PubMed: 18085915]
- Blanco C, Okuda M, Wright C, Hasin DS, Grant BF, Liu S-M, Olfson M. Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions. Archives of General Psychiatry. 2008; 65(12):1429–1437. [PubMed: 19047530]
- Breslau J, Kendler KS, Su M, Gaxiola-Aguilar S, Kessler RC. Lifetime risk and persistence of psychiatric disorders across ethnic groups in the United States. Psychological Medicine. 2005; 35(3):317–327. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2748985/. [PubMed: 15841868]
- Broman CL. Race differences in the receipt of mental health services among young adults. Psychological Services. 2012; 9(1):38–48. [PubMed: 22449086]
- Burns JM, Davenport TA, Durkin LA, Luscombe GM, Hickie IB. The internet as a setting for mental health service utilisation by young people. The Medical Journal of Australia. 2010; 192(11 Suppl):S22–S26. Retrieved from https://www.mja.com.au/journal/2010/192/11/internet-settingmental-health-service-utilisation-young-people. [PubMed: 20528703]
- Buser JK. Treatment-seeking disparity between African Americans and Whites: Attitudes toward treatment, coping resources, and racism. Journal of Multicultural Counseling and Development. 2009; 37(2):94–104.
- Carey, K. Graduation rate watch: Making minority student success a priority. Washington, DC: Education Sector; 2008.
- Chatters LM, Mattis JS, Woodward AT, Taylor RJ, Neighbors HW, Grayman NA. Use of ministers for a serious personal problem among African Americans: Findings from the National Survey of American Life (NSAL). American Journal of Orthopsychiatry. 2011; 81(1):118–127. [PubMed: 21219283]
- Cheng TC, Robinson MA. Factors leading African Americans and Black Caribbeans to use social work services for treating mental and substance use disorders. Health & Social Work. 2013; 38(2): 99–109. [PubMed: 23865287]
- Chiang L, Hunter CD, Yeh CJ. Coping attitudes, sources, and practices among Black and Latino college students. Adolescence. 2004; 39(156):793–815. Retrieved from http://web.ebscohost.com.libproxy.wustl.edu/ehost/pdfviewer/pdfviewer?sid=d0313a23-8258-479d-a71c-68578562fb00%40sessionmgr10&vid=9&hid=18. [PubMed: 15727415] Health & Social Work. 38(2):99–109.
- Chow JCC, Jaffee K, Snowden L. Racial/Ethnic disparities in the use of mental health services in poverty areas. American Journal of Public Health. 2003; 93(5):792–800. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447841/. [PubMed: 12721146]
- Copeland VC, Butler J. Reconceptualizing access: A cultural competence approach to improving the mental health of African American women. Social Work in Public Health. 2007; 23(2/3):35–58. [PubMed: 19306587]
- Davis SD, Ford ME. A conceptual model of barriers to mental health services among African Americans. African American Research Perspectives. 2004; 10(1):44–54. Retrieved from http://www.rcgd.isr.umich.edu/prba/perspectives/springsummer2004/ford-davis.pdf.
- du Prel J, HOmmel G, Röhrig B, Blettner M. Confidence interval or p-value? Deutsches Ärzteblatt International. 2009; 106(19):335–339. [PubMed: 19547734]
- Duncan LE, Johnson D. Black undergraduate students attitude toward counseling and counselor preference. College Student Journal. 2007; 41(3):696–719. Retrieved from http://www.freepatentsonline.com/article/College-Student-Journal/169306813.html.

> Eisenberg D, Golberstein E, Gollust SE. Help-seeking and access to mental health care in a university student population. Medical Care. 2007; 45(7):594-601. Retrieved from http://wwwpersonal.umich.edu/~daneis/papers/hmpapers/help-seeking%20--%20MC%202007.pdf. [PubMed: 17571007]

