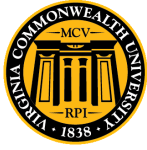

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A Theoretically-Based Mixed Methods Approach to Examining Mental Health Disorders and Help-Seeking Behaviors among University-Enrolled African American Men

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

By

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Dedicated to my father, my brothers, my nephew, my male cousins, my male best friends, and all the Black men in my life—past, present, and future.

“What mental health needs is more sunlight, more candor, and more unashamed conversation.”

– Glenn Close

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Abstract

A Theoretically-Based Mixed Methods Approach to Examining Mental Health Disorders and Help-Seeking Behaviors among University-Enrolled, African American Men

By

Kofoworola D. A. Williams

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

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Virginia Commonwealth University School of Medicine, May 2020

African American men in emerging adulthood are disproportionately impacted by serious psychological distress, increasing their risk of developing mental health illnesses, such as anxiety and depression. This increased risk has been attributed to college, racial and gender stressors. Despite being at increased risk, African American men, in general, are not utilizing mental health services at optimal rates and on college campuses, underutilization of mental health resources persist. This failure to seek help can lead to prolonged impairment by mental health symptoms and adverse physical, emotional and social health outcomes. Lack of help-seeking among African American men has been attributed to poor help-seeking attitudes.

There is little research examining African American men's mental health and help-seeking behavior, making this an area of critical need and development. This dissertation work aimed to fill this critical gap, utilizing a concurrent, mixed methods approach theoretically-based in the Social Ecological Model. There were three aims to: 1) quantitatively examine the

prevalence of mental health symptoms and rates of campus health services utilization among university-enrolled, African American men; 2) quantitatively analyze relationships between risk and protective factors, help-seeking behaviors, and associated behaviors among university-enrolled, African American men; and 3) qualitatively understand the social and contextual factors that impact the likelihood of experiencing symptoms among university-enrolled, African American men and their willingness to engage in help-seeking behaviors.

Results from Aim 1 showed that, during Freshman year, African American men, African American women and White men reported endorsement of at least one anxiety or depressive symptom at similar rates (greater than 60% for anxiety and greater than 80% for depression). By senior year, prevalence rates for anxiety decreased significantly for African American men but remained high for White men and African American women. For depression, there were only significant differences between African American men and African American women. From this aim, it is seem that African American men though reporting high levels of symptoms, still utilized counseling services at lower rates compared to White men.

From Aim 2, among risk factors assessed, stressful life events were a robust predictor of anxiety and depressive symptoms. For protective factors, endorsement of religion was associated with lower levels of anxiety symptoms in Year 1 and depressive symptoms in Year 2. Cannabis use statistically significantly predicted depression in Year 2. Surprisingly, none of the risk or protective factors predicted utilization.

The qualitative approach revealed that many men are experiencing high stress associated with transitioning to college (e.g. self-exploration, finances, self and parental pressure). Expressing this stress included behaviors associated with social isolation and substance use. Coping methods among this sample were both maladaptive and adaptive, including cannabis use,

which was highly endorsed among this sample. Results also showed that lack of knowledge was not a major barrier to seeking help among men. However, despite knowing of certain illnesses and the benefits of seeking help, African American men refrained from seeking help due to stigma, fear of judgement, breaches in confidentiality, and lack of trust. Preferred informal methods were talking to friends. Conversely, formal help-seeking was of minimal interest, mostly due to finances, lack of trust, and uncertainty of the professional's sincerity.

This dissertation study is one of the first to focus specifically on mental health risk and help-seeking behaviors among African American men on a college campus. This approach advances the field of mental health prevention by engaging a severely marginalized population in research, offering insight into unique determinants of mental health that can inform future prevention efforts for underserved populations. Further research and prevention efforts are needed to improve mental health and mental health-related help-seeking among this population and those like them. Implications for future research are discussed in the following chapters.

Chapter 1

Introduction

Although most mental health issues are preventable, they remain a national and global public health concern (CDC, 2015). Defined as a condition that affects your mood, thinking and behavior, mental illnesses are extremely high in the United States (US) and globally (WHO, 2017). According to the World Health Organization (WHO), mental illnesses are amongst the top three leading causes of disability, following heart disease and infectious diseases (NIMH, 2010). Often, anxiety and depression are linked (Assari, Dejman, & Neighbors, 2016; DiMatteo, Lepper, & Croghan, 2000) and amongst the most common mental health illnesses (Health, 2011). In 2017, approximately 792 million people had a mental health disorder (Ritchie & Roser, 2020), including 246 million people who had depression and 284 million people who had anxiety (Ritchie & Roser, 2020). In the US, in 2018, a little over 19% of adults experienced a mental health illness (Administration, 2019). Among these adults, approximately 17 million experienced depression (Administration, 2019) and 48 million experienced anxiety (School, 2017).

The economic burden of mental health illnesses includes direct treatment, social consequences, such as missing work days and disrupted social relationships, unemployment, and treatment costs for comorbid conditions. A report from the World Economic Forum (WEF) estimated the global cost of mental illnesses to be $2.5 trillion in 2010, with a projected increase to over $6 trillion by 2030 (Bloom et al., 2011). Depression accounts for much of this economic burden, amounting to annual medical expenses (i.e. direct costs, comorbid conditions) of over $210 billion (Greenberg et al., 1999; Hudson, Eaton, Banks, Sewell, & Neighbors, 2016). For anxiety, the economic costs, though difficult to assess, are estimated to be between $40 and $50 billion in the United States (Greenberg et al., 1999). These statistics, though overwhelming,

remain widely underestimated and underreported (Takayanagi et al., 2014) as mental health resources are severely underutilized (Augsberger, Yeung, Dougher, & Hahm, 2015; Takayanagi et al., 2014). This is concerning, as untreated mental illness can cause severe emotional, behavioral and physical health problems (Bibelhausen, Bender, & Barrett, 2015; Kessler et al., 2001).

There are ripple and bidirectional health effects associated with depression and anxiety. Individuals with depression, symptomized by feelings of sadness, self-doubt, and despondency (Watkins, 2012; Watson, 2007), are more likely to develop chronic illnesses, such as cardiovascular disease, diabetes, and stroke (CDC, 2015; OMH, 2017). Anxiety, symptomized by restlessness, difficulty concentrating, and irritability (Watson, 2007), has been linked to poor health outcomes and behaviors such as increased risk of depression, behavioral disorders, and substance use (Beatty & Kissane, 2017; Hill, Waite, & Creswell, 2016; Ogunyemi et al., 2018). The reverse is also relevant such that those with chronic medical conditions and poor health outcomes are more likely to develop mental health illnesses like depression and anxiety (DiMatteo et al., 2000). Experiences with such illnesses have been linked with severe physical and mental impairment, limiting one’s ability to engage in self-care, fulfill work duties, as well as execute familial responsibilities (Bertilsson, Petersson, Ostlund, Waern, & Hensing, 2013; Plowden, Thompson Adams, & Wiley, 2016).

Emerging Adult African American Men and Mental Health

The prevalence of depression and anxiety among emerging adults is a national public health concern. According to recent studies, emerging adulthood is, not only a critical time of development for individuals (Arnett, Žukauskienė, & Sugimura, 2014), but is a transitional period between adolescence and adulthood that comes with a significant amount of stress (Arnett

& Tanner, 2006; Eskin et al., 2016) and increased risk of developing mental health symptoms (Arnett & Tanner, 2006). During this transition, much is happening. Individuals are experiencing a sense of newfound independence and entering phases of self-exploration (Schulenberg & Zarrett, 2006), which are associated with higher levels of stress (Maynard, Salas-Wright, & Vaughn, 2015) and can negatively impact mental well-being (Schwartz & Petrova, 2019).

Emerging adults, ages 18 to 25, report high prevalence of mental health disorders (SAMHSA, 2016a, 2016b). This prevalence has been attributed to their disproportionate experiences with psychological distress (Gress-Smith, Roubinov, Andreotti, Compas, & Luecken, 2015; Marsh & Wilcoxon, 2015; Salaheddin & Mason, 2016), particularly on a college campus (Eskin et al., 2016). Emerging adults who attend college are exposed to unique, additional stressors resulting from leaving home, immersing themselves in new and unfamiliar social and professional environments, and working to make good grades, graduate and pursue careers (Eskin et al., 2016). Further, college and academic life involves many social situations in which various environmental factors can impact the daily lives of college students (Glanz, Rimer, & Viswanath, 2015). The combination of doing well in classes and balancing extracurriculars, social relationships, and, ultimately, one's time, has been linked to increased stress and mental health issues among students (Beattie, Laliberté, Michaud-Leclerc, & Oreopoulos, 2019). Though the experiences of emerging adults are well-documented, there is little research exploring this transitional period specific to African American populations (Hammond, 2012; Kogan, Yu, Allen, & Brody, 2015; McNeil, Fincham, & Beach, 2014; Mincey, Alfonso, Hackney, & Luque, 2014; Xanthos, Treadwell, & Holden, 2010).

Recent evidence suggests young adult, African American men experience psychological distress disproportionately compared to the general population (Powell, Adams, Cole-Lewis,

Agyemang, & Upton, 2016). The Office of Minority Health (OMH) (2017) states that African American men are 10% more likely to experience psychological distress compared to their white counterparts (OMH, 2017). Current literature suggests that such stress is attributed to African American men's health, behaviors, and healthcare environments, of which are all influenced by disproportionate experiences to racial discrimination (Chae et al., 2017; Matthews, Hammond, Nuru-Jeter, Cole-Lewis, & Melvin, 2013; Miller & Taylor, 2012; Xanthos et al., 2010). Due to racial discrimination, African American men are disproportionately impacted by low socioeconomic status, increasing likelihood of adverse experiences, such as living below the poverty level, living in poor, unsafe neighborhoods, and disparities in health (McNeil et al., 2014; Miller & Taylor, 2012; Plowden et al., 2016; Xanthos et al., 2010). In college, aside from normal college stressors, young African American men are experiencing additional stressors, including minority stress (Pittman, Cho Kim, Hunter, & Obasi, 2017), lack of social and academic support (Davis, Jacobsen, & Ryan, 2015; Hubbard, 2019), pressure to succeed as a African American man (Douglas & Arnold, 2016), and stress from social expectations (i.e. masculinity) (Hammond, 2012; Jones & Neblett, 2017; Mincey, Turner, Brown, & Maurice, 2017).

The cumulative stress from emerging adulthood, college, and racial and gender stressors, not only increases risk of psychological distress for African American men (Jack & Griffith, 2013; Xanthos et al., 2010), but also exacerbates symptoms associated with anxiety and depression (Lincoln, Taylor, Watkins, & Chatters, 2011). In 2014, the Centers for Disease Control and Prevention (CDC), reported that African American men, ages 18 to 25, were experiencing depressive feelings such as sadness, worthlessness, and hopelessness, at higher rates than White and Hispanic men (CDC, 2015). Importantly, within recent years, there has

been a disproportionate increase in suicide rates among young African American men, in which African American men, ages 18 and older, are 4 times more likely to commit suicide compared to African American women (Hammond, 2012; Jones & Neblett, 2017; Lincoln et al., 2011; Plowden et al., 2016). In university settings, such feelings and symptoms are further exacerbated among men. According to American College Health Association's National College Health Assessments (NCHA) from 2012 to 2016, anxiety (19% to 26%), depression (13% to 18%), and stress (34% to 38%) (ACHA, 2012a, 2016) increased for men. Further, the NCHA reports increases in depressive symptoms including hopelessness (40% to 44%), loneliness (49% to 52%), sadness (52% to 58%), and anxiety (40% to 47%) among college men (ACHA, 2012a, 2016; Hunt & Eisenberg, 2010; Mistler, Reetz, Krylowicz, & Barr, 2012).

Although the aforementioned speaks to the urgency of addressing mental health among men in college, there is little research focusing on the mental health of African American men on a college campus. Importantly, there is also a paucity of research examining the help-seeking behaviors and attitudes among this population. According to mental health literature, university-enrolled, African American men are not seeking mental health-related help at optimal rates and are underutilizing mental healthcare services (Mincey et al., 2017; Powell et al., 2016; Ward & Besson, 2012). Compared to the general population, African American men are less likely to seek care, leading to prolonged, severe impairment by psychological distress and, eventually, depression and comorbid chronic illnesses (Lincoln et al., 2011; Mincey et al., 2017; Powell et al., 2016; Ward & Besson, 2012).

Help-Seeking Among African American Men

According to national trends, men from African American populations are less likely to seek out services for mental health issues compared to their female and male counterparts

(Mincey et al., 2017; Powell et al., 2016; Ward & Besson, 2012). A recent quantitative study (Assari & Caldwell, 2017) examined mental health service utilization among African American boys, ages 13 to 17, from African American and Caribbean populations. Consistent with previous research, though individuals presented with psychiatric disorders, utilization rates remained low (Assari & Caldwell, 2017). Upon further analysis, the authors found correlations between this lack of utilization and individual's gender and ethnicity. Other recent studies in quantitative literature show that men from minority populations underutilize services based on personal preferences (Pattyn, Verhaeghe, & Bracke, 2015). Pattyn (2015) suggests that certain men prefer to be self-treated; whereas, women prefer professional services. Other preferences for mental health issues among men from minority populations involve treatment modality (Hines, Cooper, & Shi, 2017) and a preference for religion (Novak, Peak, Gast, & Arnell, 2019).

Underutilization of mental healthcare services among minority men has also been linked to stigma and perceptions of mental health use. For many men, the fear of appearing weak prohibits them from seeking out services (Seidler, Dawes, Rice, Oliffe, & Dhillon, 2016). In general, men who wish to maintain a masculine image often refrain from engaging in healthy behaviors that make them seem weak (Mincey et al., 2017). Hence, men are more likely to delay asking for help and less likely to request help related to a health issue (Juvrud & Rennels, 2016). Similarly, in a study analyzing the relationship between masculine ideology and help-seeking behavior, men who expressed greater conformity to masculine norms had higher levels of mental health service use stigma and were less likely to refer other men or family members to professional mental health services (Vogel, Wester, Hammer, & Downing-Matibag, 2014).

Recent literature also shows that inadequate access to care is a barrier to mental health services utilization among African American men, specifically due racial biases (Kugelmass,

2016). A study conducted by Kugelmass (2016) found that White patients were more likely to receive appointments to see a mental health professional compared to African American patients of the same class and status (Kugelmass, 2016). Further, of the few minority men who seek out services and receive care, adequate care is not definite. According to a qualitative study conducted in 2013, among a sample of approximately 4000 minority patients who were interviewed over three years, over 80% reported experiencing discrimination while receiving mental health treatment (Corker et al., 2013). Racial discrimination is also associated with quality of healthcare use such that individuals will either not seek care or, if they do, often perceive the treatment to be poor (Dehkordy, Hall, Dalton, & Carlos, 2016).

Reasons for underutilization of mental healthcare services are well-documented but lack evidence specific to young adult, African American men. On college campuses, trends in underutilization of professional mental health services persist (ACHA, 2012a, 2016), contributing to poor academic performance, low retention rates, and, ultimately, disparities in higher education enrollment rates (Davis et al., 2015; Jackson & Moore, 2006). Social expectations, combined with social norms stigmatizing mental health, make it particularly challenging for university-enrolled, African American men to discuss their feelings and seek the necessary help (Marsh & Wilcoxon, 2015; Powell et al., 2016; Ward & Besson, 2012). To fill this gap, this dissertation utilizes a large database, which has a large sample of college students and is sufficiently powered to analyze university-enrolled, African American men specifically (*N* ~ 650). In addition, this proposed study utilized the Social Ecological Model (SEM), a theory-based framework, to examine individual, relationship, community, and societal factors that impact African American men's mental health and perceptions of help-seeking.

Health Behavior Theory as a Framework

The social and environmental contexts in which African American men live are very important for examining and addressing their mental health and help-seeking attitudes and behaviors (Diclemente, Salazar, & Crosby, 2013). Hence, this dissertation study is, in part, guided by the SEM (Glanz et al., 2015; Golden, McLeroy, Green, Earp, & Lieberman, 2015). The SEM integrates social and behavioral determinants of health at the individual, interpersonal (or relationship), community and societal levels (Glanz et al., 2015), positing that these determinants interact across multiple ecological levels to influence mental health risk among African American men, their health behaviors, as well as their likelihood of seeking help for mental health symptoms (Cramer & Kapusta, 2017; Glanz et al., 2015).

The SEM has been applied to a range of health issues and prevention programs such as health literacy, alcohol use, vaccine usage, tobacco control, and physical activity (Glanz et al., 2015). Recently, the CDC has begun adopting approaches that are social-ecologically informed, especially to address issues such as suicide and mental health (Cramer & Kapusta, 2017). Similarly, Healthy People 2020 currently utilizes the SEM as the framework for their Healthy Campus Initiative (ACHA, 2012b) to improve the health of their students, staff, and faculty. With this approach, health promotion and disease prevention efforts are better able to tackle issues that are multifaceted, allowing researchers to tailor research to population- and individual-specific needs (Cramer & Kapusta, 2017). For this study, the SEM provided a robust framework to guide the selection of variables chosen for hypotheses testing, encompassing mental health risk and protective factors across all four levels of the model (Grembowski, 2016).

Similarly, the SEM framework guided the data collection methods to more fully capture the range of individual, relationship, community, and societal level factors that negatively impact African American men’s help-seeking behaviors and increase their risk of developing poor

mental health (Cramer & Kapusta, 2017; Golden et al., 2015). An ecological approach is multifaceted and provides results that are more comprehensive and better able to inform interventions (Cramer & Kapusta, 2017). Utilizing theoretically-based approaches that aid in the understanding of these social and contextual factors in relation to mental health, will provide evidence for researchers and campus professionals to develop prevention efforts that are relevant to African American men.

Mixed Methods as an Approach

This dissertation study utilized a concurrent, mixed methods approach in which all approaches occurred separately but at the same time. In social research, sequential mixed methods approaches are more effective only when the research questions and hypotheses are derived from research evidence that is well-defined (Castro, Kellison, Boyd, & Kopak, 2010). However, the literature to understand African American men's mental health-related prevalence, experiences, and help-seeking behaviors on a college campus is mixed and ambiguous. A concurrent, mixed methods approach aided in the study's ability to assess various relationships among specific variables of interest (Castro et al., 2010). Importantly, data is qualitatively and quantitatively rich and more comprehensive (Castro et al., 2010), offering findings that can be further developed and analyzed in future research.

Within this approach, Aims 1 and 2 serve as the quantitative methodological approaches and Aim 3 serves as the qualitative approach. The inclusion of the quantitative approach allowed for the leveraging of a unique and large dataset to understand trends of mental health prevalence and utilization rates among a population that is often underrepresented in mental health literature. As quantitative approaches are more objective in nature, it is easier to accurately examine relationships between independent and dependent variables (Kelle, 2006; Matveev, 2002). On

the other hand, this approach, alone, would not allow us to understand the context of which these variables are occurring. Therefore, the inclusion of a qualitative approach provided the opportunity to examine the lived experiences of a severely marginalized population who rarely is given a voice. Though subjective in nature, these focus groups created a space for men to talk about their mental health concerns and help-seeking for such issues. These groups also aided in the examination of group dynamics and interactions among these men (Chatrakul Na Ayudhya, Smithson, & Lewis, 2014). Observing a group dynamic is beneficial as it provides researchers with insight into social interactions among a group in the real world (Gibbs, 1997). In addition, as group dynamics are unfolding, the language used among the groups becomes more apparent as time goes on in the session, providing insight into the culture of the group (Gibbs, 1997).

The results and findings from all Aims will be integrated in the overall Discussion section of this dissertation paper. Integrating the findings from this dissertation study will show how all methods fit into a larger puzzle, offering insight into the mental health risk associated with depression and anxiety among African American men on a college campus, as well as their feelings and perspectives on help-seeking. In other words, themes will be highlighted, showing how findings converge, complement, contradict or silence one another (Ahuja, Nasr, Fawcett, Whitfield, & McLean, 2015; Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014; Farmer, Robinson, Elliott, & Eyles, 2006).

Aims, Research Questions, and Hypotheses

The overall aim of this dissertation work was to utilize the SEM as a framework, aiding in the examination of the prevalence and correlates of anxiety and depressive symptoms among university-enrolled, African American men, and the contextual factors that impact their perceptions of mental health-related help-seeking. This study utilized a concurrent, mixed

methods approach, including quantitative (two secondary data analyses) and qualitative (focus groups) methods. The quantitative approaches (Aim 1 and 2) focused primarily on analyzing factors at the individual and relationship level; whereas, the qualitative approach focused on factors at all ecological levels, especially the community and societal influences.

As many studies examining mental health prevalence among African American men are underpowered to assess prevalence by race and gender, Aim 1 provided insight into anxiety and depressive symptoms prevalence among this vulnerable population, as well as showed how these rates compared to other populations. Further, Aim 1 assessed whether or not African American men on the campus were using health services when experiencing symptoms. Aim 2 expands on Aim 1, focusing primarily on African American men and the risk and protective factors that influence their mental health risk, the associated factors (e.g. substance use) that influence mental health risk and, then, how these same factors impact help-seeking. The qualitative approach in Aim 3 more fully examined contextual factors that were not captured in the quantitative aims. Integrated together, we can ascertain which social factors are prevalent among a group of college men, offering insight into their everyday experiences with risk, protective and associated factors, as well as more specific insight into barriers and facilitators of help-seeking.