- Eisenberg D, Hunt J, Speer N. Mental health in American colleges and universities: Variation across student subgroups and across campuses. The Journal of Nervous and Mental Disease. 2013; 201(1):60–67. [PubMed: 23274298]
- Gelberg L, Andersen RM, Leake BD. The behavioral model for vulnerable populations: Application to medical care use and outcomes for homeless people. Health Services Research. 2000; 34(6):1273-1302. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089079/. [PubMed: 106548301
- Goodwin R, Andersen RM. Use of the behavioral model of health care use to identify correlates of use of treatment for panic attacks in the community. Social Psychiatry and Psychiatric Epidemiology. 2002; 37(5):212-219. [PubMed: 12107712]
- Griffith DM, Neighbors HW, Johnson J. Using national data sets to improve the health and mental health of Black Americans: Challenges and opportunities. Cultural Diversity and Ethnic Minority Psychology. 2009; 15(1):86–95. [PubMed: 19209983]
- Hanson C, Thackeray R, Barnes M, Neiger B, McIntyre E. Integrating Web 2.0 in health education preparation and practice. American Journal of Health Education. 2008; 39(3):157-166. Retrieved from http://chantrill.net/Web_2.0_Health_Ed.pdf.
- Hayes JA, Youn SJ, Castonguay LG, Locke BD, Mcaleavey AA, Nordberg S. Rates and predictors of counseling center use among college students of color. Journal of College Counseling. 2011; 14(2):105-116.
- Heeringa SG, Wagner J, Torres M, Duan N, Adams T, Berglund P. Sample designs and sampling methods for the Collaborative Psychiatric Epidemiology Studies (CPES). International Journal of Methods in Psychiatric Research. 2004; 13(4):221–240. Retrieved from http:// deepblue.lib.umich.edu/bitstream/handle/2027.42/34225/179_ftp.pdf?sequence=1. [PubMed: 15719530]
- Henderson F, Geyen D, Rouce SD, Griffith KG, Kritsonis WA. Mental health service usage by students attending an historically Black college/university. Lamar University Electronic Journal of Student Research. 2007:5. Retrieved from http://www.eric.ed.gov/PDFS/ED497406.pdf.
- Holm-Hansen, C. Racial and ethnic disparities in children's mental health. 2006. Retrieved from http:// www.wilder.org/download.0.html?report=1964
- Hunt J, Eisenberg D. Mental health problems and help-seeking behavior among college students. Journal of Adolescent Health. 2010; 46:3–10. Retrieved from http://www.jahonline.org/article/ S1054-139X(09)00340-1/fulltext. [PubMed: 20123251]
- Jackson JS, Torres M, Caldwell CH, Neighbors HW, Nesse RM, Taylor RJ, Trierweiler SJ, Williams DR. The National Survey of American Life: A study of racial, ethnic and cultural influences on mental disorders and mental health. International Journal of Methods in Psychiatric Research. 2004; 13(4):196–207. Retrieved from http://deepblue.lib.umich.edu/bitstream/handle/ $2027.42/34224/177_ftp.pdf; jsessionid = 4BBD4F311AE65EEB92788E130703BC71? sequence = 1.$ [PubMed: 15719528]
- Kearney, LK.: Draper, M.: Baron, A. A research report of The Research Consortium of Counseling & Psychological Services in Higher Education: Counseling utilization by ethnic minority students. 2003. Retrieved from http://www.utexas.edu/student/cmhc/research/rescon.html
- Kessler RC, Abelson J, Demler O, Escobar JI, Gibbon M, Guyer ME, Zheng H. Clinical calibration of DSM-IV diagnoses in the World Mental Health (WMH) version of the World Health Organization (WHO) Composite International Diagnostic Interview (WMHCIDI). International Journal of Methods in Psychiatric Research. 2004; 13(2):122–139. Retrieved from http:// web.b.ebscohost.com.ezproxy.umsl.edu/ehost/pdfviewer/pdfviewer? vid=4&sid=ea31f6d9-5dd8-49a7-be74-3b67147d77c4%40sessionmgr110&hid=122. [PubMed: 15297907]
- Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and ageof-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry. 2005a; 62(6):593–602. [PubMed: 15939837]

Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry. 2005b; 62:617–627. [PubMed: 15939839]