Aim 1 is to examine the prevalence of anxiety and depressive symptoms and rates of health services utilization among university-enrolled, African American men and compare these prevalence rates to university-enrolled, African American women and White men.

RQ_1: Are university-enrolled, African American men are experiencing anxiety and depressive symptoms?

RQ_2: Do these rates reported by university-enrolled, African American men differ from those reported by White men and African American women?

RQ_3: Do university-enrolled, African American men, who are experiencing symptoms, utilize health services?

RQ_4: Do these rates of utilization differ from those reported by White men and African American women?

Aim 2 is to examine and analyze risk and protective factors, help-seeking behaviors, and associated behaviors among university-enrolled, African American men.

H_1: Among risk factors, there will be positive relationships between stressful life events and financial stress and reports of symptoms.

H_2: Among protective factors, there will be negative relationships between social support and religiosity and reports of symptoms.

H_3: Among associated factors, there will be: (a) positive relationships between alcohol use, cannabis use and reports of symptoms; and, (b) a negative relationship between academic achievement (i.e. GPA) and reports of symptoms.

RQ: How do the risk or protective factors identified above impact the likelihood of seeking help?

Lastly, Aim 3 is to understand the social and contextual factors that impact the likelihood of experiencing MHDs among university-enrolled, African American men and their willingness to engage in help-seeking behaviors.

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Chapter 2

Paper 1

Prevalence of Mental Health Disorder Symptoms and Rates of Help-Seeking Among University-Enrolled, African American Men, White Men and African American Women

Abstract

Objectives. This study examines the prevalence of mental health disorder (MHD) symptoms and rates of health services utilization among university-enrolled, African American men and compares these rates to university-enrolled, White men and African American women.

Methods. We analyzed data (N ~ 2500) from a student survey, Spit for Science, a longitudinal, ongoing, research study at a mid-Atlantic, public university. Measures included mental health disorder (measured by the Symptom Checklist 90) and campus health service utilization (counseling center, health services, etc.). We conducted descriptive analyses to determine MHD prevalence and utilization rates; Mann Whitney U tests to compare MHD rates to White men and African American women, and Chi-squared tests to compare rates of utilization among groups.

Results. During their Freshman year, greater than 60% of students from each ethnic group reported at least one anxiety symptom and greater than 80% reported at least one depressive symptom. By senior year, reporting rates decreased significantly for African American men (49.6%) but remained high for White men (69.1%) and African American women (63%); $p < 0.000$. For depression, results were similar; however, only significant differences between African American men (72.7%) and African American women (87.1%); $p<0.000$. African American men (20.4%), though reporting high levels of symptoms, still utilized counseling services at lower rates compared to White men (37.76%); $p = 0.024$.

Conclusion. Findings suggest that African American men underutilize available campus health resources despite reporting one or more symptoms associated with anxiety and depression. Further research and prevention efforts are needed to improve help-seeking among this vulnerable population.

Introduction

In the United States, mental health disorders (MHD) will be the leading cause of disability by year 2020 (SAMHSA, 2016), with over 43 million adults experiencing at least one mental health illness in any given year (Derogatis & Cleary, 1977; Merikangas et al., 2010). Those suffering from mental health issues are often overwhelmed with poor behavioral and cognitive functioning, resulting in inabilities to carry out everyday family and work responsibilities, comorbid conditions (chronic illness/substance abuse), and in unfortunate of cases, death, often by suicide (Goldman-Mellor et al., 2014; Im, Oh, & Suk, 2017). Emerging adults are at increased risk of developing poor mental health due in part, to social factors impacting the transition from adolescence to adulthood (Park, Mulye, Adams, Brindis, & Charles E. Irwin, 2006). This stressful time is often correlated with high mortality rates, violence, and poor mental health, particularly among men (Park et al., 2006; Rice, Purcell, & McGorry, 2018).

Relative to young adults, emerging adults in college experience psychological distress at disproportionate rates and are at the highest risk of developing depression and anxiety (Gress-Smith, Roubinov, Andreotti, Compas, & Luecken, 2015; Marsh & Wilcoxon, 2015; Salaheddin & Mason, 2016). In 2016, emerging adults in college reported the highest prevalence of mental disorders, with anxiety and depression being among the most common (Administration, 2016; Bourdon, Moore, Long, Kendler, & Dick, 2018; Lipson, Zhou, Wagner, Beck, & Eisenberg, 2016). Such risk and onset has been strongly associated with stressors such as living away from home, learning to navigate campus, social environments, and dealing with academic life (Sumstine, Cruz, Schroeder, Takeda, & Bavarian, 2018). African American men are at particularly high risk during this transitional period. Data indicate that African American men experience psychological distress at higher rates than White men, and suicide rates among

African American men during emerging adulthood are increasing (Hammond, 2012; Jones & Neblett, 2017; Lincoln, Taylor, Watkins, & Chatters, 2011; Plowden, Thompson Adams, & Wiley, 2016). The recent decline in the mental health of emerging adult, African American men is related to several social and environmental factors, including everyday experiences with racial discrimination (Chae et al., 2017; Xanthos, Treadwell, & Holden, 2010), stressful life events (Watkins, Green, Goodson, Guidry, & Stanley, 2007), financial distress (Tucker-Seeley, Mitchell, Shires, & Modlin, 2015), poverty (Xanthos et al., 2010), and poor academic performance (Warren, 2016). For African American men who are fortunate enough to enroll in college, certain stressors, such as racial discrimination, lack of social support and belongingness, and cultural conflict, further impact their ability to succeed in higher education (Griffith, Ober Allen, & Gunter, 2010; Mereish, N'cho, Green, Jernigan, & Helms, 2016; Xanthos et al., 2010).

The compounded impact of racial stressors and college stress increases African American men's risk of psychological distress, exacerbating depressive feelings that often correspond with suicidal ideation and behavior (Lincoln et al., 2011). Despite being at higher risk for poor mental health, African American men, in general, seek mental health services at lower rates compared to the general population (Mincey, Turner, Brown, & Maurice, 2017; Ward & Brown, 2015). Help-seeking behaviors among African American men in college are often not examined; however, it is important to examine this as, on college campuses, trends in underutilization of professional mental health services persist, such that men, in general, are not seeking care even when experiencing high levels of stress and anxiety (ACHA, 2016).

There is very little research examining African American men's mental health experiences during their transition to college (Shea, Wong, Nguyen, & Baghdasarian, 2017; Ward & Brown, 2015). Further, there is a paucity of research examining rates of campus service

utilization among student populations, much of which fails to analyze by both race and gender simultaneously (Bourdon et al., 2018). Identifying patterns of mental health prevalence among this high-risk population and ascertaining to what extent African American men in college are seeking care can offer guidance for mental health researchers and campus-based practitioners who wish to develop effective mental health prevention programs that address mental health risk and improve help-seeking behavior among African American men. As such, this study examined the prevalence of MHD symptoms, anxiety and depression, and rates of health services utilization among university-enrolled, African American men and compared them to prevalence rates of university-enrolled, African American women and White men. It is hypothesized that African American men would report similar rates of anxiety and depressive symptoms compared to White men and African American women, as well as report lower rates of health services utilization.

Methods

Data were analyzed from Spit for Science (S4S) an on-going, university-wide, longitudinal research survey at a mid-Atlantic, public university (Dick et al., 2014). The S4S survey began in the Fall of 2011, using surveys to assess how genetic and environmental factors influenced the emotional and behavioral health of college students (Dick et al., 2014). Participants for S4S were eligible to participate if 18 and older. An initial survey was completed through REDCap (Harris et al., 2009) during their first semester, followed by a follow-up survey every Spring. After completing the survey, students received the option to consent to give a saliva sample, which they were compensated $10 and a S4S t-shirt. Overall, more than 12,000 students have enrolled in the Spit for Science study, consisting of 5 cohorts that average 2500 students, with approximately 68% enrollment for all incoming eligible freshmen across the first

four cohorts. Data for cohort 5 was released in May 2019. The S4S study was approved by the university's Institutional Review Board (Dick et al., 2014).

For the current analysis, we used all available data for African American male and female students and White male students across the five cohorts. For cohorts 1 through 4, data represents individuals who entered their freshman years in the Fall of 2011, 2012, 2013 and 2014; whereas, for cohort 5, data comes from individuals who entered during Fall of 2017. Analysis focuses on the freshman year through senior year for first four cohorts and freshman and sophomore year for cohort 5. These timepoints were chosen in order to maximize sample size and ensure data analyzed is representative of the student population and their experiences.

Measures

The Spit for Science survey includes various questionnaires assessing a number of behavioral, emotional, and mental health topics. To reduce participant burden, certain surveys were abbreviated (Dick et al., 2014).

Symptoms associated with anxiety and depression were assessed using an abbreviated version of The Symptom Checklist-90 (SCL-90) (Derogatis & Cleary, 1977). SCL-90 is a widely used instrument measuring individuals' experiences with mental health symptoms within the past 30 days. In the S4S survey, the SCL-90 includes subscales for measuring depressive and anxiety symptoms. For anxiety, four items ($\alpha = 0.85$) were used, containing response options, ranging from "not at all," "a little bit," "moderately," "quite a bit," and "extremely," to understand the degree to which students experienced: nervousness or shakiness inside; suddenly scared for no reason; feeling fearful; and spells of terror or panic (Dick et al., 2014). For depression, four items ($\alpha = 0.89$) were used, containing the same response options to understand the degree to which students experienced: feeling blue; worrying too much about things; feeling no interest in things;

and feeling hopeless about the future (Dick et al., 2014). Higher scores mean higher endorsement of one or more anxiety or depressive symptom.

Campus service utilization included a series of yes and no questions asking whether students used or did not use a specific campus service since attending VCU. The following services were assessed separately for this analysis: University Counseling Services, University Health Services, The Wellness Resource Center (The Well) and Recreational Sports. A range of services are included in this analysis to gain insight into various ways students might deal with mental health symptoms. For example, though The Well does not house therapists or mental health counselors, this organization makes referrals for such services and promotes healthy behaviors among their students, offering services and resources for numerous mental health needs. Importantly, the S4S survey only examines utilization of such services for every spring semester to ensure students have had the opportunity to go through at least one semester of schooling and to have used a service. A response of "yes" suggests individuals have used that particular service since they've been at school.

Statistical Analyses

All data was analyzed using Statistical Package for Social Science (SPSS) software 26.0 version or older. Data were analyzed separately by fall (F1) and spring (S1) semesters of year 1 (freshman year) and by spring semesters for the following years (i.e. spring of sophomore (S2), junior (S3), and senior year (S4)). To determine the prevalence of depressive and anxiety symptoms among students, descriptive statistics were conducted within the sample by race and gender (i.e., African American men; White men; African American women). Sum scores were created separately for anxiety and depressive symptoms for individuals who answered at least 50% of questions asked and missing data were prorated. To assess utilization of services,

descriptive analyses were conducted. Group differences in prevalence were conducted to assess differences in mental health prevalence between groups. For group differences of utilization, we examined only for individuals who reported high levels of anxiety and/or depressive symptoms. Within each group, the high-level group is operationally defined with the sample's upper quartile as the cut-off (i.e. at or above the 75th percentile). Group mean differences were assessed using Mann Whitney U Tests to compare prevalence rates between African American and White male students, as well as between African American male and female students. Chi squared tests were conducted to compare rates of utilization between groups.

Results

As mentioned, the S4S survey includes data from over 12, 000 students; however, for this analysis, the overall analytic sample includes data from African American male students (N = 681), White male students (N = 2, 329), and African American female students (N = 1, 679) (*see Table 1*). Approximately 75% African American men completed the SCL-90 survey, along with 79% White men and 78% African American women. It is important to note that this sample is representative of students attending this institution.

Anxiety Symptom Prevalence

As incoming freshmen, 60.7% of African American men, 68.7% of White men, and 71.5% of African American women reported an endorsement of at least one anxiety symptom (*see Table 1*). In the following Spring, those numbers decreased in all groups (58% among African American men, 69.9% of White men, and 68.7% of African American women). During sophomore year, 47.6% African American men, 65.7% White men, and 64.7% African American women reported at least one anxiety symptom. However, junior year shows a slight increase for African American men (54.6%) and White men (67.2%); whereas, for African American women,

64.7% reported endorsement of at least one anxiety symptom, remaining the same. By Year 4 (senior year), we see a decline in reports among African American men (49.6 %) and an increase in reports of symptoms among White men (69.1%). Among African American women, approximately 63% of students reported at least one anxiety symptom.

Table 1: SCL-90 Survey Completion and Actual Prevalence of MHD Symptoms among Groups by Year

Group	*Y1F*		*1S*		*2S*		*3S*		*4S*	
	N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
					Anxiety					
African American Men	309	60.7	286	58	127	47.6	101	54.6	69	49.6
White Men	1275	68.7	1092	69.9	575	65.7	379	67.2	300	69.1
African American Women	944	71.5	916	68.7	601	64.7	401	64.7	312	63
					Depression					
African American Men	424	83	414	84.5	211	79	154	83.2	101	72.7
White Men	1591	85.6	1413	90.2	779	88.9	485	85.8	385	88.5
African American Women	1195	90.2	1245	93.1	820	88.2	540	87.2	432	87.1

*Y1F = Freshman Year Fall; 1S = Freshman Year Spring; 2S = Sophomore Year Spring; 3S = Junior Year Spring; 4S = Senior Year Spring

Group Differences Among All Individuals

Across incoming freshmen, anxiety symptom scores were lower for African American men (Mdn = 6) compared to African American women (Mdn = 7), U = 10506.5, p = < 0.000 (*see Table 2*). At the end of the spring semester, median anxiety symptom scores among African American men (Mdn = 5.5) remained lower than White men (Mdn = 7), U = 9903.5, $p < 0.000$, as well as compared to African American women (Mdn = 7), U = 8840, $p < 0.000$. During the following year, African American men’s median scores (4.5) decrease but remain low compared to White men (Mdn = 6), U = 2064.5, $p < 0.000$. However, compared to African American women, though median scores are similar, African American women (Mdn = 6), U = 3486 report

anxiety symptoms at higher rates than their male counterparts ($p = 0.001$). By year 3, junior year showed anxiety symptoms were statistically significantly different between African American men *(Mdn* = 5.5) and White men (*Mdn = 8*), $U = 757$, $p < 0.000$ and African American women (*Mdn* = 6), $U = 1981$, $p = 0.002$. By senior year, persisting low median anxiety scores for African American men (4) remained lower compared to White men (*Mdn* = 7), $U = 562.5$, $p < 0.000$ and African American women (*Mdn* = 7), $U = 792.5$, $p = < 0.000$.

Depressive Symptom Prevalence

Overall, reports of depressive symptoms were high among all groups. 83% of African American men, 85.6% of White men, and 90.2% of African American women reported experiencing at least one depressive symptom during fall of their incoming year. During the spring, reports of at least one depressive symptom increased slightly for African American men (84.5%). Among White men (90.2%), there was approximately a 5% increase and a little less of an increase for African American women (93.1%). In the following year, year 2, reports of depressive symptoms decreased for all groups—African American men (79%), White men (88.9%), African American women (88.2%) (*see table 1*). Junior year, 83.2% African American men, 85.8% White men, and 87.2% African American women reported experiences with at least one depressive symptom. During their senior year, there was a decrease in reporting for African American men (72.7 %) but not for African American women (87.1%) and White men (88.5%).

Group Differences Among All Individuals

During Fall of year 1, African American men (*Mdn* = 9) reported statistically significantly lower median depressive symptom scores compared to African American women (*Mdn* = 10), $U = 14458.5$, $p = < 0.013$ (*see Table 2*). The following semester showed statistically significant differences in reports of depressive symptoms between African American men (*Mdn*

= 9) and White men (*Mdn* = 11), *U* = 10359, $p < 0.000$ as well as compared to African American women (*Mdn* = 11), *U* = 9327, p <0.000.

Table 2: Comparison of MHD Symptomology of African American Men to White Men and African American Women by Year

Year	*African American Men (Mdn)*	*White Men (Mdn)*	*U*	*Z*	*P-value*	*African American Women (Mdn)*	*U*	*Z*	*P-value*
					Anxiety				
1F	6	6	23923	-0.368	0.713	7	10506.5	-4.003	<0.000
1S	5.5	7	9903.5	-5.305	<0.000	7	8840	-4.9	<0.000
2S	4.5	6	2064.5	-4.931	<0.000	6	3486	-3.193	0.001
3S	5.5	8	757	-5.645	<0.000	6	1981	-3.148	0.002
4S	4	7	562.5	-3.819	<0.000	7	792.5	-3.941	<0.000
					Depression				
1F	9	9	25003	-0.346	0.729	10	14458.5	-2.476	0.013
1S	9	11	10359	-7.717	<0.000	11	9327	-7.45	<0.000
2S	9	11	2946	-6.037	<0.000	11	3015	-5.837	<0.000
3S	9	11	2946	-6.037	<0.000	11	3015	-5.837	<0.000
4S	9	10	1318.5	-1.42	0.156	11.5	913	-3.585	<0.000

Junior year presents a similar trend showing median depressive symptoms scores significantly lower for African American men (9) compared to White men (11), *U* = 2946, $p < 0.000$, and African American women (11, *U* = 3015, $p < 0.000$). During spring semester of junior year, African American men (9) showed lower median depressive symptom scores than White men (11), *U* = 2946, $p < 0.000$ and African American women (11), *U* = 3015, $p < 0.000$). In Year 4, depressive symptom scores were only statistically significantly different between African American men (9) and women (11.5), *U* = 913, $p = <0.000$.

Service Utilization

Group comparisons were conducted between African American men and White men, as well as between African American men and women. Chi Square Tests (see Table 3) were

conducted to assess differences in utilization between groups. Only individuals from high-level groups (i.e. endorsement of symptoms at or above 75th percentile) were compared.

Utilization for those with High Level Anxiety Symptoms

During spring semester of freshman year, the percentage of African American men (20.4%) utilizing counseling services were lower compared to White men (37.76%), $p = 0.024$. Similarly, White men (N = 60) utilized recreational sports at higher rates compared to African American men (N = 31), $p < 0.000$). Of the 164 African American women who reported high levels of anxiety, only 42.7% reported utilization of recreational sports which is lower than that of African American men (63.3%), $p = 0.011$. During their sophomore year, there were differences in utilization of services of The Well where African American women's (33.1%) rates were higher than African American men (10.5%), $p= 0.047$. During junior year, there were significant differences in utilization of health services between African American men (27%) and African American women (81.9%), $p = 0.002$. By Senior year, similar results show that the percentage of African American women (86.4%) utilizing used health services were higher compared to African American men (66.7%), $p = 0.022$. African American men (74.1%) also show higher rate of recreational sports utilization compared to White men (50.8%), $p=0.042$.

Utilization for those with High Level Depressive Symptoms

Freshman year showed significant differences between African American men (63.3%) who used recreational sports and White men (37.6%), $p < 0.000$, as well as compared to African American women (34.1%), $p < 0.000$.

Table 3: Comparison of Service Utilization for Groups by Mental Health Symptom and Year

		Anxiety							
YR	**Group/N***	**UCS**		**USHS**		**The Well**		**Rec Sports**	
		%	**Chi-Sq/P**	**N**	**Chi-Sq/P**	**N**	**Chi-Sq/P**	**N**	**Chi-Sq/P**

1S	**African American Men (49)**	20.4		57.1		24.5		63.3	
	White Men (186)	37.76	x_2 (1) = 5.12, p = 0.02	58.1	x_2 (1) = 0.01, p = 0.90	22.0	x_2 (1) = 0.13, p = 0.71	32.3	x_2 (1) = 15.71, p = <0.000
	African American Women (164)	20.10	x_2 (1) = 0.002, p = 0.96	58.5	x_2 (1) = 0.03, p = 0.86	17.1	x_2 (1) =1.361, p = 0.243	42.7	x_2 (1) = 6.41, p. = 0.01
2S	**African American Men (19)**	21.1		52.6		10.5		57.9	
	White Men (105)	27.6	x_2 (1) = 0.35, p = 0.55	65.7	x_2 (1) = 1.19, p = 0.27	26.7	x_2 (1) = 2.50, p = 0.15	48.6	x_2 (1) = 0.55, p = 0.45
	African American Women (118)	22	x_2 (1) = 0.009, p = 1.000	72.0	x_2 (1) = 2.89, p = 0.08	33.1	x_2 (1) = 3.95, p = 0.04	48.3	x_2 (1) = 0.60, p = 0.43
3S	**African American Men (45)**	28.9		60		33.3		62.2	
	White Men (107)	43.0	x_2 (1) = 2.65, p = 0.10	68.2	x_2 (1) = 0.95, p = 0.32	31.8	x_2 (1) = 0.03, p = 0.85	51.4	x_2 (1) = 1.49, p = 0.22
	African American Women (144)	32.6	x_2 (1) = 0.22, p = 0.63	81.9	x_2 (1) = 9.24, p = 0.002	40.3	x_2 (1) = 0.69, p= 0.40	54.9	x_2 (1) = 0.75, p = 0.384
4S	**African American Men (27)**	37		66.7		40.7		74.1	
	White Men (61)	41	x_2 (1) = 0.12, p = 0.72	72.1	x_2 (1) = 0.26, p = 0.60	32.8	x_2 (1) = 0.51, p = 0.47	50.8	x_2 (1) = 4.15, p = 0.04
	African American Women (81)	42.0	x_2 (1) = 0.20, p = 0.65	86.4	x_2 (1) = 5.23, p = 0.02	38.3	x_2 (1) = 0.05, p = 0.82	61.7	x_2 (1) = 1.35, p = 0.24
				Depression					
1S	**African American Men (60)**	30		61.7		25		63.3	
	White Men (189)	34.40	x_2 (1) = 0.39, p = 0.53	55	x_2 (1) = 0.81, p = 0.36	21.2	x_2 (1) = 0.38, p = 0.53	37.6	x_2 (1) = 12.28, p = <0.000
	African American Women (173)	22	x_2 (1) = 1.57, p = 0.20	54.9	x_2 (1) = 0.82, p = 0.36	15	x_2 (1) = 3.05, p = 0.08	34.1	x_2 (1) = 15.66, p < 0.000
2S	**African American Men (30)**	16.7		63.3		26.7		63.3	
	White Men (128)	25	x_2 (1) = 0.94, p = 0.33	60.2	x_2 (1) = 0.10, p = 0.74	25	x_2 (1) = 0.03, p = 0.85	48.4	x_2 (1) = 2.15, p = 0.14
	African American Women (99)	25.3	x_2 (1) = 0.95, p = 0.32	70.7	x_2 (1) = 0.58, p = 0.44	34.3	x_2 (1) = 0.61, p = 0.43	47.5	x_2 (1) = 2.31, p = 0.12
3S	**African American Men (27)**	33.3		59.3		29.6		55.6	

	White Men (100)	36	x^2 (1) =.06, p = .79	71	x^2 (1) =1.35, p = 0.24	22	x^2 (1) = 0.68, p = 0.40	45	x^2 (1) = 0.95, p = 0.33
	African American Women (105)	32.4	x^2 (1) =.009, p = 0.92	79.0	x^2 (1) = 4.48, p = 0.03	45.7	x^2 (1) = 2.27, p = 0.13	55.2	x^2 (1) = 0.01, p = 0.97
4S	African American Men (7)	36.8		68.4		42.1		68.4	
	White Men (76)	39.5	x^2 (1) = 0.04, p = 0.83	67.1	x^2 (1) =.012, p = 0.91	31.6	x^2 (1) = 0.75, p = 0.38	52.6	x^2 (1) = 1.53, p = 0.215
	African American Women (69)	42.0	x^2 (1) = 0.16, p = 0.68	92.8	x^2 (1) = 8.06, p = 0.01	40.6	x^2 (1) = 0.01, p = 0.90	58.0	x^2 (1) = 0.67, p = 0.410

*Sample size reflects those who are in the "high" level group for anxiety and depressive symptom endorsement

Assessment of health services utilization showed higher rates for African American women (79%) compared to African American men (59,3%), p = 0.034, during junior year. During senior year, African American men (68.4%) reported lower utilization of health services compared to African American women (92.8%), p = 0.011.

Discussion

This study is one of the first to examine the prevalence of anxiety and depressive symptoms longitudinally and by sex and race simultaneously among college students. The aim was specifically to ascertain prevalence rates and rates of health services utilization among university-enrolled, African American men and compare these rates to university-enrolled, African American women and White men. Among those who completed the surveys, results showed reporting rates greater than 60% for African American men, White men, and African American women during their Freshman year. By their senior year, this rate remained higher than 60% for African American women and White men but dropped below 50% for African American male students. These findings somewhat align with the current literature base (Assari & Caldwell, 2017).

Firstly, it is difficult to ascertain if the differences in rates are due to underreporting or lack of reporting. In the mental health literature, it is shown that African American men may be experiencing mental health symptoms at similar rates to their counterparts (OMH, 2017); however, it is uncertain how many African American men are actually suffering from mental health symptoms as they often underutilize services (Hudson, Eaton, Banks, Sewell, & Neighbors, 2016; Novak, Peak, Gast, & Arnell, 2019; Vogel, Wester, Hammer, & Downing-Matibag, 2014). In addition, based on recent studies, this difference in rates may be due to educational disparities, such as low enrollment and retention and high drop-out among African American men (McDaniel, DiPrete, Buchmann, & Shwed, 2011). With enrollment rates and drop-out rates remaining high among African American men (American Psychological Association, 2012; Davis, Jacobsen, & Ryan, 2015), further research is needed to ascertain whether mental health prevalence rates on a college campus are impacted by these educational disparities or whether African American men's endorsement of such symptoms contributes to their inability to continue in higher education (Douglas & Arnold, 2016). Both avenues would provide valuable information for campus practitioners and public health professional who wish to address poor mental health among African American men the gap in higher education enrollment.

Overall, reporting of endorsement of at least on depressive symptom is concerningly high among all groups. During freshman year, we see even higher rates where approximately 80% of individuals from all groups are reporting experiences with at least one symptom. As students approach the end of their senior years, reports of experiences with depressive symptoms decrease significantly for African American men but remain high and steady for their male and female counterparts. From the literature, it is evident that depression is common among students on

college campuses (Eisenberg, Gollust, Golberstein, & Hefner, 2007; Wright et al., 2013). According to Eskin and colleagues (2016), approximately 18-30% of emerging adults in university settings will suffer from depression (Eskin et al., 2016). Emerging adults on a college campus are at increased risk of developing psychological distress due to various stressors that increase their risk of developing poor mental health (Stallman, 2010). Interestingly, however, anxiety is typically more common, in general, according to recent statistical evidence (WHO, 2017). It may be beneficial for future research to examine and understand why depression is more common on a college campus like this one. Similarly, further research is needed to ascertain prevalence rates of depression and anxiety among college students and determine what about the college experience may make depression more commonplace than anxiety.

Comparisons regarding rates of utilization showed that African American men, though reporting high levels of symptoms, still utilized counseling services and health services at lower rates compared to African American women and White men. Also, among this sample, rates of utilization for recreational sports were higher among African American men compared to others, suggesting that African American men may be resorting to alternative coping measures, such as physical activity (Goodwill, Watkins, Johnson, & Allen, 2018). This finding complements current literature. Studies show that even when experiencing high levels of stress or dealing with a mental health issue, African American men refrain from seeking formal help; however, will engage in other coping strategies, such as physical activity, talking to loved ones, or self-reliance (Goodwill et al., 2018; Hayward & Krause, 2015). While this is consistent with other findings, it is important to note that this study is able to look at utilization rates specific to African American men and offer insight into their preference for various services.

Limitations

Though the data from this analysis provides significant results, there are limitations to consider. Primarily, this is a secondary data analysis and the current researchers were not involved in data collection; however, the measures included have been utilized and adapted for specific use in studies concerning the proposed issues and college students.(Dick et al., 2014) Further, the dataset used for this study has a breadth of data for analysis, allowing us to look at trends and changes within the population over time. Sample size and attrition are also limitations of this study. As presented, each group, African American men being the smallest, show a high response rate in Year 1; however, by senior year, size decreases. This is expected as current literature shows that African American men are less likely to participate in research and less likely to return to school each year and graduate. Another limitation lies in the focus of three ethnic groups, limiting the generalizability of the results. However, these results can provide evidence for future studies focusing on minority populations.

Public Health Implications

The significance of the findings for this study is not overpowered by the limitations and offers numerous avenues for future research. Future work should aim to conduct similar analyses, examining prevalence of symptoms and help-seeking among emerging adults, specifically African American men. Research and prevention efforts should also aim to conduct this research on varying campuses ensuring data is reflective of many cultures and backgrounds of individuals from other universities. Mainly, future research should examine prevalence across multiple campuses, including but not limited to community colleges, historically African American colleges, and 2-year universities, predominantly white institutions and those in urban and rural areas. Such research evidence can guide the development of tailored programs effective in addressing campus level risk/protective factors among specific race and gender groups.

This study also looked at different sources of health service utilization. Some studies either explore one source or calculate a poly variable for its analysis (Bourdon et al., 2018). Though this is beneficial, researchers should aim to separately explore utilization of multiple sources to ascertain which health services are more prevalent for certain populations. For example, it is well-documented in the literature that African American boys and men refrain from using formal services (Moorhead et al., 2013). Research that takes this into account may better service this population and others alike offering effective, non-traditional ways for mental prevention, as well as sustainability of future programs. In addition, this approach can complement other frameworks and strategies geared towards effective health behavior change (Glanz, Rimer, & Viswanath, 2015).

This study provides some evidence to support that, during incoming years, African American men are experiencing mental health symptoms are similar rates compared to their counterparts; and that depressive symptoms are more prevalent than anxiety symptoms. Future research should aim to understand this and examine social and environmental factors that exacerbate mental health symptoms, as well as those that's buffer the effect of stress on this population. A better understanding of this will aid in the development of program and initiatives that are tailored and well-rounded and better able to address unique needs of minority student populations. This will be a step forward in reducing health and educational disparities on college campuses and other educational contexts.

Researchers should aim to utilize mixed methods, allowing researchers to capture a more comprehensive outlook (Tariq & Woodman, 2013; Tashakkori & Teddue, 2003) on the experiences of African American men. The inclusion of a quantitative approach would allow researchers to determine and assess relationships (Rahman, 2017) among social and

environmental factors that are most predictive of mental health risk and related outcomes among vulnerable populations such as African American men on a college campus. As datasets for quantitative approaches are often large, it would further allow research to ascertain trends over time which provides a unique perspective (Rahman, 2017). The inclusion of a qualitative approach would allow researchers to understand and analyze similar factors but also give voice to the participants (Matveev, 2002; Rahman, 2017), creating opportunities for African American men to engage in discussion that may not otherwise occur. This will provide insight for campus health professionals who wish to understand societal and community level factors that play a role in African American men's acceptance of or rejection of mental health issues African American male students may be facing. Furthermore, a mixed methods approach is commonly used in social science research, ensuring research is designed to capture evidence that may not otherwise be captured by one method (Creswell & Clark, 2007; Tariq & Woodman, 2013; Tashakkori & Teddue, 2003).

Conclusion

The evidence-base for understanding mental health risk and utilization of mental health services are limited, lacking data specific to African American men on a college campus. Therefore, the key findings from this study contribute to the literature and advance the field of mental health. Major findings suggested that African American men are experiencing symptoms associated with anxiety and depression, and at similar rates to their male and female counterparts. Further analyses showed utilization of mental health services on campus were low among African American men compared to their peers. Among this sample, African American men did utilize recreational sports at higher rates compared to White men and African American women. Importantly, amongst African American men who reported high endorsement of anxiety

or depressive symptoms, they underutilized available campus health resources. Such findings can help inform future efforts geared towards improving help-seeking among this vulnerable population and preventing mental health concerns among African American men and men like them. It is critical that future health promotion and prevention efforts continue to address this and health and educational disparities remain persistent for African American men.

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Chapter 3

Paper 2

Examining Risk and Protective Factors Associated with Mental Health Symptoms and Rates of Help-Seeking among University-Enrolled, African American Men

Abstract

Background. African American men on college campuses are at increased risk of developing mental health symptoms and underutilize mental health resources. However, there is little research focused on this vulnerable population.

Aims. The objective of this study is to examine social and environmental factors that serve as risk, protective, and other factors associated with anxiety and depressive symptoms, as well as the likelihood of these factors impacting help-seeking.

Methods. Data were analyzed from a longitudinal survey at a large, urban, public university. Measures included: depression and anxiety as measured by the Symptom Checklist 90; campus health service utilization (counseling center, health services, wellness center, etc.); risk factors (stressful life events and self-report financial status); protective factors (social support assessed by Survey of the RAND Medical Outcomes and religion); and associated factors (alcohol, cannabis use, and GPA). Descriptive analyses and multiple linear regressions were conducted to examine relationships between these factors and anxiety/depressive symptoms and how these symptoms affect help-seeking behavior.

Results. Data from approximately 681 African American male students were included in this analysis. In Years 1 and 2, regression analyses showed that stressful life events statistically significantly predicted higher anxiety symptoms and depressive symptoms. Cannabis use statistically significantly predicted higher depression in Year 2. Also, in Year 1, the regression showed that religiosity predicted lower anxiety and depressive symptoms. None of the risk and protective factors predicted campus service utilization.

Conclusions. The key findings indicate that African American men's mental health is predicted significantly by stressful live events and utilization is not predicted or associated with risk and

protective factors. Further research is needed to improve mental health and help-seeking among these men.

Introduction

In the United States, over 45 million adults ages 18 and older experienced a serious mental illness in 2017 (Administration, 2018). Depression and anxiety, specifically, affect an estimated 26% of US adults (Administration, 2019; School, 2017). The underlying causes of depression and anxiety are not explicitly stated in the literature; however, the onset of these disorders are associated with numerous risk factors (Gress-Smith, Roubinov, Andreotti, Compas, & Luecken, 2015; Hudson, Eaton, Banks, Sewell, & Neighbors, 2016; Plowden, Thompson Adams, & Wiley, 2016). Of these factors, psychological distress is among those most predictive, affecting over 3.2% of the US adult population (Marko, Linder, Tullar, Reynolds, & Estes, 2015).

The Centers for Disease Control and Prevention report increases in mental health disorders among young adult, African American men within the last four years (CDC, 2015). According to literature, young African American men, an especially marginalized population, represent a subgroup of emerging adults at increased risk of developing depression and anxiety due to their overexposure to experiences with serious psychological distress (Mouzon, Taylor, Nguyen, & Chatters, 2016; Nguyen et al., 2017). As these men enter college, this increased risk persists. Recent studies show that as African American men enter college, risk of mental health disorders, such as depression and anxiety, increase, having daunting effects on individual health outcomes, everyday functioning, and academic success (Barry, Jackson, Watkins, Goodwill, & Hunte, 2017).

Despite high risk for experiencing poor mental health, college students, in general, do not utilize mental health services at optimal rates (Marsh & Wilcoxon, 2015). According to American College Health Association's National College Health Assessments (NCHA) from

2016, less than 40% of students used or sought out psychological or mental health services within the last year (ACHA, 2016). In particular, despite being at higher risk for mental health symptoms, university-enrolled, African American men are not seeking help even when experiencing high levels of stress and anxiety, impacting their academic performance (ACHA, 2012, 2016), as well as prolonging adverse experiences resulting from mental health symptoms (Lincoln, Taylor, Watkins, & Chatters, 2011) and co-morbid conditions (Goldman-Mellor et al., 2014; Tuisku et al., 2014).

Risk Factors

Psychological distress is a significant risk factor associated with poor mental health (Caron et al., 2012). According to recent studies, psychological distress has a bidirectional relationship with mental health disorders, and is also a major risk factor of depression and anxiety (Schmitz & Crystal, 2000; Wright, Crawford, & Del Castillo, 2009). Psychological distress is a negative reaction resulting from stressful conditions that provoke feelings of emotion and hopelessness (Lincoln et al., 2011; Wright et al., 2009). These feelings decrease a person's ability to function, as well as their psychological well-being (Lincoln et al., 2011; Marko et al., 2015).

Stressors associated with psychological distress and poor mental health among African American men are well-documented (Lincoln et al., 2011; Matthews, Hammond, Nuru-Jeter, Cole-Lewis, & Melvin, 2013; Plowden et al., 2016; Xanthos, Treadwell, & Holden, 2010). One major stressor is racial discrimination in which African American men are disproportionately impacted (Xanthos et al., 2010), increasing their risk of adverse experiences, such as living below the poverty level and in poor, unsafe neighborhoods, and disparities in health (McNeil, Fincham, & Beach, 2014; Miller & Taylor, 2012; Plowden et al., 2016; Xanthos et al., 2010).

Importantly, racial discrimination has often been linked to many stressful life events including unfair treatment from police and in school, exposure to violence (Aymer, 2016; Lauren, 2018), and financial distress (Tucker-Seeley, Mitchell, Shires, & Modlin, 2015). These factors create challenging social situations for African American men and, ultimately, promote poor social behaviors, such as maladaptive coping with substances (Chae et al., 2017; Hudson et al., 2016). In addition, such experiences can lead to disproportionate exposure to psychological distress and development of mental health symptoms (Gibbons et al., 2014; Hope, Hoggard, & Thomas, 2015). According to mental health literature (Mincey, Alfonso, Hackney, & Luque, 2015), African American men, often resort to substances to cope with this stress and stressors and is more common among men from low-income communities (Watkins, Walker, & Griffith, 2009).

For African American men in college, such stressful life events have been tied to the transition from adolescence to adulthood (Schulenberg & Zarrett, 2006; Schwartz & Petrova, 2019; Tanner, 2006). As these men are transitioning, they are introduced to the unique demands of academic life, requiring they form a sense of independence and belongingness and search for social support (Strayhorn, 2008), which proves to be quite strenuous (Blanco et al., 2008; Eskin et al., 2016). According to literature, such stressors can lead to depressive symptoms, poor academic performance, and increased risk of dropping out (Roach, 2001) among these men. This, ultimately, would perpetuate the increased risk of experiencing challenging social situations, stressful life events, and financial distress (Elman & Chesters, 2017; Reeves & Rodrigue, 2017; Xanthos et al., 2010). Despite risk factors being well-documented, there is little research examining university-enrolled, African American men’s experience with psychological distress and poor mental health symptoms. This is a critical gap that must be addressed.

Protective Factors

It also important to understand how certain social and environmental factors can protect African American men against the development of poor mental health (Golden, McLeroy, Green, Earp, & Lieberman, 2015), lessening the likelihood of developing psychological distress. According to many studies, social support (McNeil et al., 2014; Naslund, Aschbrenner, Marsch, & Bartels, 2016; Pössel et al., 2018) and religion (Bierman, 2006; Lorenz, Doherty, & Casey, 2019) are common factors serving as buffers for stressors associated with racial discrimination, unfair treatment and mental health among and towards African American men.

Social support is the most commonly researched construct, as it serves as a broad protective factor for psychological health (Edmond, Granberg, Simons, & Lei, 2014; McNeil et al., 2014; Miller & Taylor, 2012). According to Edmond, Granberg, Simons, and Lei (2014), supportive and emotionally sound relationships are positively associated with improved health, and increased ability to cope with strenuous circumstances, such as racial discrimination (Edmond et al., 2014). The social relationships African American men form can influence their health behaviors and health outcomes, mitigating negative experiences with stress and improving mental health (Edmond et al., 2014). A study conducted by McNeil, Fincham, and Beach (2014), reported that men's perceived discrimination and depressive symptoms are positively associated with spousal support, serving as a buffer (McNeil et al., 2014). Further analysis suggested that inadequate spousal support is associated with higher levels of depression and perceived discrimination (McNeil et al., 2014). Despite its potential for mitigating stressful conditions, there is little research examining roles of social support in decreasing mental health risk among African American male college students.

Religion is a valued method of coping with adverse life experiences and, even, medical conditions among many African American communities and populations (Hayward, Krause, &

Pargament, 2017). According to studies, among minority men, religion is not only a preferred method of coping (Hayward & Krause, 2015) but has also been associated with lower levels of mental health symptoms (Bierman, 2006). In the quantitative literature, among approximately 400 African American individuals, it was found that religion had. A negative relationship with depressive symptoms among men and women, particularly with a stress-buffering effect on men (Brown, Ndubuisi, & Gary, 1990). Importantly, there has been research examining the inclusion of religion in prevention efforts geared towards improved mental health (Dein, 2018). There is more research needed to understand the relationship between religion and mental health symptoms. Such understanding will provide direction for future research that wishes to focus on protectives factors and include religion in prevention efforts.

Purpose of Study

Current studies examining mental health among African American men are limited, and rarely focus on the mental health of university-enrolled, African American men. More research is needed to understand the avenues of onset and, ultimately, treatment of mental health symptoms among young, African American men. Such evidence would allow researchers to develop and implement prevention and policy efforts to improve mental health among these men. To aid in this effort, this study aimed to examine the relationship between risk, protective, and associated factors and mental health symptoms among university-enrolled, African American men. This analysis also aims to assess how these factors relate to their likelihood of seeking help. The following hypotheses are predicted and the following research question is assessed:

H_1: Among risk factors, there will be positive relationships between stressful life events and financial stress and reports of symptoms.

H_2: Among protective factors, there will be negative relationships between social support and religiosity and reports of symptoms.

H_3: Among associated factors, there will be: (a) positive relationships between alcohol use, cannabis use and reports of symptoms; and, (b) a negative relationship between academic achievement (i.e. GPA) and reports of symptoms.

RQ: How do the risk or protective factors identified above impact the likelihood of seeking help (i.e. utilizing campus health services)?

Our understanding of the mental health experiences of African American men on a college campus is minimal, making it difficult to effectively address the health and educational disparities that impact this population.