- Mance GA, Mendelson T, Byrd B III, Jones J, Tandon D. Utilizing community-based participatory research to adapt a mental health intervention for African American emerging adults. Progress in Community Health Partnerships: Research, Education, and Action. 2010; 4(2):131–140.
- Maulik PK, Mendelson T, Tandon SD. Factors associated with mental health service use among disconnected African-American young adult population. Journal of Behavioral Health Services & Research. 2010
- Mays VM, Cochran SD, Barnes NW. Race, race-based discrimination, and health outcomes among African Americans. Annual Review of Psychology. 2007; 58:201–225.
- Mishra SI, Lucksted A, Gioia D, Barnet B, Baquet CR. Needs and preferences for receiving mental health information in an African American focus group sample. Community Mental Health Journal. 2009; 45(2):117–126. [PubMed: 18633704]
- Mojtabai R, Olfson M, Sampson NA, Druss B, Wang PS, Wells KB, Kessler RC. Barriers to mental health treatment: Results from the National Comorbidity Survey Replication (NCS-R). Psychological Medicine. 2011; 41(8):1751–1761. [PubMed: 21134315]
- Mowbray CT, Mandiberg JM, Stein CH, Kopels S, Curlin C, Megivern D, Lett R. Campus mental health services: Recommendations for change. American Journal of Orthopsychiatry. 2006; 76(2): 226–237. [PubMed: 16719642]
- Myers HF. Ethnicity- and socio-economic status-related stresses in context: An integrative review and conceptual model. Journal of Behavioral Medicine. 2009; 32(1):9–19. [PubMed: 18989769]
- National Alliance on Mental Illness. Mental Illness Facts and Numbers. 2013. Retrieved from http://www.nami.org/factsheets/mentalillness_factsheet.pdf.
- National Institute of Mental Health. The Numbers Count: Mental Disorders in America. NIH
 Publication No. 06-4584. 2006. Retrieved from http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml
- National Institute of Mental Health. 12-month prevalence of major depressive episode among U.S. adults (2012). (n.d.). Retrieved from http://www.nimh.nih.gov/health/statistics/prevalence/major-depression-among-adults.shtml
- National Institute of Mental Health. Demographics for lifetime prevalence of bipolar disorder among adults. (n.d.). Retrieved from http://www.nimh.nih.gov/health/statistics/prevalence/bipolar-disorder-among-adults.shtml
- Neighbors HW, Caldwell C, Williams DR, Nesse R, Taylor RJ, Bullard KM, Jackson JS. Race, ethnicity, and the use of services for mental disorders. Archives of General Psychiatry. 2007; 64(4):485–494. [PubMed: 17404125]
- Newhill CE, Harris D. African American consumers' perceptions of racial disparities in mental health services. Social Work in Public Health. 2007; 23(2/3):107–124. [PubMed: 19306590]
- Ojeda VD, Bergstresser SM. Gender, race-ethnicity, and psychosocial barriers to mental health care: An examination of perceptions and attitudes among adults reporting unmet need. Journal of Health and Social Behavior. 2008; 49(3):317–334. [PubMed: 18771066]
- Perl, L.; Bagalman, E.; Fernandes-Alcantara, AL.; Heisler, EJ.; McCallion, G.; McCarthy, FX.; Sacco, LN. Homelessness: Targeted federal programs and recent legislation. Washington, DC: Congressional Research Service; 2014. Retrieved from http://fas.org/sgp/crs/misc/RL30442.pdf
- Reed V, Gander F, Pfister H, Steiger A, Sonntag H, Trenkwalder C, Wittchen HU. To what degree does the Composite International Diagnostic Interview (CIDI) correctly identify DSM-IV disorders? Testing validity issues in a clinical sample. International Journal of Methods in Psychiatric Research. 1998; 7(3):142–155.
- Reeves WC, Strine TW, Pratt LA, Thompson W, Ahluwalia I, Dhingra SS, ...Safran MA. Mental illness surveillance among adults in the United States. Morbidity and Mortality Weekly Report. 2011; (Suppl./60) Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/su6003a1.htm.
- Ringeisen H, Casanueva CE, Urato M, Stambaugh LF. Mental health service use during the transition to adulthood for adolescents reported to the child welfare system. Psychiatric Services. 2009; 60(8):1084–1091. [PubMed: 19648196]

Rosenthal B, Wilson C. Mental health services: Use and disparity among diverse college students. Journal of American College Health. 2008; 57(1):61–67. [PubMed: 18682347]