Methods

A secondary data analysis was conducted utilizing data from a university-wide, longitudinal survey at a public university. This survey assesses associations between genetic and environmental factors, and substance use, health behaviors and emotional health among college students (Dick et al., 2014). Participants for this survey are incoming freshman, 18 and older, recruited via email to complete an initial survey, followed by a follow-up survey every Spring. Participants are compensated a t-shirt and $10 after each assessment survey. Study data were collected and managed using REDCap (Harris et al., 2009). Participants in the original dataset reflect general demographics of the university in which the data is derived. Overall, more than 12,000 students have enrolled in the project, consisting of 5 cohorts with an overall response rate above 55%. Additional details on the study can be found in the introductory article (Dick et al., 2014).

Measures

The survey includes various questionnaires assessing a number of behavioral, emotional, and mental health topics. To reduce participant burden, certain surveys were abbreviated.

Mental Health Symptoms. Abbreviated scales from The Symptom Checklist-90 (Derogatis & Cleary, 1977). were used to examine anxiety and depressive symptoms occurring within the last 30 days. Four questions measured anxiety symptoms, inquiring to what degree students experience nervousness or shakiness inside; suddenly scared for no reason; feeling fearful; and spells of terror or panic ($\alpha = 0.85$) (Dick et al., 2014). Four questions also measured depressive symptoms, inquiring to what degree students experience feeling blue; worrying too much about things; feeling no interest in things; and feeling hopeless about the future ($\alpha = 0.89$) (Dick et al., 2014). Responses were on a Likert-type scale, ranging from 0 = "not at all," 1 = "a little bit," 2 = "moderately," 3 = "quite a bit," to 4 = "extremely." For this study, sum scores were created separately for anxiety and depression symptomology. Higher scores indicate higher levels of endorsement for anxiety or depressive symptoms.

Campus Service Utilization. Numerous services on a college campus are available and accessible by students, offering resources for mental health needs and comorbid conditions. To assess utilization of campus services and resources, the following four services were included: University Counseling Services, University Health Services, The Wellness Resource Center (The Well) and Recreational Sports. The survey examines utilization of these services for every spring semester to ensure students have had sufficient opportunity to use each service (or not). Response categories were "yes" and "no." A response of "yes" suggested that individuals have used that particular service since they have been enrolled. A sum score representing total number of services used was created for this study (Bourdon, Moore, Long, Kendler, & Dick, 2018).

Risk Factors. To assess relevant risk factors of stressful life events and financial stress, potential non-traumatic stressful life events (Kendler, Karkowski, & Prescott, 1999) and financial stress were examined. SLEs included 14 items and consisted of various topics or questions asking experiences within the last 12 months related to a broken engagement, someone close passing away, serious illness, experiencing burglary, trouble with the police, etc. A sum score was created for each individual based on their endorsement of total exposure to the events. There are two categories for examining financial stress. First, two separate demographic questions are included, asking about education level (high school, college, GED) of the student's guardian who functioned as their mother or father figure. The items asked, "for the woman who functioned as the student's mother, how far in school did she go." The same question was asked for the father. Response options ranged from "There was no one who functioned as a mother in my household" to "graduated college or university." Items were recoded to ensure lowest level of education started at 0 and highest level ended at 12. In addition, data were included from three, self-report items assessing whether students felt they were able to afford the opportunity to engage in leisure activities of their liking, clothing they needed, and the food they should have. Response options included 0 = "Never", 1 = "Seldom", 2 = "Sometimes" and 3 = "Often." A sum score was created for those who answered at least two of these items.

Protective Factors. Social support and religiosity were examined as protective factors. Social Support is assessed by the Survey of the RAND Medical Outcomes Study (Hays, 1995). Three items measured to what degree students felt they had someone: to give advice when experiencing a crisis; to get together with for relaxation; and, to love them when needed within the past 12 months (Kendler et al., 1999). Participants were given the response options of 0 = "none of the time," 1 = "some of the time," 2 = "most of the time," or 3 = "all of the time"

(Kendler et al., 1999). A sum score was calculated for individuals who answered at least two of the three items with lower scores indicating less support. Two items were included and summed to asses religiosity (Kendler, Gardner, & Prescott, 1997). One question asked "how important are your religious or spiritual beliefs in your daily life" with responses including: 4= "very important", 3 = "somewhat important", 2 = "not very important", and 1 = "not at all important." (Kendler et al., 1997) Another question asked "how often do you seek spiritual comfort" when you have problems with responses including: 3 = "almost always", 2 = "sometimes", 1 = "rarely", and 0 = "never."

Associated Factors. Associated factors included alcohol consumption, cannabis use and academic achievement. To assess alcohol consumption, a scale consisting of items from the Alcohol Use Disorder Identification Test (Pradhan et al., 2012) was used. This scale measured frequency and quantity items associated with alcohol consumption within the past 30 days (Salvatore et al., 2016). Calculations included: data to compute grams of ethanol consumed per month; number of days a student drank alcohol in the past 30 days; and, if those who had a drink in the past 30 days, was it 1 to 10 or more drinks on a typical day. Students were asked to specify number of drinks with responses ranging from "1 or 2," "3 or 4," "5 or 6," "7, 8, or 9," and "10 or more" which was converted to midpoint ranges. This had the following options: never = 0; monthly or less = 0.5; 2 to 4 times a month = 3; 2 to 3 times a week = 10.7; and 4 or more times a week = 23.54. The responses to the number of drinks per drinking occasion were also converted: 1 or 2 drinks = 1.5; 3 or 4 = 3.5; 5 or 6 = 5.5; 7, 8, or 9 = 8; and 10 or more = 15.5. Number of days participants drank was multiplied by the number of drinks per occasion, and this was multiplied by 14 (rough amount of grams in a standard drink) (Salvatore et al., 2016).

Cannabis use (Heatheron, Kozlowski, Freckers, & Fagerstrom, 1991) was assessed on a three-point scale: "none," "at least once," and "six or more times," asking students how often they used non-medical cannabis within the past 12 months. For academic achievement, participants consented to having their University cumulative GPA data (university student ID numbers) matched to Spit for Science survey data (participant ID numbers). This information is not self-reported.

Statistical Analyses

All data were analyzed using SPSS 26.0 or older. This analysis, however, only includes data for African American male students from their freshman and sophomore years. This allowed us to ascertain trends in predictors associated with baseline measures and outcomes, as well as ensure sample was representative of men on the campus. Data for depressive, anxiety symptoms, and help-seeking behavior were summarized for African American male students. Basic descriptives are analyzed separately for freshman year (Y1S) and sophomore spring semester (Y2S). Bivariate correlations were conducted to determine multicollinearity issues or concerns between variables and outcomes of interest.

Multiple linear regression analyses were conducted to test the study's hypotheses, including three regression models per mental health symptom category (anxiety and depression) and by year (freshman and sophomore year). Model 1 represents the risk and protective factors that could predict anxiety and depressive symptoms among African American men during their Freshman and Sophomore years. As we see in the literature, there are various behavioral health outcomes that are associated with mental health risk and the aforementioned risk and protective factors (Kendler et al., 1997; Kogan, Cho, Brody, & Beach, 2017; Kogan, Cho, Oshri, & MacKillop, 2017). To assess the impact of behavioral health outcomes on mental health risk,

Model 2 included associated outcomes (i.e. alcohol consumption, cannabis use). Similarly, Model 3 included GPA, allowing us to ascertain how GPA might impact or predict mental health risk. A parallel set of regression models was also conducted to assess whether these same risk and protective factors predicted campus service utilization use among this population by year.

Results

Descriptive Statistics. In *Table 1*, results from descriptive analyses are summarized for each variable of interest.

Table 1: Descriptives for Variables and Outcomes for Freshman Year and Sophomore Year African American Men

	Anx	*Dep*	*CU*	*FSSR**	*SLEs*	*MPE**	*FPE**	*SS*	*Religion**	*Alc*	*Cann*	*GPA*
						Year 1						
N	493	490	191	226	501	657	611	437	490	408	466	518
Mean	1.89	4.36	1.57	3.72	1.75	7.00	6.76	5.62	5.70	214.39	0.67	2.95
Median	1	4	1	4	1	8	8	6	6	38.5	0	3.03
Min	0	0	0	0	0	0	1	0	2	0	0	0
Max	16	16	4	9	10	9	9	9	8	5108	2	4
SD	2.70	3.60	1.05	2.55	1.80	2.03	2.14	2.40	1.92	494.59	0.82	0.74
						Year 2						
N	267	267	102		271			157		191	266	444
Mean	1.41	3.89	1.57		1.57			5.92		340.54	0.77	3.00
Median	0	3	2		1			6		147	0	3.08
Min	0	0	0		0			0		0	0	0.31
Max	12	16	4		11			9		5108	2	4
SD	2.30	3.61	1.05		1.83			2.44		654.19	0.90	0.63

*Some variables were only assessed at baseline under the assumption that data does not change over the years.
Note: SD = standard deviations. Anx = anxiety; Dep = depression; CU = Campus Service Utilization; FSSR = Financial Self-report Status; SLE = Stressful life events; MPE = Mother's education level; FPE = Father's education level; SS = Social support; Alc = Alcohol consumption; Cann = Cannabis use

Predicting Anxiety Symptoms. A linear regression was conducted to examine the associations between risk and protective factors and anxiety symptoms (*see Table 2*).

Year 1. Model 1 showed stressful life events (B = 0.39, SE = 0.09, $p < 0.000$ were associated with higher levels of anxiety symptoms and could statistically significantly predict anxiety symptoms. In Model 2, associated factors were included. According to the regression, religiosity was associated with lower levels of anxiety symptoms.

Table 2: Regression Analyses Showing Relationship Between Risk, Protective and Associated Factors and Anxiety Symptoms

Model 1				***Model 2***				***Model 3***			
Year 1											
	B	*SE*	*p*		*B*	*SE*	*p*		*B*	*SE*	*p*
(Constant)	1.37	1.13	0.22	**(Constant)**	2.98	1.21	0.01	**(Constant)**	2.62	1.46	0.07
FSR	0.06	0.07	0.41	**FSR**	-0.02	0.07	0.76	**FSR**	-0.04	0.08	0.56
SLEs	0.39	0.09	0	**SLEs**	0.32	0.1	0.002	**SLEs**	0.31	0.10	0.002
MPE	-0.02	0.08	0.81	**MPE**	-0.13	0.086	0.11	**MPE**	-0.14	0.08	0.11
FPE	0.04	0.08	0.62	**FPE**	0.11	0.085	0.19	**FPE**	0.12	0.08	0.16
SS	-0.02	0.07	0.76	**SS**	-0.09	0.078	0.23	**SS**	-0.09	0.08	0.23
Religiosity	-0.10	0.09	0.27	**Religiosity**	-0.23	0.1	0.01	**Religiosity**	-0.25	0.10	0.013
				Alcohol	0	0.001	0.45	**Alcohol**	0	0.001	0.39
				Cannabis	0.20	0.23	0.36	**Cannabis**	0.23	0.24	0.32
								GPA	0.17	0.26	0.51
Year 2											
(Constant)	3.42	1.37	0.01	**(Constant)**	4.42	1.50	0.004	**(Constant)**	3.547	2.06	0.091
FSR	-0.12	0.08	0.15	**FSR**	-0.16	0.10	0.104	**FSR**	-0.209	0.11	0.062
SLEs	0.48	0.11	0	**SLEs**	0.35	0.12	0.007	**SLEs**	0.375	0.14	0.013
MPE	-0.17	0.11	0.14	**MPE**	-0.23	0.12	0.055	**MPE**	-0.254	0.13	0.056
FPE	-0.06	0.10	0.58	**FPE**	-0.10	0.11	0.337	**FPE**	-0.116	0.12	0.355
SS	0.007	0.09	0.94	**SS**	-0.02	0.10	0.833	**SS**	-0.01	0.11	0.929
Religiosity	-0.13	0.12	0.26	**Religiosity**	-0.12	0.12	0.32	**Religiosity**	-0.166	0.13	0.231
				Cannabis	0.25	0.29	0.392	**Cannabis**	0.407	0.31	0.206
				Alcohol	0	0	0.699	**Alcohol**	0	0.001	0.844
								GPA	0.387	0.43	0.374

Stressful life events were associated with higher levels of anxiety symptoms, as well. From this model, religiosity (B = -0.23, SE = 0.1, p = 0.019) and stressful life events (B = 0.32, SE = 0.1, p = 0.002) predicted symptoms. In Model 3, cumulative GPA was added. We see that stressful life events remained associated with higher levels of anxiety and religiosity remained associated with lower levels of anxiety symptoms. The linear regression model showed stressful life events (B = 0.31, SE = 0.10, *p* = .002) and religiosity (B = 0.25, SE = 0.10, *p* = .013) remained significant predictors of anxiety symptoms.

Year 2. Model 1 showed that stressful life events (B = 0.48, SE = 0.11, p < 0.000) were associated with higher levels of anxiety and could predict symptoms in Year 2. In Model 2, mother's educational level (B = -0.23, SE = 0.12, p = 0.055) was associated with lower levels of anxiety symptoms and could predict symptoms. Stressful life events (B = 0.35, SE = 0.12, p = 0.007) were associated with higher levels of anxiety symptoms and, according to the linear regression, could predict anxiety. In Model 3, stressful life events (B = 0.37, SE = 0.14, p = 0.013) remained significantly predictive of anxiety symptoms and was associated with higher levels of anxiety.

Predicting Depressive Symptoms. A Linear regression was conducted to test whether there were relationships between risk and protective factors and depressive symptoms (*see Table 3*). It was also of interest to ascertain whether these variables were able to predict symptoms. The results are presented by Year.

Year 1. Model showed that higher levels of depression were associated with financial self-report status and stressful life events. The linear regression established that stressful life events (B = 0.33, SE = 0.13, *p* = 0.013) and financial self-report status (B = 0.21, SE = 0,10, p = 0.041) could statistically significantly predict depressive symptoms. In Model 2, financial self-

report status (B = 0.25, SE = 0.11, p = 0.036) and stressful life events (B = 0.33, SE = 0.15, p = 0.031) remained associated with higher levels of depressive and were able to predict symptoms. Religiosity (B = -0.32, SE = 0.15, p = 0.035) was associated with lower levels of depression and could predict symptoms. In Model 3, stressful life events were associated with higher levels of depression. Religiosity showed a negative relationship with depressive symptoms. The linear regression model showed stressful life events (B = 0.311, SE = 0.14, p = .039) and religiosity (B = -0.36, SE = 0.15, p = 0.17) predicted depressive symptoms.

Table 3: Regression Analyses Showing Relationship Between Risk, Protective and Associated Factors and Depressive Symptoms

Model 1				***Model 2***				***Model 3***			
					Year 1						
	B	***SE***	***p***		***B***	***SE***	***p***		***B***	***SE***	***p***
(Constant)	4.59	1.61	0.005	**(Constant)**	5.04	1.82	0.007	**(Constant)**	5.02	2.16	0.022
FSR	0.21	0.10	0.041	**FSR**	0.25	0.11	0.036	**FSR**	0.20	0.12	0.094
SLEs	0.33	0.13	0.013	**SLEs**	0.33	0.15	0.031	**SLEs**	0.31	0.14	0.039
MPE	0.05	0.12	0.661	**MPE**	0.00	0.13	0.988	**MPE**	-0.01	0.12	0.906
FPE	0.03	0.11	0.799	**FPE**	0.02	0.12	0.828	**FPE**	0.06	0.13	0.631
SS	-0.1	0.11	0.362	**SS**	-0.1	0.11	0.397	**SS**	-0.11	0.11	0.319
Religiosity	-0.25	0.13	0.065	**Religiosity**	-0.32	0.15	0.035	**Religiosity**	-0.36	0.15	0.017
				Alcohol	0	0.001	0.858	**Alcohol**	3.41E-05	0.001	0.967
				Cannabis	0.35	0.34	0.307	**Cannabis**	0.41	0.35	0.251
								GPA	0.14	0.38	0.715
					Year 2						
(Constant)	5.95	2.24	0.01	**(Constant)**	6.15	2.45	**0.015**	**(Constant)**	7.99	3.43	0.023
FSR	-0.17	0.14	0.229	**FSR**	-0.21	0.16	**0.195**	**FSR**	-0.27	0.18	0.136
SLEs	0.63	0.19	0.001	**SLEs**	0.56	0.20	**0.009**	**SLEs**	0.47	0.24	0.055
MPE	0.04	0.19	0.806	**MPE**	-0.06	0.19	**0.738**	**MPE**	-0.009	0.21	0.968
FPE	-0.14	0.17	0.408	**FPE**	-0.28	0.18	**0.127**	**FPE**	-0.36	0.20	0.079
SS	-0.18	0.15	0.225	**SS**	-0.19	0.16	**0.243**	**SS**	-0.31	0.19	0.105
Religiosity	-0.04	0.20	0.843	**Religiosity**	0.07	0.21	**0.719**	**Religiosity**	0.14	0.22	0.521
				Cannabis	1.14	0.47	**0.02**	**Cannabis**	1.08	0.52	0.045
				Alcohol	0	0.001	**0.543**	**Alcohol**	0	0.001	0.585
								GPA	-0.35	0.71	0.621

Year 2. Model 1 showed that stressful life events (B = 0.63, SE = 0.19, p = 0.001) were associated with higher levels of depression and could predict symptoms. Stressful life events and cannabis use were associated with higher levels of depressive symptoms. The linear regression established stressful life events (B = .56, SE = 0.20, *p* = .009) and cannabis use (B = 1.14, SE = 0.47, *p* = .020) predicted depressive symptoms. In Model 3, stressful life events (B = 0.47, SE = 0.24, p = 0.055) and cannabis use (B = 1.08, SE = 0.52, p = 0.045) were associated with higher levels of depressive symptoms and predicted depressive symptoms. In Model 3, stressful life events (B = 0.47, SE = 0.24, p = 0.055) and cannabis use (B = 1.08, SE = 0.52, p = 0.045) were associated with higher levels of depressive symptoms and predicted depressive symptoms.

Predicting Campus Service Utilization. Regression analyses were conducted to assess whether risk and protective factors predicted service utilization. Results are summarized in Table 4. For Year 1, results showed that religiosity (B = -0.15, SE = 0.07, p = 0.042) was associated with lower levels of utilization and predicted utilization; however, the model was not significant. For Year 2, results showed that father's education level (B = -0.13, SE = 0.06, p = 0.032) was associated with lower levels of utilization and predicted utilization; however, this model was also not significant.

Table 4: Regression Analyses Showing Relationship Between Risk and Protective Factors and Utilization

	Year 1		
	B	***Std. Error***	***P-value***
(Constant)	2.058	0.767	0.01
FSR	0.037	0.056	0.511
SLEs	0.141	0.095	0.146
MPE	-0.068	0.064	0.292
FPE	0	0.061	0.995
SS	0.096	0.062	0.126
Religiosity	-0.151	0.072	0.042
	Year 2		
(Constant)	2.576	0.855	0.004
FSR	-0.052	0.053	0.333

SLEs	0.015	0.069	0.834
MPE	0.083	0.078	0.293
FPE	-0.135	0.061	0.032
SS	0.029	0.055	0.592
Religiosity	-0.121	0.074	0.106

Discussion

The current study analyzed how risk and protective factors and other outcomes impacted university-enrolled, African American men's anxiety and depressive symptoms and campus service utilization. It was hypothesized that the risk factors (stressful life events, financial stress) would predict higher levels of anxiety and depressive symptoms, whereas protective factors (social support and religion) and reports of symptoms would predict lower levels of symptoms. We further hypothesized that associated behaviors (alcohol and cannabis use) would predict higher levels of symptoms and higher cumulative GPA would predict lower levels of symptoms.

Overall, across all years, stressful life events appeared to be a robust predictor of anxiety and depressive symptoms, which is consistent with mental health literature. Many studies (Caron et al., 2012; Gibbons et al., 2014; Watkins et al., 2009) corroborate this, suggesting higher levels of stress are associated with more mental health challenges and poorer health outcomes (Constantine, Wilton, & Caldwell, 2003; Marko et al., 2015; Stallman, 2010). As mentioned, the onset of psychological distress is linked to various stressors and risk factors, some of which African American men are disproportionately impacted by (Assari, Mistry, Caldwell, & Zimmerman, 2018; Xanthos et al., 2010). Within this study, as stressful events remain predictive of all symptoms throughout the years, it seems African American men are under high levels of stress during their freshman year. However, more research is needed to analyze what kinds of stressors these men may be dealing with.

This study aimed to address the stressor associated with financial stress which, in the literature, is a significant contributor to men's poor psychological well-being (Meyer, Castro-Schilo, & Aguilar-Gaxiola, 2014; Miller & Taylor, 2012; Xiao, Berrigan, & Matthews, 2017). From the results, financial self-report status was only able to predict depressive symptoms in Year 1 suggesting that it may be an indicator. This supports the hypotheses and mirrors current literature. According to literature, financial stress is a major risk factor (Xiao et al., 2017) for the onset of psychological distress and increases individual risk of experiencing poor mental health. Studies suggest that financial instability or low socioeconomic status is associated with higher levels of poor mental health (Williams, 2008; Xiao et al., 2017). Further analysis of financial stress included examining parental educational levels and its impact on symptoms. When associated factors were included in the regression model, only mother's educational level was predictive of lower levels of anxiety symptoms in Year 2. The model showed a negative association between mother's education and anxiety symptoms. This contributes to literature in support of finding showing that that higher levels of education is associated with better health outcomes (McDaniel, DiPrete, Buchmann, & Shwed, 2011; Xanthos et al., 2010).

It is interesting that mother's education level is associated with lower levels of anxiety, but father's educational level is not significantly associated with any outcome. This finding can be due to certain factors. For example, there is evidence to suggest that single-parent households in the US are more likely to be headed by women (Gretchen, 2018). Further, there is literature to suggest that African American men are less likely to be gainfully employed (Morial, 2007) and more likely to be socioeconomically disadvantaged (Tucker-Seeley et al., 2015). From this, it can be considered that, among this sample, either the man who functioned as the student's father is more likely to have lower educational attainment, a significant predictor of poor health

outcomes (Reeves & Rodrigue, 2017), or that the student does not have someone who functions as a father in their household. However, as this is not certain, further research is needed. Therefore, researchers should not only aim to examine relationships between parental education, as a risk factor, and mental health risk among African American men in college but also in particular to father's educational level and presence in men's lives.

During students' freshman year, religiosity was associated with lower levels anxiety and depressive symptoms and predicted symptoms. However, this is only seen when associated factors were included in the model. The negative relationship observed is consistent with current literature and supports the hypothesis that protective factors buffer effects associated with poorer mental health outcomes. Studies have reported that protective factors, including religion (Lorenz et al., 2019), would help buffer negative impacts of stressors, such as racial discrimination and dealing with depressive symptoms, that increase mental health risk (Coker et al., 2002; Hefner & Eisenberg, 2009). Not saturated in the literature is how conformity to religion is impacted by endorsement of associated factors, such as alcohol and cannabis use. Among this sample, it could be that as African American men's endorsement of religion increases, their need to engage in substance use is impacted, as well. There is evidence in the literature to suggest that African American men and those from African American communities turn, often, to religion in times of need (Hayward & Krause, 2015; Kendler et al., 1997). This will offer insight into the utilization of religion and related factors in attenuating risk associated with the onset of mental health symptoms among African American men in college and their engagement in unhealthy behaviors.

Also, in the literature, it is seen that African American men often resort to poor coping mechanisms for dealing with high levels of stress (Goodwill, Watkins, Johnson, & Allen, 2018).

When examining the effects of associated factors, it is seen that cannabis use was associated with higher levels of depressive symptoms in Year 2. This may suggest that men dealing with depression are more likely to use cannabis which, overall, aligns with current literature. According to literature, substance use has been reported to predict mental health symptoms among many populations (Barry et al., 2017; Kogan, Cho, Oshri, et al., 2017). Particularly for cannabis use, among a sample of African American adolescents, males marijuana use was predictive of their depressive symptoms but not amongst their peers (Assari et al., 2018). As mentioned, endorsement of cannabis only appeared during Year 2 and only for depressive symptoms. This offers direction for future research. First, it may benefit researchers to examine differences in endorsement of alcohol and cannabis use among this population. From this, researchers can determine whether cannabis use may be a better route of intervention and reducing mental health risk among men, as well as creating opportunity to attenuate unhealthy behaviors among African American men. Further, as mentioned, cannabis use is only predictive of depression during their sophomore year. Future research should aim to examine what about a student's sophomore year is more stressful or increases one's risk of developing mental health. this would also offer insight into the best time of intervention for this population.

Another aim of this study was to determine if risk and protective factors could predict utilization. Results showed that religiosity and father's educational level predicted lower levels of utilization. However, neither models for Years 1 and 2 were significant. Despite this, this finding further speaks to the role of religiosity as a means for coping among African American men. It could be that, among this sample, African American men who endorse religion and/or are spiritual are less likely to use formal services for concerns. Researchers should aim to further analyze this, focusing on types of utilization that may be more relevant for this population as

well as factors that may impact these relationships. In addition, more research is needed to determine if religion is a viable avenue for mental health prevention and what aspects of religion are relevant and appropriate to promote among this population.

Strengths and Limitations

There are several strengths and limitations to this analysis. The services examined in this study vary however were summed across all services used. Though it gives us insight into overall endorsement of campus health services, it does not allow us to ascertain or determine services preferences for such issues. From the mental health measures, we are able to look at anxiety and depression separately in regard to increased risk and factors that minimize its onset. Some studies may suggest combining since these mental health conditions are common and often co-morbid; however, that is not certain among this population. Therefore, it is a strength of this study to look at these symptoms separately. Similarly, though measures included are supported in the literature, there is a possibility that there may be measures more appropriate for assessing risk and protective factors among this population. However, this is one of the first studies to examine risk, protective and associated factors among this vulnerable population and, therefore, offers unique insight into their experiences. The results should be considered in research moving forward and should aim to collect primary data, using mixed methods and developing measures that are suitable and comprehensive for examining mental health and utilization among African American men in college.

Generalizability of these findings may be limited to the scope of this sample—African American male students on a college campus. Hence, there are numerous populations that are left out. For example, other minority men who may not face the same issues, but similar in race or gender, may not necessarily fully benefit from the findings. However, this does not take away

from the significance of this work. African American men, in general, are a severely marginalized population whose mental health issues are steadily climbing and yet despite prevention efforts. African American men's help-seeking remains low and they continue to face significant disparities in health that are tied to mental health concerns. Therefore, this study provides valuable information, lending itself to avenues for future research.

Implications for Future Research

The current study has implications for future research, intervention work, and prevention practices. Primarily, we see that stressful life events are a robust predictor of mental health symptoms. This is congruent with literature, for many populations, however, for African American men in college, research still lacks in this area. For future research, it would be important to continue in this effort and conduct research that examines stressful life events—traumatic and non-traumatic—among emerging adult, African American men. Understanding what kinds of stressful life events impacts their health but also how it shapes their social and behavioral environments will provide direction for campus professional who wish to reduce mental health risk among these men. In addition, it would allow public health professionals to gain a more comprehensive understanding of African American men's willingness to seek help for mental health concerns.

As religion was able to predict anxiety and depressive symptoms, as well as service utilization, it may benefit researchers to consider partnering with religious organizations on campuses or otherwise, finding ways to incorporate religiosity into their prevention efforts. It may be beneficial to conduct more work in this area among this population and other minority populations. In the literature, we do see that certain types of social support have positive effects on mental health for African American populations (Baker, 2013). Though social support was

not significantly predictive of any outcome, it should still be considered in future work. In other words, more research is needed to ascertain how social support manifests in the lives of African American college men. Future research and researchers should aim to understand various ways in which African American men in college recognize and need social support and how they choose to exercise religious beliefs that help them combat mental health concerns and health outcomes.

Importantly, as this study only includes data from freshman and sophomore years, future research should aim to either expand on this or include other years. Further, as we see from the results, there are factors that are more predictive of depression and anxiety during the sophomore year. It may be worthwhile to consider focusing on the sophomore year in college and the stressors that may come with entering this year. Such data can help determine whether the impact of risk, protective, or associated factors shift between years of schooling or change in predictive relationships are due to accumulated stress. Nonetheless, both avenues would offer valuable insight.

Conclusion

Depressive and anxiety symptoms are prevalent on college campuses. Among African American men, the risk of developing such symptoms is a concern as they are overexposed to unique daily stressors. Despite this, utilization rates of campus mental health resources remain low. Underutilization of services can lead to prolonged impairment by mental health symptoms which may negatively impact African American men's ability to succeed in higher education and their overall mental well-being. The present study contributes to the currently mental health literature, focusing on African American men on a college campus to examine social and

environmental factors that serve as risk, protective, and other factors associated with anxiety and depression symptoms, as well as the likelihood of these factors impacting help-seeking.

Using a large, longitudinal dataset in which data were analyzed from approximately 681 African American male students. In summary, findings suggest that African American men's mental health is affected significantly by stressful live events and religion may be a buffer for these symptoms. However, none of the risk or protective factors could statistically significantly predict utilization. Public health practitioners should consider expanding on these findings and emphasize religion among this population in regard to prevention. This will be particularly relevant for college professionals who wish to improve mental health among minority men and reduce educational disparities that continue to persist. Further research is needed to improve mental health and help-seeking among these men.

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Chapter 4

Paper 3

"*But, Internally, I Just Feel Depressed*": Understanding Social and Contextual Factors Impacting Help-Seeking for Mental Health Symptoms Among University-Enrolled African American Men

Abstract

Among emerging adults, African American men in college experience distinct, unfavorable stressors, which can lead to depressive symptoms, poor academic performance, and increased risk of dropping out. Importantly, despite being at such high risk, these men do not seek out services, further impacting their ability to succeed in higher education. The objective of this study was to understand the social and contextual factors that influence men's risk of experiencing anxiety and depression and whether these factors impact their likelihood of seeking help. We conducted qualitative five focus groups with 20 African American men between the ages of 18 and 25. Data collection and analysis were guided by the Social Ecological Model, providing a framework for focus group guide development and interpretation of results. Upon analysis, seven organizing themes emerged: what is known or felt about mental health; causes or stressors; signs as symptoms; coping; help-seeking and reasons to do it; types of help-seeking, barriers and facilitators; and societal views on help-seeking and men who seek help. In brief, from these organizing themes and discussions with these men, subthemes ranged including detailed discussions about social constructions of masculinity as a barrier to help-seeking and as a mental health risk factor; the college transition as a stressor; stress associated with self-exploration; depressive and anxiety symptoms that could be considered externally or internally expressed; reasons why African American men would or would not seek help (e.g. trust or fear of vulnerability); how these men discussed mental health issues; as well as, kinds of help they would seek (i.e. informal vs formal methods) and why or why not. This research highlights the need for more conversations around mental health and help-seeking among African American men on a college campus and offers insight into avenues for future research.

Keywords: Black/African American men; mental health; depression and anxiety; help-seeking behavior; emerging adulthood; Social Ecological Model

Introduction

The number of people suffering from depression has increased approximately 20% within the last ten years, and over 3.3 million young adults in the United States are affected annually (Lincoln, Taylor, Watkins, & Chatters, 2011; Organization, 2017). In the mental health literature, it is suggested that emerging adults in college are overexposed to daily stressors, increasing their risk for depression due to high levels of psychological distress (Lincoln et al., 2011; Watkins, 2012), as well as symptoms associated with anxiety (Beiter et al., 2015). According to researchers (Arnett & Tanner, 2006; Newcomb-Anjo, Barker, & Howard, 2017), the transitional period between adolescence and adulthood carries its own stressors, including identity issues, navigating self-exploration while creating new social relationships, and pressures of future success (Arnett, Žukauskienė, & Sugimura, 2014). As these stressors build up, emerging adults become riddled with accumulated stress (Evans & Cassells, 2014).

Upon entering college, the psychological well-being of emerging adults is further impacted by additional stressors (Blanco et al., 2008; Hunt & Eisenberg, 2010), increasing risk of experiencing feelings associated with depression (Association, 2013). This increased risk has been attributed to several factors, varying by ethnicity and gender. Due to preexisting vulnerabilities, like low socioeconomic status and disproportionate experiences with daily racial discrimination (Jack & Griffith, 2013; Xanthos, Treadwell, & Holden, 2010), minority groups, including African American men, are more likely to develop depression in college (Plowden, Thompson Adams, & Wiley, 2016).

Among emerging adults in college, African American men represent a subgroup at increased risk of developing mental health symptoms (Sileo & Kershaw, 2020), resulting from psychological distress and unique daily stressors (Brooms & Perry, 2016; Matthews, Hammond,

Nuru-Jeter, Cole-Lewis, & Melvin, 2013; Powell, Adams, Cole-Lewis, Agyemang, & Upton, 2016; Xanthos et al., 2010). Recent studies suggest psychological distress is experienced disproportionately by young adult, African American men (Lincoln et al., 2011; Powell et al., 2016), heightening their depression likelihood (Powell et al., 2016). The Office of Minority Health (2017) reports that African American men, 18 years or older, are 1.7 times more likely to experience feelings associated with depression (OMH, 2017). In 2014, the Centers for Disease Control and Prevention (CDC), reported that African American men, ages 18 to 25, were experiencing depressive feelings (i.e. sadness, worthlessness, and hopelessness) at higher rates than White and Hispanic men (CDC, 2015).

Current literature attributes African American men's mental health risk to stressors associated with their race. According to Gress-Smith and colleagues (2016), African American men experience racial discrimination at disproportionate rates, increasing their risk of serious psychological distress, and, eventually, depression (Gress-Smith, Roubinov, Andreotti, Compas, & Luecken, 2015; Hudson, Eaton, Banks, Sewell, & Neighbors, 2016). Other stressors, more geared towards college, include academic workload, searching for belongingness, pressures of completing college, and living away from home (Armstrong & Jackson, 2017; Jackson & Hui, 2017). Though the mental health risk among African American men is high, African American men seek out and utilize mental health services at lower rates compared to the general population (Assari & Caldwell, 2017; Mays et al., 2018), prolonging experiences with mental health symptoms (Lincoln et al., 2011; Powell et al., 2016; Ward & Besson, 2012).

Help-Seeking Among African American Men

The prevalence of mental health symptoms of young African American men is underrepresented due to underutilization of mental healthcare services (Hudson et al., 2016;

Powell et al., 2016; Ward & Besson, 2012). Compared to the general population, African American men are less likely to seek care, leading to prolonged, severe impairment by poor mental health (Lincoln et al., 2011; Salaheddin & Mason, 2016; Seidler, Dawes, Rice, Oliffe, & Dhillon, 2016). Importantly, African American men who refrain from seeking help formally are rarely able to mitigate the negative effects associated with daily stressors, such as racial discrimination, becoming overwhelmed and resorting to poor coping methods (Kogan, Cho, Brody, & Beach, 2017; Kogan, Cho, Oshri, & MacKillop, 2017; Kogan, Yu, Allen, & Brody, 2015). Kogan and colleagues reported that African American men, instead of seeking appropriate mental health care, resort to substance use in order to manage the overwhelming effects of high stress (Kogan, Cho, Brody, et al., 2017; Kogan, Cho, Oshri, et al., 2017). Their underutilization of care has been attributed to poor help-seeking attitudes that are influenced by various social and environmental factors. These factors include African American men's lack of knowledge of mental health symptomatology and resources, social constructions of masculinity, and mental health stigma (Doblyte & Jimenez-Mejias, 2017; Marsh & Wilcoxon, 2015; Powell et al., 2016).

Lack of knowledge may be a barrier to seeking help among African American men, infringing on their ability to recognize signs and symptoms associated with depression or anxiety, impacting their likelihood of knowing they may need help (Hammond, 2012; Marsh & Wilcoxon, 2015; Plowden et al., 2016; Powell et al., 2016; Ward & Besson, 2012). Masculine norms or social expectations of male behavior are often reported as negative influences on healthy behavior (Hammond, 2012; Powell et al., 2016). Masculinity encourages men to avoid seeking help, instead promoting ideals of resiliency, stoicism, emotional restriction, and neglect of pain (Flowers & Banda, 2015; Powell et al., 2016; Seidler et al., 2016; Staples, 1978). As these expectations are internalized by African American men, to seek care becomes a sign of

weakness and a threat to masculine status, increasing one's risk of social isolation and bullying (Fleming, Gruskin, Rojo, & Dworkin, 2015; Smagur, Bogat, & Levendosky, 2016). Stigma-related concerns, on the other hand, involves negative perceptions and misconceptions of mental health by an individual and one's community (Marsh & Wilcoxon, 2015; Powell et al., 2016; Ward & Besson, 2012). Among African American populations, mental health and its associated factors are often not discussed, making it difficult for men to discuss their feelings and seek the necessary help (Marsh & Wilcoxon, 2015; Powell et al., 2016; Ward & Besson, 2012).

On college campuses, trends in underutilization of mental health services and resources persist, such that men are not seeking care even when experiencing high levels of stress and anxiety, impacting their academic performance (Association, 2012, 2016). Numerous barriers to seeking mental health services among African American men have been documented, with social and environmental factors, such as lack of knowledge regarding mental health, social constructions of masculinity, racial discrimination, and lack of social support, as the more prevalent barriers to seeking care (Powell et al., 2016; Ward & Besson, 2012; Yun et al., 2016). There is little research providing a clear evidence base for the prevalence of mental health disorders among university-enrolled, African American men, and the improvement of their help-seeking behaviors, making it difficult to develop effective prevention efforts.

Objective

Our lack of understanding of the experiences of university-enrolled, African American men and how their social environment influences their mental health, help-seeking behaviors, and their ability to succeed in higher education is a critical barrier to progress in reducing health disparities. The purpose of this study is to address this barrier, examining the social and contextual factors that impact African American men's likelihood of developing mental health

symptoms and their perceptions of mental health-related help-seeking behaviors. To guide this study and ensure factors that serve as barriers and facilitators are accurately identified, we utilize the Social Ecological Model (SEM), a theory-based framework.

Theoretical Framework

The use of theory is integral to the prediction and explanation of health outcomes and the impact certain health behaviors and health behavior changes have on individuals and populations (Bandura, 1986; Cramer & Kapusta, 2017; Golden, McLeroy, Green, Earp, & Lieberman, 2015). Data suggests that the inclusion of theory and evidence-based strategies is most effective in health behavior change; however, the use of theory is lacking in much formative research (Frost, 2008; Prochaska, Wright, & Velicer, 2008), as well as in the design, development, and evaluation of research studies and programs. Failure to utilize theory in study design, development, and implementation may result in inaccurate research findings (Frost, 2008; Prochaska et al., 2008). For this study, the impact of African American men's social environment must be considered. This will allow us to capture the experiences of these men and understand how various social ecological factors influence beliefs, attitudes, and experiences with and toward mental health issues, resulting health behaviors, and perceptions of help-seeking (Cramer & Kapusta, 2017; Golden et al., 2015). Further, it is important to consider the contextual factors that impact an individual's ability to engage in the behavior of interest (Cramer & Kapusta, 2017; Sniehotta, Presseau, & Araujo-Soares, 2015).

This study employed the SEM for guidance on developing data collection methods and analysis. The SEM is widely used and recognized as a guiding framework to inform interventions geared towards health behavior change (Golden et al., 2015; Griffith, Ober Allen, & Gunter, 2010). The SEM posits that environmental and personal factors interact at multiple

levels—societal, community, relationship, and individual—to affect individual's attitudes and beliefs, which, in turn, can influence behavior (Cramer & Kapusta, 2017). These factors, which often interact, can directly and indirectly influence an individual's well-being and mental health (Cramer & Kapusta, 2017; Golden et al., 2015; Griffith et al., 2010). In this study, the SEM guided and informed focus group guide development and question formation. With the SEM as a framework, the data collection method aimed to capture relevant ecological factors impacting mental health risk and help-seeking, not only on lower level factors (individual and interpersonal), but also on the outer level factors (community and societal). Further, as analysis occurred, the framework served as a guide for creating and refining themes appropriate for reporting and relevant to African American men in the context of their environment. An understanding of these factors and their influence at various ecological levels will offer insight for public health and campus professionals who wish to develop program and initiatives geared towards reducing poor mental health among African American men and improve their willingness of African American men to seek informal or formal help for such issues.

Materials and Methods

Sample and Recruitment

Upon IRB approval, potential participants were recruited via active and passive recruitment methods to increase variability among the sample. Such methods included the use of a student survey registry and in-person recruitment. Both methods were used, as those who initially participated in the survey may be more inclined to engage in future research which may increase selection bias (Cypress, 2017). Research staff associated with the survey registry used purposive sampling to identify men who fit the inclusion criteria. To be contacted and participate, individuals had to identify as male, self-identify as African American or Black, be

between ages of 18 to 25, and be currently enrolled at as an undergraduate student. Though not part of the inclusion criteria, it was important to ascertain from there men whether they have or have not utilized campus services. Both perspectives would not only help gain insight into various ways students might deal with mental health symptoms but also into reasons for engaging in help-seeking and not. The campus services included are University Counseling Services, University Health Services, The Wellness Resource Center (The Well) and Recreational Sports.

Survey research staff initially contacted potential participants via email, which included information about the study. Among those who responded to that email, the first author sent another email, including a REDCap survey link (Harris et al., 2009), to students in order to determine final eligibility for the study and enroll students. In-person recruitment occurred at student fairs where interested individuals spoke directly to research staff and, if interested after, they received an email with the same eligibility screening survey. Passive recruitment included the use of flyers disseminated through email listservs and university-wide online announcements. Relevant email distribution lists of campus organizations dedicated to serving minority populations and social media platforms, such as Instagram and Facebook, were also utilized to distribute flyers and announcements. Those who became interested, contacted first author and completed a survey to determine eligibility. Emails contained a redcap survey confirm inclusion criteria and interest in study participation; as well as, screen for those who have sought help and for those who have not. information about the study and the contact information, and option to decline or consent to participate in the focus groups. If the potential participant was eligible, they received a list of preselected dates and times of availability for their focus group. Participants

were also able to propose other times or dates they may be available. Once scheduled, participants received a confirmation email for their session.