- Russell, L. Mental health care services in primary care: Tackling the issues in the context of health care reform. Washington, D.C.: Center for American Progress; 2010. Retrieved from http://www.americanprogress.org/issues/2010/10/pdf/mentalhealth.pdf.
- Sly JR, Lewis RK, Roberts SR, Wernick S, Lee FA, Kirk CM. Assessing the health behaviors of African American emerging adults. Journal of Prevention & Intervention in the Community. 2011; 39(4):333–345. [PubMed: 21992023]
- Snowden LR. Health and mental health policies' role in better understanding and closing African American-White American disparities in treatment access and quality of care. The American Psychologist. 2012; 67(7):524–531. [PubMed: 23046303]
- Snowden LR, Yamada A. Cultural differences in access to care. Annual Review of Clinical Psychology. 2005; 1:143–166.
- So DW, Gilbert S, Romero S. Help-seeking attitudes among African American college students. College Student Journal. 2005; 39(4):806–816. Retrieved from http://www.redorbit.com/news/health/370843/helpseeking_attitudes_among_african_american_college_students/.
- StataCorp. Stata Statistical Software: Release 13. College Station, TX: StataCorp LP; 2013.
- Substance Abuse and Mental Health Services Administration. Results from the 2008 National Survey on Drug Use and Health: National Findings (Office of Applied Studies, NSDUH Series H-36, HHS Publication No. SMA 09-4434). Rockville, MD: 2009. Retrieved on 2/4/12 from http://www.oas.samhsa.gov/NSDUH/2k8NSDUH/2k8results.cfm#Ch8.
- Tanner, JL. Mental health in emerging adulthood: The changing spirituality of emerging adults project. Washington, DC: The Catholic University of America, The Institute for Policy Research and Catholic Studies; 2010. Retrieved from http://www.changingsea.net/essays/Tanner.pdf.
- Tanner, JL.; Arnett, JJ. The emergence of 'emerging adulthood': the new life stage between adolescence and young adulthood. In: Furlong, A., editor. Handbook of youth and young adulthood: New Perspectives and Agendas. London, UK: Routledge; 2009. p. 39-46.
- Thompson VLS, Kalesan B, Wells A, Williams S-L, Caito NM. Comparing the use of evidence and culture in targeted colorectal cancer communication for African Americans. Patient Education and Counseling. 2010; 81(S1):S22–S33. [PubMed: 20702056]
- Thornicroft G. Stigma and discrimination limit access to mental health care. Epidemiologia e Psichiatria Sociale. 2008; 17(1):14–19. [PubMed: 18444452]
- US Department of Health and Human Services. Mental health: Culture, race, and ethnicity—a supplement to mental health: A report of the surgeon general. Rockville, MD: Author; 2001. Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK44243/
- Villatoro AP, Aneshensel CS. Family influences on the use of mental health services among African Americans. Journal of Health and Social Behavior. 2014; 55(2):161–180. [PubMed: 24872466]
- Viner J, Tanner JL. Psychiatric disorders in emerging adulthood. Yellowbrick Journal of Emerging Adulthood. 2009; 1(1):6–7.
- Williams DR, Gonzalez HM, Neighbors H, Nesse R, Abelson JM, Sweetman J, Jackson JS. Prevalence and distribution of major depressive disorder in African Americans, Caribbean Blacks, and Non-Hispanic Whites: Results from the National Survey of American Life. Archives of General Psychiatry. 2007; 64:305–315. [PubMed: 17339519]
- Williams S. A systematic review: The effectiveness of cultural competence trainings among health professions. Perspectives on Social Work. 2012; 9(1):26–36.
- Williams SL. Mental health service use among African-American emerging adults, by provider type and recency of use. Psychiatric Services in Advance. 2014
- Woodward AT, Chatters LM, Taylor RJ, Neighbors HW, Jackson JS. Differences in professional and informal help seeking among older African Americans, Black Caribbeans, and Non-Hispanic Whites. Journal of the Society for Social Work and Research. 2010; 1(3):124–139. [PubMed: 21666782]
- Woodward AT, Taylor RJ, Chatters LM. Use of professional and informal support by black men with mental disorders. Research on Social Work Practice. 2011; 21:328–336. [PubMed: 21686069]

Yorgason JB, Linville D, Zitzman B. Mental health among college students: Do those who need services know about and use them? Journal of American College Health. 2008; 57(2):173–181.

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Table 1

Descriptive statistics of African American emerging adult respondents by entire sample, those with lifetime evaluated need, and those with evaluated need and lifetime service use

	Enure Sample	mple	Lifetime Evaluated Need	aluated I	Lifetime Service Use	aso asik
Characteristic	908=N	%	n=373	%	n=160	%
Age (M±SD)	23.0±3.7		22.9±3.7		23.5±3.8	
Gender						
Male	275	43.8	116	40.2	36	29.7
Female	531	56.2	257	8.65	124	70.3
Education						
Some high school	186	20.7	107	24.8	42	24.9
High school graduate	356	45.9	155	44.9	09	38.1
Some college	196	25.3	84	24.2	46	31.7
College graduate	89	8.1	27	6.1	12	5.3
Employment status						
Employed	581	71.7	265	71.8	111	71.4
Unemployed	135	16.8	99	17.4	25	14.8
Not in labor force	06	11.5	42	10.8	24	13.8
Health insurance						
Yes	582	74.6	261	70.7	112	8.89
No	197	25.4	106	29.4	46	31.2
Religious/spiritual support						
Yes	49	7.6	57	14.9	54	31.8
No	742	92.4	316	85.2	106	68.2
Lifetime evaluated need						
Yes	373	45.9	1	!	160	42.4
No	433	54.0	1	1	213	57.6
Lifetime service use						
Yes	197	24.7	160	42.4	1	1
No	609	75.3	213	57.6	1	1

 Table 2

 Multivariate analysis of association of predictor variables with lifetime mental health service utilization

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	Lifetime use	
Variable	OR	95% CI
Female (reference: male)	2.1***	1.4–3.2
Education attained (reference: some high school)		
High school graduate	.8	.5-1.3
Some college	1.2	.7-2.1
College graduate	.8	.4–1.8
Employment status (reference: employed)		
Unemployed	.8	.4-1.4
Not in labor force	1.5	.7-3.4
Health insurance coverage (reference: no)		
Have insurance	.7	.4-1.2
Religious/spiritual support (reference: no)		
Have religious/spiritual support	36.4***	6.6–199.7
Evaluated need (reference: no need)	5.4***	3.2-9.3

^{*} p .05,

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^{**} p .01,

^{***} p .001