Procedure

Prior to focus groups, reminders via email were sent to participants 48 hours in advance and the morning of their scheduled session. Emails included the location of where sessions would take place, which was in a private lab on the university's main campus. As students entered the room, they were greeted by staff and offered refreshments. The first author was the focus group moderator, accompanied by a graduate research assistant (GRA) who served as the assistant. Both the moderator and the assistant have training in qualitative research methods and extensive experience working with emerging adults and were African American females. As participants arrived and to ensure immediate confidentiality, students were given a sheet of paper and asked to create a fake name for recording and data collection purposes.

Prior to audio-recording, study objectives were presented and participants were informed that they may leave/exit at any time if experiencing distress throughout the session. Additionally, students were informed of the distress protocol. It was not expected that any adverse events would occur; however, in the event a participant mentioned they were feeling distressed or uncomfortable for any reason, they would be allowed to stop and leave. The GRA was available to assist participants, if needed, directing them to counseling services. Following introductions, ground rules for discussion were established in collaboration with students, an ice breaker was conducted, and the focus groups began. Sessions lasted approximately 60 to 90 minutes, after which participants were compensated $30.

Focus Group Guide

To understand the breadth of participants' perspectives related to anxiety and depression, and help-seeking attitudes and behaviors, the focus group guide (*see Appendix 3*) and questions were developed based on the SEM. Questions asked about perceptions and perspectives of mental health symptomology and help-seeking behavior at the individual, relationship, community, and societal ecological levels. The guide asked questions related to knowledge, beliefs, attitudes, and social norms regarding mental health among university-enrolled, African American men. In order to obtain an accurate understanding of the topics discussed, the moderator and, at times, assistant, asked clarifying questions, restated responses, and encouraged men to elaborate on responses that were unclear. The guide did not require the disclosure of personal experiences.

Data Analysis

Focus group discussions were audio-recorded with consent of participants. Upon completion of all sessions, the recordings were contracted out to an external company, Rev.com, for transcription. Transcripts were then coded by the first and second authors. To assist with conducting analysis of transcripts, an inductive thematic analysis (Braun & Clarke, 2006) was employed occurring in six, sequential steps: (1) familiarize oneself with the data; (2) assigning preliminary codes to transcripts and describing the content; (3) search for patterns and themes in your codes across transcripts; (4) reviewing themes; (5) defining and naming themes; and (6) producing the findings (Braun & Clarke, 2006). This type of analytical approach has been used frequently in research examining various health issues among and with minority populations (Glanz, Rimer, & Viswanath, 2015; Vaismoradi, Turunen, & Bondas, 2013). During analysis, meetings were established weekly among the coders to discuss any disagreements between coders and come to a consensus on themes.

Results

Sample Characteristics

Overall, forty individuals met eligibility for the study and were enrolled; however, 20 men attended and completed the focus group sessions. There were five groups in total, averaging three men per group. Groups were conducted until theoretical saturation was met. All participants self-identified as African American or African American males enrolled at the university full time as an undergraduate student. The sample included students from all levels: freshman ($N = 2$); sophomore ($N = 3$), juniors ($N = 14$); and senior ($N = 1$). Age varied across groups ($\mu = 19.8$).

Organizing Themes

There were overarching themes that emerged from the data. Primarily, participants spent most of the time talking about mental health issues. These discussions encompassed thoughts and personal experiences centered on how these men experience mental health, what it looks like when they experience mental health issues and how they cope with these concerns. On the other hand, less time was spent talking about help-seeking behaviors and approaches. However, men did share which formal and informal ways they sought help from and how they perceived those services in general.

Organizing Theme 1: What is Known or Felt About Mental Health

Within this overarching theme, men talked about what mental health means to them and how they viewed mental health, sharing examples of mental health conditions, as well as personal experiences with either their own mental health issues or those close to them. Participants were open, offering detailed descriptions about how they experienced stress in their everyday lives and descriptions of how this makes them feel and what they are willing to show

and express. Men also discussed what they felt society expected of them and how society viewed African American men with mental health issues.

Theme: Levels to Issues

When asked what they know about mental health, men talked about mental health conditions they were aware of, how this looked to them, and, some men were able to offer personal stories:

> "*So my mom, she owns a group home [...] and majority of, actually, I think all but two of the clients that live there are African-American. So I grew up around a lot of adults with autism or severe mental health issues, and it made me understand things a lot earlier."*

Conversations like this occurred in 3 of 4 groups where men would assert stories or opinions of mental health conditions and begin listing the types of mental health issues and illnesses they have heard about, seen, or personally experienced. This included schizophrenia, bipolar disorder, stress, paranoia, ADHD/ADD, suicide, and anger. Participants mentioned stress not only as a way they experience mental health issues but also as a mental health condition itself. Particularly, in three groups, men discussed back and forth how stress can be a mental health condition and it can also lead to more mental health issues: *"I think stress can be mental health too, because it can be really stressful at times, and it makes you go crazy. And then it can also lead to other mental health stages." "I think stress is a big one, because sometimes there's nothing you can do about it…" "Another mental disorder, I would say is paranoia, like you're just feeling paranoia all of a sudden or you just feel like the world is caving around you and you don't know what to do or how to stop it from surrounding you." "Yeah, I also agree. […] I also agree with stress and paranoia, and I think sometimes they can go hand in hand, like if too many*

things have been happening to you that can stress you out, and you also might start getting paranoid that things will keep happening. I think they kind of can go off of each other." Across 4 of 5 groups, men mentioned schizophrenia as a mental health condition they knew of. One participant described a situation where they once knew a person with schizophrenia, a person he hung out with from time to time:

> *"He was always chill, we're cool, everybody on our floor came to kick it. But one night he had an episode, I had no idea he had schizophrenia, so I thought he was freaking out on me, and I didn't respond very well. Then my roommate told me, he's like, "Yeah, he didn't really want everyone to know." So I apologized and everything, but there was a couple times where he called the police on himself during three separate episodes. It was scary, you see somebody who you were kicking it with an hour ago, and then a completely different person. Or he's saying he's seeing certain things, and you don't see them. Some kids on the floor stopped talking to him, and then he still came around, we'd kick it, but it was weird to see some of the responses that people stopped coming around when he was there. It's interesting."*

From this situation, the participant shared with the group what the condition looked like, how he responded and proceeded to talk about how people treat people with mental health conditions differently. Depression and anxiety were mentioned, as well. Depression or *feeling down* was discussed more frequently and in much more detail. Some participants explained what they felt they knew about depression and its levels of severity:

> *"I just feel like, also, there are levels to people's mental health issues. Yes. People can be depressed, but there are levels even to depression. There are people who are in major depression, and there are people who are just depressed, so it's also basically what*

you're going through because you could sit there and be like, "Yeah. I'm sad." That only lasts for a day or there are other instances where you're sad, and that lasts for a week or two weeks. It all depends on what type of things you're going through, I guess."

Theme: Keep It In and Man Up

Across all groups, men were often nodding and shaking their heads to agree with their peers, especially on discussions about how mental health is viewed among African American men and how people view African American men with mental health symptoms. Participants insisted and shared with their groups that they felt discussions about mental health did not occur often among men, with friends or among families:

"But for me personally I just feel like there's a stigma when it comes to African American men showing their emotions. I feel like the second something like mental health comes up, everybody kind of shies away from speaking up. So, I don't think ... I feel like these type of conversations don't really come up in the black, male community."

Many men asserted that masculinity was the major reason these conversations did not occur. In multiple groups it was apparent that men agreed with statements like this concerning the struggles with masculinity and having to remain masculine. According to these men, talking about feelings and emotions was a sign of looking weak and, if expressed, it would open them up to being made fun of. Sharing personal issues, to these men, did not happen because they were afraid of being seen as fragile and disrespected:

I feel like that's one of the things, like the phrase, "You've got to be a man about it.", or "You gotta man up.", that's one of the things that stops people from showing emotion, because it's emasculating I guess, and you'll be viewed less of a man. And in their head, they won't have as much respect if you show emotion."

Many men agreed with many statements like this and offered thoughts about masculinity being a major reason they did not have a safe space to share possible issues with depression or anxiety. Some men talked about this from the perspectives of how they grew up. Men would rather keep things in and maintain that sense of stoicism and masculinity:

> *"But I feel like as a Black man, some of us come from places that are extremely masculine, and you're supposed to hold your head high and act like a man at all times. So, saying certain things, like you're feeling depressed or something of nature, you might not feel like you can say that. But your peers around you might not respect that, so you might be more likely to hold it in, instead of sharing and another type of person."*

Amongst three groups, men mentioned how growing up in an African household made them feel that mental health should not be a thing or should not be acknowledged. According to these participants, men were only meant to be strong, cannot show signs of weakness, and are supposed to suppress their emotions:

> *"There's no discussions. Mainly for me, within family, I can't speak the same for a lot of Africans, but I'm from Ghana, and with the old generation, mental health doesn't really exist, because they just say, "My parents pushed through it." So they use that as a basis like, "If we can do it, you shouldn't be having these problems." But it doesn't work like that for everybody."*

> *"For me, it's from my culture. I'm African, so the epitome of African males, you have to be strong. You have to be the man of the house, you can't really show weakness. So in a sense, if you're complaining about something in your head, and you're physically fine, they won't understand that, because the way they grew up, even if they had those thoughts, they had to suppress them."*

It is important to mention that though these previous comments were explicit to an African household, men in the groups were able to share this sentiment. One participant first agreed with his peer and discussed how within African American households, this, too, happens: *"I think we're still held to a similar standard. Maybe not as defined in the household all the time, but just generally speaking."* The conversation circled back and concluded with the notion that mental health is not taken seriously among African American men, in general.

Organizing Theme 2: Causes or Stressors

Within this theme, men offered thoughts about what might make them or men like them experience depression and anxiety. Majority of the stressors included factors associated with interpersonal relationships, finances, college stress and the transition, as well as future success in one's career.

Theme: Learning College is a Big Thing

Men talked often about college, itself, and how experiencing certain things, such as emotions and maintaining masculine identity, in college and as a college student could be stressful:

> *"Hiding emotions are heightened on campus, trying to find themselves, find friends, be manly to show that they are masculine. College campus, I'll say [mental health issues] could be even worse in college for the fact that a lot of African American men are trying to, one, find themselves, and two, pull themselves towards friends or just feel male, that they are masculine. So, I think hiding emotions or maybe acting a way that you're not is heightened in college."*

Discussions around the college transition, for the freshmen ($N = 2$), would include how men struggled with being away from home and missing their families back at home. Many

participants, including the freshman, would also talk about how becoming independent and dealing with a new sense of freedom was difficult for them. Men felt this not only stressed them out but also made it difficult for them to manage their time and, ultimately, take care of themselves:

> *"I would agree with everybody else. I think the transition did give me more freedom. It took me away from home, more independence. I would say that college itself is also another transition into being an adult, and that itself kind of exposes you more to the world and the things that can stress you out, bring paranoia, bring all this to attention. And it kind of makes you figure out how to deal with it, and it kind of becomes a problem when you don't know how to go about that."*

Men mentioned how their academic workload, keeping good grades, struggling to find the time to do everything, and extracurriculars added a great deal of stress to their lives. It was a constant struggle, they mentioned, to find time and prioritize things in a way that is effective but not stressful. However, prioritizing and managing time, then, also became stressful. A few participants would nod their heads and agree that getting good grades was a big deal. Men shared their thoughts about future careers and how doing well in college would allow them to become successful. This, too, was stressful for men. They were not only concerned with being able to meet the demands of their courses but also of their future career choice. Participants discussed that the possibility of failing and the pressures of succeeding weighed heavy on them. In fact, a participant made a connection between balancing life in college and succeeding or dropping out:

> *It's easy to get overwhelmed at this age, everything is competitive, everybody's striving for something. You tend to put a lot on your plate, you'll try to get extra credits, you try to get the highest grades you can, as you should, but grades aren't everything. So you've*

> *got to get internships, or you've got to work jobs and do your job well, get that recommendation. You've got to apply for this, that or the third, to this organization, try to take leadership positions. […] It's gotten to me in past semesters, so you've just got to understand time management, prioritizing, and understand what you really want to do and is this really going to help you. Because otherwise, if you just put everything on your plate, it happens every year, kids transfer out or drop out, because they just can't handle everything they put on their plate.*

Theme: Money is Everyone's Stressor

Across all groups, the conversations involving financial stressors did not take up much time, but each group mentioned that having money and affordability were big factors that influences men's stress levels. Men talked about how money and lack of money impacted their ability to engage in professional activities, afford textbooks for class, pay rent, sometimes eat food, and just being able to live and enjoy life: "[…] *not being able to afford textbooks, and figuring out how to pay your tuition, and stuff like that is really stressful." "For me, yeah. Just like they said, really money. Money is everybody's stressor. To get specific, a major stressor in my life is my housing situation, not that I'm homeless or anything like that, but yeah."*

Theme: Self-pressure vs Parental Pressure

For these men, stress concerning family involved discussions in which men talked about being a first-generation student. Some men explained that because they are first-generation, there is a lot of pressure on them to go to college and succeed. However, men mentioned that it was difficult to succeed in some ways because they felt their parents' lack of college experiences and schooling left them unprepared to do so. This, too, became stressful where men felt pressured by not only their own expectations to succeed but that of their parents:

> *I guess one of the major things that does stress me out is the fact that my parents didn't go to college but, yet, they... In so many words, they kind of forced me to go to college, but with all of the loopholes and the nuances that college comes with, I get kind of angry because I lost money here or I wasted time there that if my parents would have made it to college or I don't know, they would have did something, it would have better prepared me to avoid all of these stressors, but I understand that they were dealing with different circumstances why they might not have gone to college or whatever.*

Parental pressure also included discussions about pressure on men to choose a particular career path: *"I want you to do this major and stick with it," and try to pressure you to a certain path, but that might not be which way you want to go, and just that stress of finally choosing what you want to do or make your parents happy, and just that fighting between trying to do all that." "Or it could be my divorced parents can't see eye to eye in terms of supporting me of what I want to do, and not seeing the impact of that, because it's not a ship-building job, or whatever job that they chose."* Some men mentioned that this caused them to become dispassionate in school and, ultimately, promoted a strained relationship between them and their parents. From this point in conversation, men would discuss their lack of or troubled relationships between them and their parents. Discussions about these relationships involved men's desire to have relationships; to have better relationships; and dealing with divorced parents:

> *The relationship with my parents isn't the greatest, and I feel like that's where most of my emotional issues stem from. Me having a relationship or the lack thereof relationship with my parents that I would want or that I've seen other kids have with their parents so, also, that's another thing that stresses or another relationship that stresses me out.*

Theme: Finding Self and Fitting In

Self-exploration and identity development were saturated in many conversations as causing significant amounts of stress among these men. Depending on spaces in which these men spent their time, they were concerned with fitting in and making connections with their peers. One participant talked about being on the pre-med track and how he is nervous about spaces he is in and will be in the future. He is worried about being the only African American person in a space:

> *[…] when I think about as far as moving forward with the pre-med stuff, I know that the space gets wider and wider, and you know that definitely I don't really feel too comfortable being the only African American person anywhere. It just feels weird, and so I know that's what I'm going to be going into, so that does give me anxiety.*

Another participant hinted at this but from another lens. A participant explained in one group how being at a predominantly white institution is stressful for African American men: *"You're here at a PWI, and it's like you're trying to find yourself, but you're not really sure who you are, and that's anxiety that's put on you, and stress, and you just feel like you don't really know."* Identity also became a concern for a participant who felt their *blackness* was different or in question in certain spaces. He explained that not growing up around African American people made him uncomfortable and anxious in all African American spaces; he was concerned about fitting in:

> *I wasn't raised around many African American people. Pretty much when I was a kid, all my friends were White and stuff, and it's not like I'm scared of African American or anything, but sometimes [it] can be a lot of African American people, and it's like what if I'm not like them? Not Black, there's no real way to be Black, but just what I'm too different from them or anything like that?*

Organizing Theme 3: Signs as Symptoms

Within this theme, men talked about how they might feel when and if they experienced depression and anxiety and how they would express these symptoms.

Theme: Feeling A Way and Down on the Inside

Men explained that masking their true feelings and keeping emotions in was an internal sign they might be experiencing or dealing with depression or anxiety. Sometimes this was due to their initial response to minimize or deny their feelings or issues they may be dealing with. For example, though they think they may feel depressed, they would never use this word but, instead, would say they are *feeling a way* or *feeling down*:

> *I don't really say I'm depressed, because I feel like when I use the word depressed, it's way bigger than how I feel. Honestly when I'm down, I usually say I'm just sad or something. I feel like the word depressed has a lot of weight on it, so I don't really use that word to myself.*

Men were in agreeance about masking such feelings. Men talked about pretending they have no problems and maintaining a friendly and happy demeanor. Men would verbally agree with this point of view and talk about having to keep up personal appearances which often meant smiling on the outside but feeling hopeless, uncertain and depressed on the inside: *"I feel like no matter what's going on, you might put on a bright face, but you deal with in internally, so you won't really show it physically, and it can happen at any time." "So a lot of times you won't be able to see if somebody's necessarily depressed or is suffering from anxiety. They might just try to seem standard in front of everybody else." "Sometimes I put a smile on my face when I go out, but internally I just feel depressed, and I don't want to say that I'm sad, because of probably pride, and that's not good."* Men also mentioned that being depressed can feel like they are alone in the

world and the world is caving in on them. Participants agreed that this feeling of the world caving in was common and quite persistent.

Other internal symptoms, related to anxiety, came from one participant who suffers from this condition:

> *It's almost like equivalent to having a bad day in my head, and it's just one bad thing happens, and then it's like a gateway to letting in other bad thoughts. So other intrusive thoughts that just spur the moment, just ruin my mood, and then my mood's ruined for the rest of the day. Then those thoughts just keep circulating back and forth, so something like that can happen, I guess you could say every three months or quarterly. I'll have a big anxiety attack, and then I'll have to regroup myself for a couple days before I'm ready to get back into the flow of things. But normally, it's just small ones that happen, and then you wouldn't know, but it happens, and then I'm back to normal for the rest of the day.*

Theme: Changing Behaviors on the Outside

As men mentioned that it may be hard to tell or see if they or others are going through something, men described certain signs that may indicate someone is dealing with an issue. Across all groups, participants often talked about social isolation as a major sign that they are dealing with something internally. Men also mentioned lack of sleep and excessive napping meant they were struggling a little, as well as irritability: *"I know personally, and even amongst friend groups, that some signs of depression and anxiety is typically naps, like a lot of untimely naps. It will be the middle of the day, or just oversleeping for long periods of time."* Men would mention that having a meltdown was a sign but were unable to explain exactly what this would look like or entail. A change in behavior was also a sign that one might be dealing with an issue. Men explained that them or their friends (i.e. other African American men) acting out of their

usual ways would mean something was wrong: *"My friend personally will, they're not funny, so when they start telling jokes or trying to be funny, that's just not you, what's good with you?"* Abuse of substances and developing unhealthy habits or behaviors, such as overeating, were also signs that someone might express if dealing with depression or anxiety:

> *I think some telltale signs are if anybody is abusing drugs or alcohol, and personal opinion, I think weed can be a drug. It's not a drug, per se, but it can be abused, and so on. Yeah. That's kind of one of the specific things that people will deny, but I think that's apparent. If you got to smoke every day, all the time before you do anything, I have close friends like that, and so I know everything isn't what it could be. I think that's obvious.*

Organizing Theme 4: Coping

Within this theme, there were two major categories for coping methods and ways these men coped (*See Table 1*), some of which overlapped with external symptoms mentioned above. Overall, men discussed that using certain methods were an attempt to distract themselves from unwanted feelings and to keep them preoccupied.

Theme: There are Good Ways and Bad Ways

After reassurance that the sessions were a safe space to talk, across all groups, men mentioned that smoking weed was a major way they dealt with things that bothered them, though some men realized it was not the best way to cope: *"Basically, just getting out of your head, doing something. That helps. What I used to do is smoke weed. That was definitely what I thought was that helped me the most, but it took me a long time to figure out it was only making things worse."* However, smoking weed to these men was helpful in preoccupying their minds, allowed them to reach a calm state, and to focus. For most, coping with drugs and substances began once they entered college. A participant explained that 1) they preferred weed to drinking

and they didn't really smoke or drink until they came to college: *"I didn't smoke or drink before college. So when I got into it and was having a good time, but I feel like for me at least, weed was more manageable. I feel like I can function better, and I recover better afterwards, and get what I need to done."* Another participant was vocal about using overeating to cope: *"Yeah, so I gained 19 pounds in my first semester. Couldn't fit none of my clothes, I didn't look at all like I did in high school."*

Table 1: Adaptive and Maladaptive Coping Methods Discussed Among Black Men in Focus Groups*

Adaptive Methods	***Maladaptive Methods***
▪ "Treat yourself" meaning self-care days and activities ▪ Something artistic ▪ Looking at memes ▪ Anime ▪ Music and Movies ▪ Sports or going to the gym ▪ Go somewhere peaceful, going for a drive, taking a walk ▪ Motivations apps and daily reminders ▪ Meditation ▪ Hanging out with friends ▪ Cooking ▪ Getting energy out somehow ▪ Meditation, going to the gym	▪ Temptation and sex ▪ Eating ▪ Using "down" instead of "depressed" ▪ Watching porn, used to be addicted ▪ "Smoking helps alleviate thoughts;" don't think about it in that moment ▪ Drugs (e.g. Adderall) and alcohol ▪ Isolation

*Not in any particular order nor is it ranked by how many times it was mentioned

Among two groups, men discussed coping preferences. According to these men, to cope with feelings of sadness, men opted to socially isolate themselves, remain indoors, lay inside and watch movies; whereas, for feelings of anger, being outdoors, "screaming" or hanging out with friends was preferred:

> *Yeah, or say, for example, go hang out with my friends, and me go play basketball or go play football. Sometimes other people will be involved if I'm more so angry to get my*

mind off of it, but I feel like it's different when I'm sad. When I'm said, I just don't want to be around anybody. I don't want to be bothered type of thing.

Outside of using drugs, men talked about *better* ways to cope with their issues. Some of this included going for a drive, talking walks and doing something that was peaceful and helped them feel calm. A couple participants specifically talked about self-care activities that made them *happy* which they would engage in on certain days of the week:

“I would say for me personally, I'd be like, "Treat yourself." You know if you need to go get some ice cream, go watch a movie, just chill, something to just take care of yourself.”

“I just like to take a mental health care day. Sometimes I just being myself, try to get myself back into the out of depression state. Just try to figure out what really makes me happy rather than just thinking about this one thing that's making me down and depressed at the moment.”

Men from three groups discussed their feelings about prayer and its role in coping with mental health issues. One young man, who identifies as Christian, mentioned how he used prayer to start discussions with his peers when they seemed stressed: “And if they say they're not doing good, being a Christian man, we pray about it first and then when he actually wants to talk about it then we'll just start talking about specifics and how it's affecting him.” In another group, two men discussed prayer as being somewhat unhelpful and not enough to help, despite it being recommended by their parents: *“I feel like if I told my parents, like hypothetically, that I was suffering from depression or something, they'd just tell me to pray. And I understand, that could definitely be a way to alleviate how you're feeling, but it's that... not every time.”*

“It definitely doesn't work for everybody. I get where they're coming from, because... But also I think that's just how they got through things. Those things aren't going to work for

me. I know for a fact they won't. So I take it with a grain of salt, I understand. I can't really get mad because I know how this conversation is going to go in my family. So whatever they say, I'm just like, "Okay." But then it's like, damn, I didn't really get any help from that."

Organizing Theme 5: Help-Seeking and Reasons to Do It

Within this theme, men were asked to talk about what they knew about help-seeking, how they knew they needed help for an issue and what would stop them or encourage them to seek help.

Theme: If We Trust, We'll Go

Men across all groups explained that seeking help meant asking to talk to someone professionally (i.e. therapy) or finding someone their close to and feel safe enough with to talk to. Men mentioned that seeking help or help-seeking can include reaching out to any kind of person to get help with anything you need, finding a group to be vulnerable with, and finding someone you can relate to and trust:

"I would say finding someone that you trust. Sometimes it's hard, like you don't know who to trust with the information or the way that you feel. Probably go to, find someone that you know that if you go to this person, something like this, it's a closed room, we're going to feel comfortable to say how you really feel. Get everything that you need off your chest."

Trust was mentioned frequently among all groups. Men explained that if they did not trust the person or therapist, they would not feel comfortable going to them to talk about their issues.

Men knew that if they sought help, that it would be beneficial to them in the long run. For example, a young man in one of the groups has had a personal experience with depression and

being close to suicide. He talked with some regret, explaining that if he had sought help sooner, it may have been different:

> *"I think people should actively try to seek help, because just coming from a place where I've been close to a suicide, well I've had a suicide attempt, been thinking about suicide most of the time in my life, that's not really something I want anybody to ever experience. And to prevent that I feel seeking help could help with those thoughts you're thinking of, it could help you sort things out. Even if the person [does] not necessarily know how to help, just having someone else to listen to, or someone to talk to about it, could steer you away from those more extreme consequences."*

Theme: Seeking Help from "SOs"

To seek help from someone, men described needing to feel safe with the person they sought help from. Men talked a little about whether or not they would seek help from their significant other (SO). Surprisingly, not many participants were going to their significant others for help. However, men were able to talk about what would make them talk about certain issues with their SOs. A participant talked about how his romantic relationship may be good for him to seek help as it consists of emotional connection and trust. He explains that: *"You really got to think that it's safe to open up to a person, and talk with them like that. Unfortunately, I only get there with my romantic relationships, if you will. I don't get there with my actual friends, and I think that's important. I wish we did, but we certainly don't."* However, many men in this sample were not in *significant* romantic relationships. Hence, they did not feel the need to talk to their partners about anything they were going through. Men would explain that what they have with romantic partners is not substantial enough for them to feel comfortable sharing such issues with their partner:

"In a relationship? Sure. It just depends on where we're at. If it has something pertaining to do with our relationship, then I would be open to speak about it, but if it's something I'm dealing with by myself, or something that happened outside of the situation, then I'm more like apprehensive to speak up about it. [...] If something happened outside of the relationship, then I'm less inclined to say, "Yeah. This is how I'm feeling right now." Because me, personally, I just don't want to bring that type of energy into a relationship. Like, "Yes, your significant other should be somebody you can confide in," but also, that person can't always be that for you, so you kind of have to figure out how you can do that on your own.

It is important to note that a lot of students mentioned that romantic relationships were not as common on this campus or during this time in their lives. However, one participant who often coped with sex, did address and express that he sees the benefits of opening up in relationships and would like to do so more:

I would say this year was the first time I've actually went to invest in a female friendship because I have realized that there are some conversations that I just can't have with my friends, my guys. So, I'm actually trying to put in effort to be able to express myself because I understand that you shouldn't bottle it in and I do need someone to talk to.

Theme: Boiling Points and Meltdowns

Many participants mentioned how they would reach a boiling point or experience a meltdown and how reaching this point was an indication of needing to seek help. Men were probed to explain how they knew they reached a boiling point. They explained that it was not until their *feeling down* or depressed lasted for long periods of time (i.e. days vs weeks). Further,

if one's usual coping method didn't work, they felt that was another sign that they were heading towards a breakdown and needed to seek help:

> *I think when you start doing things that you would normally do to get out of it but even that's not working. Like, let's say you isolate yourself but you're noticing that, "I don't even want to be isolated right now." You don't really know what you want to do with yourself type. There's nothing really to cope with. So maybe you tried coping with the isolation on Monday but then you tried it again on Wednesday and it's like, "Nah, something's really off." Something like that.*

Men further explained that if their daily routines were affected and their social life became affected, this meant things were falling apart and something had to be done:

> *To be honest, when I do have those moments like last week, I tend to ... In terms of a breakdown, it's like, bruh, it's a breakdown. Like, why am I crying? Is it because I have the migraines, or is it because I'm not sure what's happening with this, that and the third? Or is it because I haven't gotten, I've only gotten three hours of sleep, and I get emotional, because I'm not functioning? What can it be? We don't know. Is it both?*

Overall, it was really difficult for men to describe at exactly when their boiling point happened, explaining that it was hard for them to recognize personal or social cues signifying they were about to have a meltdown. To these men, their meltdowns came without warning. A participant was able to describe triggers:

> *It's different for everybody. Some people that have a boiling point that they reach, some people they might be listening to a song, or watching a movie or something, they see or hear something that's very familiar to them, they'll realize it. I've seen that before. I've seen somebody get, for a habit that they have, intervention for them. They get like,*

"You're better than this." It's whatever a person feels like they can no longer tolerate, and the same for the people around you. I feel like there's a point everyone has, and it's a different point, that things pile up, things start to happen, where you're like, "Okay, I need help." Or, "We need to help you, and you don't realize it yet.

Importantly, though men reached their break points, help was rarely sought.

Organizing Theme 6: Types of Help-seeking, Barriers and Facilitators

Within this theme, men were asked if they knew where to find help if they needed it, what kinds of help-seeking they engaged in, and why they did or did not use services. Overall, it seems men were aware of where to get help on their campus, whether that was due to flyers on campus or information from campus officials (e.g. resident advisors). Such places they listed included university counseling services and paying attention to university email announcements. However, men were not able to pinpoint the exact location of these services.

Theme: Talking to Friends

Overall, men mentioned that going to their friends for help or to talk to about mental health issues were the preferred method for seeking help. Men talked about hanging out with their friends would always help them with their stress and that seeking help from their friends was easier because their friends may be dealing with similar issues and they would be able to relate to them and support them: *"[...] I know they're going to listen. I know they're going to be here for me, because I've been there for them too. We have that relationship where I can tell them whatever, and they'll be able to help me in some way, shape, or form."* However, seeking help in this manner was always a last resort. Men believed their problems were never deep enough to seek help from friends: *"Because I don't feel like I've ever felt to myself like, damn I need to reach out, I need to talk to someone about how I feel, because usually I just don't think*

it's that deep." Men further explained that they would rather keep issues to themselves, so they do not worry people.

Theme: Test the Vibe, but Remain Surface Level

Men discussed that conversations surrounding depression amongst friends did not occur often, but typically started with joking around and testing the vibe. When going to their friends and talking about issues, conversations typically started off with joking around and maybe after would get serious where men can then discuss their feelings. One participant has tried to normalize conversation among their friends about suicide, but he is always met with apprehension or disinterest: *"I talk about it with some of my friends but it's just like they try to move away from the topic. Like it's not interesting to them or it's something that's not bothering them. It's just like, "If I commit suicide, how do you all feel?" You all would be hurt, sad, distressed, depressed, or anything?"*

Around mental health issues, men also mentioned that many conversations in this area did not occur among African American men. If conversations around men's issues occurred with their friends, men would intentionally leave certain personal things out, keeping convos with their friends at face value, on the surface, and not going too deep. According to participants, these conversations remained surface because men were afraid and uncertain of their friend's responses and reactions; they were afraid to be vulnerable. Many of these men did not want to take this kind of *risk* in the friendship: *"That's just risky. That's just taking a risk. Me personally, I think a lot of people they're scared to really say how they're feeling to just anybody. You really got to think that it's safe to open up to a person, and talk with them like that."* Some also mentioned they were uncertain about people's genuineness and level of trustworthiness. Men were not always certain if those they confided in will keep what is discussed confidential: *"[...]*

if you open up to somebody, they might tell people. Not necessarily tell people, but make that information... Just not keep it between two people or just make it more than what it is, I guess." To these men, vulnerability, personal fear, and trust outweighed the potential benefits of seeking help in this way.

Theme: Talking to Family

Turning to family for help was slightly popular for seeking help. Men discussed that, though, they rarely discussed their issues with their family members and parents, they would turn to their mothers or sisters, first. A freshman discussed how he goes to his sister when he's feeling down or struggling a little because she can relate: *"I would say my sister, I talk to her about stress. She mostly just listens. I talk most of the time. Then she gives me advice to what to do, since she went to college, she went through what I'm going through right now. And most of the time it helps out for me."* Barriers to seeking help from family included men's lack of relationship with their parents. Also, men did not want to worry their parents so they refrained from talking to them about their issues: *"I don't really tell nobody, because I don't want my close family members [...] worrying. Because even if they worry, there's really nothing they could do with it. It's something I'd have to figure out internally, in my opinion."* Men explained how family, especially parents, disregarded some of their issues or were unable to understand, suggesting that the generational differences in how stressors and stress are viewed is vast:

> *"I know the older generation before us, they feel as though our issues aren't as bad as what they went through and they feel as though we shouldn't be so stressed or hung up, and worried about it, and things like that when we're complaining so much about it…"*

Outside of friends and family, prayer was mentioned by a couple of participants; however, though prayer seemed like a good suggestion, men believed it could only help so much: *"I feel*

like if I told my parents, like hypothetically, that I was suffering from depression or something, they'd just tell me to pray. And I understand, that could definitely be a way to alleviate how you're feeling, but it's that... not every time."

Theme: Therapy On-Campus

For on campus services, men noted the benefit of at least have someone to talk to and relieve some stress. But many participants refrained from using services because they were fearful people would find out and did not want to be embarrassed: *"And, I try to think about how other people would see me. And I know I shouldn't be doing that because I should only be focused on myself and what makes me happy, what betters me. But it's like, "I don't want to be judged."* A couple men have attempted to visit counseling services. These men talked about how they weren't pleased with their first impressions. A participant described that they did once seek therapy but was turned away due to lack of availability which discouraged them from future visits. Another participant talked about appointment time limitations and how this does not allow therapists ample time to get to know their patients and getting to the root of their issues. For instance, a participant discussed how there are only 5 free sessions available for students which isn't enough time to really address the issues or problems affecting these them:

> *"But I feel like somebody has to have that personal connection with you, or understand the context, like Jacob was saying. They were just starting to get to it in meeting three, we only get five for free, and as a college student, you ain't really got the money for all that. You burn two-fifths, three-fifths of your time, and you're finally starting to make progress. Whereas I feel like somebody who already has that background knowledge of who you are, and again, knows who you are and you're comfortable with them, you're able to open up to them more. I feel like that,*

at least for me, is more effective."

Theme: Therapy Off-Campus

For off-campus services, a major barrier was perceived lack of genuineness and trust from therapists. Many men insisted that therapists would not be able to express sincerity for someone they barely know and, therefore, cannot offer real and genuine help; they believed therapists could not truly care about their issues. Men suggested that therapists would need to have a personal relationship with them. Without this, many men agreed that it wouldn't benefit them: *"I guess the reason why I wouldn't go is the same stranger concept again. It's like breaking the ice before you can actually tell them, like how we kind of broke the ice. But it would be more personal things, so it would take longer for me to develop trust for that person."*

Not many men visited counseling services on- or off-campus. Reasons for not going to seek therapy off-campus included not being able to afford it and not trusting it would actually help them. Therefore, it seemed like a waste of time:

> *"They are removed from your life. They can't really do anything. In my opinion, they can't really do anything. It seems like a waste of time, honestly, and a waste of money [...] You can't just call a counselor like that unless you got money like that. It just seems pointless, to be honest."*

On the other hand, if men decided to go to therapy, a major draw would be if the therapist looked like them. It was important to most of these men to have an African American male therapist or an African American therapist. Men explained that this created a better chance that therapists could relate to them on various levels (i.e. culture, class, socioeconomic status). Different backgrounds and upbringings would also mean a lack of connection:

> *“I've never been to Counseling Services, but I'm going to use this example. If you all were old white women, there's no shot I would have been talking about weed at any point. It's a comfort level, and then you get ... Different groups, you've got to change how you put it to yourself and talk. I can't speak comfortably if someone looks a lot less like me, it's a lot less like likely I'm going to be comfortable speaking a certain way. Or even explaining what I mean to a certain point, I'm not going to give you certain details, if I don't think you're going to understand or understand the significance to me.”*

Organizing Theme 7: Societal Views on Help-Seeking and Men who Seek Help

Within this theme, men answered questions asking about how they felt society viewed African American men who seek help and those who may be experiencing mental health issues.

Theme: Some are Strong and Others are Weak

Specific to how society viewed African American men who seek help, participants discussed that they have seen people glorify those who seek help and also those who do not:

> *“I feel like it depends on who you're talking to. Some people feel like they applaud that. You realize you have an issue, you're going to get help, and then other people look at you like, "Oh, you're crazy or you're damaged goods," or something like that because you went to go get counseling.”*

However, the stigma surrounding seeking help and those who seek help outweighed the possibility of being looked at as strong. Ultimately, men were afraid to be seen seeking services, afraid to be judged, and afraid of being treated differently because they sought help: *“And, I try to think about how other people would see me. And I know I shouldn't be doing that because I should only be focused on myself and what makes me happy, what betters me. But it's like, "I don't want to be judged."* Men felt that society painted the picture that African American men

must be masculine, suppress emotion, and can't show vulnerability. Men talked about societal apathy mentioning that they felt society didn't care about African American men's mental health, were not aware of the issues men may be facing, and didn't care. Because of this, men explained that African American men are portrayed poorly in the media. Some participants expanded on this notion, mentioning that they feel Black men have been brought down so much but are expected to be resilient and maintain a sense of strength. Many men mentioned feeling alone in society: *"Society paints us to be this monstrous person, and honestly most of us are not even like that. African American men, we have feelings too."*

> *"We want to be able to express that, but... And I just can't blame it on society, I can blame it on culture and family and stuff like that. They want us to always walk around like... I don't know. I can't really explain it. I can't really pull it into words how the weakness... We just can't be weak in this society. We can't have any room for anybody to say anything about us or bring us down anymore, because we've already been brought down basically to the floor already…"*

Theme: Mental Health Issues are Normalizing

According to participants, mental health is becoming a hot topic in TV and social media. Men mentioned how they have seen TV shows and movies present scenes that focus on mental health issues. Men did not specify what issues were discussed, however. Men talked about seeing many athletes open up and come forward about their depression and anxiety. The men discussed that when some celebrities came forward about their issues, however, they were looked down upon, it lowered their status, and people "trolled" them (i.e. ridiculed relentlessly on social media platforms):

> *"The first thing that popped in my head was during sports, how there's some athletes who*

go through it publicly and they say things about it, but when they do that, majority of the people who see that look down on them, put them lower than the other people because they're expressing their mental health."

Much of the ridicule stemmed from preconceived notions that athletes should not be experiencing mental health issues because they are rich and popular, and should be showing strength and not weakness. Overall, outside of this, participants rarely see African American men discussing such issues and rarely see society aiming to help African American men who may be dealing with such issues:

I think in society, I think it's easy to feel alone if you're feeling that type of way, because it probably seems like most people don't really care, especially not to try and help you with the problem, like try to fix it or offer some sort of support. As far as on campus, I think maybe on this campus you would like to think that it would be more welcoming, but I think that by default it would probably be something similar.

Discussion

Absent from the mental health literature is research associated with the mental health of African American men in college. This is a critical barrier to progress, seeing as African American men's mental health has been often been linked to poor academic success and other health outcomes. Further, there is a paucity of theoretically-based qualitative studies addressing help-seeking behavior among this population. An understanding of the mental health experiences of these men and influences on their help-seeking behaviors will be a vital step in improving health among these men. Therefore, the aim of this qualitative study was to use focus groups guided by the SEM to understand and probe the individual, interpersonal, community and

societal influences on the onset of depression and anxiety among African American men in college and what factors impact their likelihood of seeking help.

Men discussed and provided specific reasons or instances where they might be experiencing depression or anxiety. Consistent with other studies, findings show that stress is the most prevalent risk factor associated with developing mental health issues (Mouzon, Taylor, Nguyen, & Chatters, 2016; Pittman, Cho Kim, Hunter, & Obasi, 2017). This study was able to provide into insight into significant stressors for men on a campus, which included interpersonal relationships, finances, college factors, such as academic and future success, and the college transition. Specific to the college transition, men discussed learning to navigate one's newfound independence and freedom as a major stressor. Men were not necessarily able to balance new responsibilities and demands that came with this new period of development. Further, trying to deal with the new demands added to their stress. This is in the literature; however, mostly from the lens and experiences of female college students (Byrd & McKinney, 2012; Fiori & Consedine, 2013).

Other stressors included the pressure men felt by way of themselves and their parents. As we see in literature, parental pressure has been associated with mental health symptoms as a risk factor (Deb, Strodl, & Sun, 2015). Among these men, we see that this pressure exists, especially for first-generation students. Though these men's parents may not have gone to college, they place *a lot* of pressure on their children to go to college and graduate. Importantly, these men mentioned that they are already under pressure to get good grades, meet deadlines, and meet the demands of their courses so they can graduate with good grades and be better positioned to succeed in their careers. This combined impact of stress from self-pressure and parental pressure places men at risk of experiencing stress and mental health symptoms. Financial stress did come

up in conversation among these men. They were often dealing with the stress of trying to afford books and everyday college needs, such as food and rent (for those off-campus). The aligns with current literature (Heckman, Lim, & Montalto, 2014), showing that financial stress influences negative outcomes, such as depression and anxiety. It is important to note that there are various levels to individuals' financial stress and that should be taken into consideration when expanding on these study's findings (Northern, O'Brien, & Goetz, 2010).

Findings provided insight into signs and symptoms associated with mental health among these men. This contributes to the literature as some studies have indicated that African American men may present symptoms associated with depression and anxiety differently than their peers (Al-Khattab, Oruche, Perkins, & Draucker, 2016; Lu, Lindsey, Irsheid, & Nebbitt, 2017; University, 2018). According to the results, men are experiencing symptoms associated with depression and anxiety internally and externally. Similar to current literature (Watson, 2007), men are feeling emotions of anger and sadness; however, they explained that such emotions are not always expressed and cannot be seen physically. Men mentioned some internal symptoms or feelings include moments when their minds are racing and they feel overwhelmed such that the world is *caving in* on them. Symptoms that are expressed outwardly might include changing behaviors, social isolation, and sleeping. It seems most of the external symptoms mentioned would be hard to ascertain or notice unless these men have people close enough to them to notice changes in behavior. This would be an aspect to focus on for future work. As men are more likely to suppress feelings and pretend that everything is okay, approaches would need to address this in order to reduce risk and prevent poor mental health among these men.

Further, what is also seen from the results is that many men in this study could not necessarily describe signs and symptoms associated with having a mental breakdown. Further

analysis of this would be important for future prevention efforts. Such efforts would need to ascertain what signs are associated with men's boiling points. For example, what leads up to a breakdown event and how do men, then, deal with the aftermath. This would provide some insight into potential intervention components for future research aiming to address stress levels among African American men in college.

Similar to current mental health literature (Polanco-Roman, Danies, & Anglin, 2016; Thomas, Hammond, & Kohn-Wood, 2015), though men were aware of the benefits associated with help-seeking, they did not seek help. Expanding on previous findings (Mincey, Alfonso, Hackney, & Luque, 2015; Thomas et al., 2015), men talked about their resorting to coping methods, instead, which they did so more often than seeking informal or formal help. These men engaged in both adaptive and maladaptive coping methods. Importantly, adaptive methods men may engage in for dealing with mental health issues is not well-documented in the literature. Findings show that, in brief, men's adaptive methods ranged from hanging out with friends, listening to music, playing video games and practicing self-care (*see Table 1*). Aligning with literature, maladaptive coping included substance use, social isolation, and excessive sleeping (Goodwill, Watkins, Johnson, & Allen, 2018). Cannabis use or smoking weed was highly endorsed among this population, across all groups. Particular to maladaptive coping, men often attributed their increase in substance use to the college transition. In other words, as men entered college, they began using substances to cope with their increased levels of stress. This further adds to the evidence base suggesting that the college transition is especially stressful for young adults such that behaviors change in order to cope with the accompany stress and stressors (Arnett et al., 2014; Kogan, Cho, Brody, et al., 2017; Newcomb-Anjo et al., 2017).

According to various studies, African American men's help-seeking behavior is negatively impacted by barriers such as lack of knowledge of mental health symptomology and disorders, mental health stigma, and social constructions of masculinity (McDermott et al., 2017; Powell et al., 2016; Seidler et al., 2016). In this study, diverging from current literature, lack of knowledge particular to mental health conditions was not apparent. In fact, the men in this sample were able to definitively list types of mental health disorders, suggesting they are aware of such issues.

Mental health stigma came up frequently in discussion but mostly in regards to help-seeking, not necessarily in regards to the onset of mental health symptoms. According to participants, there is a taboo around 1) discussing mental health issues and 2) delving into issues that might cause men to be vulnerable and open. Men were afraid that if they opened up to their friends or loved ones, they would be looked at as less than and create room in these relationships for pity. According to the results, men's last resort is to speak to their friends, family, or significant others about issues they may be dealing with because they are afraid of what people may think about them. These notions of mental health stigma as a barrier is quite common in the literature. According to recent studies, students are less likely to utilize services (ACHA, 2012, 2016) and have attributed this apprehension to mental health stigma (Bibelhausen, Bender, & Barrett, 2015; Ward & Besson, 2012). Studies addressing this have been successful in attenuating stigma associated with seeking help (Livingston, Cianfrone, Korf-Uzan, & Coniglio, 2014; Livingston, Tugwell, Korf-Uzan, Cianfrone, & Coniglio, 2013); however, more research is needed to understand how mental health stigma manifests itself in the lives of African American men on college campuses. Though stigma serves as barrier to help-seeking, men did mention that the promotion of trust, a guarantee of confidentiality, and a person's genuineness or willingness

to provide genuine help would aid in their willing ness to seek help. Future work should consider how to leverage and promote trust, genuineness, and relatability for these men.

The framework of the SEM allowed us to better understand how social expectations of men impact help-seeking and mental health risk. At the individual level, men were more likely to discuss personal experiences, describing their inner battles with trying to suppress emotions. In the literature, this is often known as gender role conflict, which posits that men's social behavior and social situations are primarily dictated by the restrictive nature of masculine norms (O'Neil, 2013). Conformity to such norms places unique strain on men, increasing their stress levels, as well as negatively influences their health behaviors (Mahalik et al., 2003; McDermott et al., 2017). For men in this study, this was seen through their lack of help-seeking despite knowing the potential benefits and their endorsement of poor coping methods. Further, reasons for these unhealthy behaviors were directly tied to their desire to remain masculine and seem strong. At the interpersonal level, masculinity was discussed from the perspective of people's expectations for men. Men discussed that people would treat them differently and expect them not to show emotions because they are African American men. Lack of help-seeking was also tied to, what these men would call, generational differences in perceived stress. In other words, men discussed how the stressors they experienced, now, were considered different or less than what their parents or older individuals experienced. Because of this, men felt their parents and others would dismiss their stress and, almost, minimize their experiences with certain stressors. At the community and societal levels, perspectives were different such that being an African American man is associated with a criminalistic nature. The psychological impact from this and the effect it has on African American men in this sample aligns with the literature. These pressures increase men's risk of experiencing feelings of hopelessness and sadness, and ultimately, developing a

mental health issue (Wester, Vogel, O'Neil, & Danforth, 2012). Importantly, suppressing such emotions, trying to maintain a sense of masculinity and not seeming weak will decrease men's likelihood of help-seeking despite knowing the benefits associated with it (Powell et al., 2016; Seidler et al., 2016).

Consistent with other studies, help-seeking for mental health issues was not common among this population (Hunt & Eisenberg, 2010; McDermott et al., 2017) and this was evident in discussions surrounding African American man's mental health issues. In general, conversations about mental health do not occur. These men, their friends, or family or other men they know would rarely discuss issues associated with stress, emotions, or feeling down. Much literature states that some informal help-seeking methods among African American men and African American communities include prayer and churches (Bierman, 2006; Hayward & Krause, 2015); however, among this population, though it is recommended to them as a viable method (i.e. from parents), prayer or going to church were rarely discussed as a preferred method. In fact, a couple participants believed it did not always alleviate the issues they well dealing with.

Saturated in the literature is the notion that social support can serve as a buffer for stress and help reduce risk associated with the onset of mental health symptoms (Barker et al., 2018; Constantine, Wilton, & Caldwell, 2003; Gariepy, Honkaniemi, & Quesnel-Vallee, 2016). We see in some literature that the presence of significant others or loved ones can mitigate negative effects experienced from daily stressors (Carter-Francique, Hart, & Cheeks, 2015; Constantine et al., 2003) like racial discrimination. However, diverging from this literature, the men in this sample interestingly were not romantically involved with significant others and did not see this as a major source of protection against mental health issues. If they were involved with someone

it was not considered substantial enough or safe enough for men to disclose their issues or feelings to.

Limitations and Future Directions

This study has several limitations that may serve as avenues for future researchers and research. Consistent with qualitative studies conducted with this population, the sample size is small and therefore the results are limited in scope. As this health issue is a growing concern and more research is needed to fully understand the college African American male experience, future research should aim to 1) conduct more research qualitatively and 2) contrast and compare multiple universities to include perspectives from various types of universities and colleges. For example, are the experiences of men different at Historically Black Colleges and Universities than at PWIs? Importantly, future programs and initiatives geared towards improving help-seeking among this population, if informed by these future studies, will include components that are effective and sustainable over time. Despite this limitation, this study offers significant insight into a marginalized population and their barriers, facilitators, and preferences for help-seeking, as well as the social factors that increase their risk of developing depressive and anxiety symptoms. Key findings will allow future research to understand which factors are most relevant for future research and mutable factors for future quantitative or intervention work. Lastly, a strength of this study is in the utilization of SEM. The SEM provided a unique lens in which the results show valuable insight into social and environmental factors that interact at multiple ecological levels.

Conclusion

With increasing rates of mental health symptoms among African American, young adult men, it is important for public health professionals and campus officials to become aware of how

to address mental heal needs among their students. This study is one of only a few to qualitatively examine help-seeking behavior and risk/protective factors associated with mental health risk among African American men on a college campus. Findings suggest that African American men's mental health risk and help-seeking is not necessarily impacted by lack of knowledge. African American men refrained from seeking help due to stigma, fear of judgement and breaches in confidentiality, and lack of trust. Signs and symptoms of depression and anxiety included social isolation, anger, and irritability. Coping methods among this sample were both maladaptive and adaptive, including cannabis use, which was highly endorsed among this sample. Informal methods preferred were talking to friends while formal help-seeking was of minimal interest, mostly due to finances, lack of trust, and uncertainty of the professional's genuineness.

Public health practitioners should consider expanding on these findings, focusing on aspects that diverge from current literature. For example, religion though considered as an avenue for mental health prevention, was not a preferred method among this population. Researchers should aim to quantitatively examine factors, such as masculinity, that impact help-seeking and mental health risk among this population and those like them. This will be particularly relevant for college professionals who wish to improve mental health among minority men and reduce educational disparities that continue to persist. Further research is needed to improve mental health and help-seeking among these men.

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Chapter 5

Discussion

This dissertation study aimed to fill a significant gap within the mental health literature, examining and addressing the mental health prevalence and rates of help-seeking among African American men in college, as well as examining their perceptions, barriers, and facilitators of help-seeking for anxiety and depression-related issues. This dissertation work consisted of three studies, all with their own research questions or hypotheses. The specific aims were to: 1) examine the prevalence of anxiety and depressive symptoms and rates of campus health services utilization among university-enrolled, African American men and compare these prevalence rates to university-enrolled, African American women and White men; 2) examine and analyze predictors and correlates of mental health risk and help-seeking methods among university-enrolled, African American men; and, 3) understand the social and contextual factors that not only influence mental health risk among university-enrolled, African American men on a college campus but also their anxiety and depression-related help-seeking behaviors.

Specifically, for Aim 1, it was important to ascertain if African American men in college are experiencing anxiety and depressive symptoms and if they are seeking help for such issues. For Aim 2, it was hypothesized that a) there will be positive relationships between stressful life events and financial stress (risk factors) and reports of symptoms; b) there will be negative relationships between social support and religiosity (protective) and reports of symptoms; c) there will be positive relationships between alcohol use, cannabis use and reports of symptoms and negative relationship between academic achievement and reports of symptoms (associated). For Aim 3, the primary focus was to determine the individual, interpersonal, community, and societal level factors that not only influence mental health risk among African American men but

also the factors that promote and negatively impact help-seeking behaviors among African American men on a college campus.

Aim 1

This aim employed a secondary data analysis of a university-wide, longitudinal dataset, including data from approximately 4600 students. Key findings showed that endorsement of anxiety and depressive symptoms among African American men were at least 8% to 18% lower than their peers over the span of four college years. As students went through college, rates of endorsement dropped gradually for White men and Black women but decreased significantly for African American men. Findings also showed that depression was more prevalent among this sample of college of students. Assessment of utilization showed that while in college, African American men who were experiencing depressive symptoms were using recreational services more than all their peers and health services less than their female counterparts.

Among those who were experiencing anxiety symptoms, African American men used recreational services more than African American women but less than White men in the first year. Also, in year 1, African American men used counseling services at lower rates. During sophomore, junior and senior years, African American men visited health services at lower rates than African American women. Similar, but only in year 2, African American men utilized services at The Well at lower rates than their female counterparts. Importantly, even when African American were experiencing *high* levels of symptoms, utilization rates for African American men remained low. The findings pertaining to counseling services and The Well speak to the current state of African American men's mental health-related help-seeking behaviors (Augsberger, Yeung, Dougher, & Hahm, 2015; Marsh & Wilcoxon, 2015; Novak, Peak, Gast, & Arnell, 2019). University counseling services specifically offer therapeutic services, as well as

refer students to community mental health services, if needed. On the other hand, The Well, though not a designated counseling center, offers mental, emotional, and behavioral resources for students' mental health concerns and referrals to university counseling services. As the literature states that men are less likely to use formal services (ACHA, 2012, 2016), this finding is not surprising.

Aim 2

This study utilized the same dataset mentioned in Aim 1 but focused particularly on African American men ($N \sim 681$) during their freshman and sophomore years. Results indicated that, among risk factors, stressful life events predicted both category of symptoms during both years for African American men. Financial stress, which included analysis of perceived financial stress and parental education, was associated with higher levels of anxiety but only in Year 2. Among protective factors, surprisingly, social support was not a significant predictor of symptoms; however, religiosity was associated with lower levels of anxiety symptoms in year 1 and depressive symptoms in year 2. When associated behaviors were added to the models, only cannabis use was able to predict depression in Year 2.

Aim 3

This study employed qualitative focus groups with 20 African American college men, including those who have and have not used a campus health resource. Students' class status ranged from freshman to senior year. Organizing themes included men talking about their knowledge and awareness of mental health conditions and issues; signs and symptoms associated with depression and anxiety; coping preferences; and about which formal and informal ways they sought help from and how they perceived those services in general. Unlike current literature, these men were fairly knowledgeable of mental health definitions and aware of various

types of mental health disorders. Some stressors for increased stress and "feeling down" included poor parental relationships, finances to afford books, rent, and food, meeting academic demands, and planning for the future. Main stressors centered on masculine ideology and the college transition. Many men discussed how social (gender) expectations made it difficult for them to be themselves; recognize certain emotions; and seek help though they knew it would beneficial for their social and academic life. In regards to where to find help, they were less aware of locations on campus to visit but knew of these services (i.e. wellness center).

The college transition, according to these men, involved a lot of self-exploration and navigating independence, causing them high levels of stress that often led to expression of certain symptoms and certain maladaptive coping. Symptoms included, mainly, social isolation, as well as anger, irritability, and overwhelming feelings of *feeling down* and sad. Coping methods mostly included substance use (i.e. cannabis use), excessive sleeping, physical activity, hanging out with friends, and, unsurprisingly, social isolation. According to the findings, informal methods were preferred to formal methods, which isn't surprising. Reasons for preferences included lack of affordability and the notion that men do not feel comfortable speaking to strangers about issues they may be dealing with due to fear of insincerity on behalf of the therapists. Men would consider seeking help from therapists, on and off campus, if they felt they could trust the therapist and if the therapist looked like them. Across all groups, men talked about the desire for their therapists to be able to relate to them on some level which is more likely to occur if the therapist was black and/or male. For informal methods, preferences lied with friends; however, the conversation around issues concerning mental health or emotions were not regularly disclosed because men were not willing to show that *vulnerability;* were fearful of consequences and seeming weak; and, wanted to remain masculine.

Integration of Findings

As mentioned in Chapter 1, though Aims 1, 2, and 3 are separate studies with their own research aims, hypotheses and questions, they are interrelated and aimed to address an overarching public health issue. To reiterate, the overall aim of this dissertation work was to utilize a concurrent, mixed methods approach to examine the prevalence and correlates of anxiety and depressive symptoms among university-enrolled, African American men, and the contextual factors that impact their mental health-related help-seeking. A major strength of a mixed methods approach is allowing researchers to examine and understand contradictions and convergences between quantitative results and qualitative findings (O'Cathain, Murphy, & Nicholl, 2010; Tariq & Woodman, 2013; Tashakkori & Teddue, 2003). The findings are integrated in the following sections.

Mental Health Prevalence. From all three aims, it is seen that African American men, overall, are experiencing anxiety and depressive symptoms. Aim 1 provided objective data for prevalence rates, showing that African American men's endorsement of anxiety and depressive symptoms are high during the transition to college. As college moves forward, these rates drop. Aim 1 provided this data for four years of college and compared it to two other ethnic groups (i.e. African American men's female and male counterparts), offering evidence into differences in prevalence rates of anxiety and depressive symptoms among African American men compared to their peers. Aim 1 results also showed how help-seeking rates might differ for each ethnic group and for those, among these groups, who were experiencing high levels of symptoms. Aims 2 and 3, focus on African American men only, lacking the ability to compare across ethnic groups. Consistent with the quantitative data, in Aim 3, African American men described experiencing anxiety and depressive symptoms to some extent across all years of college, as well

as described the challenges of transitioning to the college environment, particularly for first generations students.

Mental Health Risk Factors. Aims 2 and 3 examined mental health risk among African American men. Aim 2 provided evidence for mental health risk, whereas Aim 3, took it a step further to describe the context in which African American men are experiencing such risk. Aim 2 data showed that stressful life events significantly predicted anxiety and depressive symptoms. Aim 3 complimented this finding. In the focus groups, men mentioned stress as a major risk factor for anxiety and depression. Factors influencing this stress included the college transition, finances, self-exploration and parental/self-pressure. Aim 2 and 3, however, diverge slightly when assessing financial stress as a risk factor.

For Aim 2, financial stress included two categories: perceived financial stress and parental education. Data assessing perceived financial stress, for both Aim 2 and 3, corroborated one another. Aim 2 results show that perceived financial stress predicted symptoms in Year 2. Aim 3 addresses this further such that men mentioned that they experienced stress from not being able to afford things they want, need, and enjoy. Aim 2 and Aim 3 discussed parental education in different ways. Aim 2 examined whether parent’s lack of education impacted students’ mental health symptoms. According to the results, it did not. From Aim 3 results, parents’ lack of education was discussed from the perspective of first-generation students. For example, according to men, their parents’ lack of education did cause these men to be stressed out. According to results, being a first-generation student left men ill-prepared for school as their parents’ lack of college experiences left parents unaware and unable to help their children navigate the demands and requirements of higher education.

Mental Health Protective Factors. Aims 2 and 3 offer evidence for the role of protective factors in preventing or reducing mental health risk. The protective factors assessed were social support and religion. According to literature, social support is a significant buffer for mental health-related stress and symptoms (Constantine, Wilton, & Caldwell, 2003; Hefner & Eisenberg, 2009). Aim 2 suggested that social support is not a factor predicting symptoms or utilization among this population. Aim 3 complemented this finding to a certain extent. According to men, social support, as a buffer, was not a factor associated with decreased mental health risk. In fact, some men mentioned it was more a risk factor such that friendships, romantic relationships, and familial relationships could be stressful or the root of one's mental health concerns. With regard to religion as a protective factor, Aim 2 and Aim 3 contradicted one another. According to Aim 2, religion is predictive of anxiety and depressive symptoms such that endorsement of religion is associated with lower levels. Though this is corroborated in the literature (Brown, Ndubuisi, & Gary, 1990; Hayward & Krause, 2015), according to Aim 3, religion is not effective or sufficient enough in mitigating stress associated with feelings of depression and anxiety.

Associated Behaviors. Associated behaviors, such as substance use and academic achievement (i.e. GPA), were assessed. Aim 2 and 3 complemented one another, offering evidence that associated behaviors, such as substance use, and in particular to this study, cannabis use, is associated with mental health symptoms. From Aim 2, data is objective, showing that African American men are using cannabis. As levels of cannabis use increase so does their depressive symptoms. From Aim 3, according to the results, men are using cannabis as a coping mechanism frequently for both symptoms associated with depression and anxiety. Alcohol use was also assessed in Aim 2, however, it is shown that alcohol was not associated with symptoms

and could not predict symptoms. Further, from Aim 3 findings, it is seen that men did not mention alcohol much and if they did, it was mentioned as a lesser preference to cannabis use. Surprisingly, Aim 2 did not show that GPA was associated or predictive or either category of symptoms. However, from Aim 3, it is seen that men are experiencing high amounts of stress from academic pressures, including balancing assignments and deadlines, getting good grades and passing their courses.

Help-Seeking and Service Utilization. All Aims provided significant insight into men's utilization behaviors, suggesting that 1) men are not using services and 2) men are not using services as optimal rates. From Aim 1, prevalence is assessed for various campus services, including university counseling services, university health services, The Well, and Recreational sports. Aim 2 collapses these services in a poly-variable. Aim 3, on the other hand, provided insight into various services, as well. According to results, Aim 1 and 3 show that men are not utilizing counseling services and health services as much as they could; however, Aim 1 and 2 do not provide context for this underutilization. Examining the results from Aim 3, it is seen that social support or support from friends is important in serving as a preferred method of help-seeking among these men. Further, in order for men to engage in such behaviors, they must feel they can trust those they are seeking help from, can relate to them, and are guaranteed a sense of confidentiality.

Strengths, Limitations, and Future Directions

The results from this dissertation should be considered in the context of several limitations. For Aims 1 and 2, keeping in mind that the same dataset is used, certain measures and variables are included in this analysis, leaving others out. Though choice of these factors is guided by the SEM, there may be other measures that can provide different insight into mental

health prevalence and experiences of African American men on a college campus. Further, it is important to mention that these measures from the original dataset are mostly self-report and may not: 1) necessarily be able to capture symptoms among minority populations and 2) do not definitively speak to diagnostic criteria associated with depression and anxiety. However, many of the measures included in these studies have been used in various clinical and academic settings focusing on emotional, behavioral and mental health outcomes (Bourdon, Moore, Long, Kendler, & Dick, 2018; Dick et al., 2014). Attrition is also a limitation of Aims1 and 2 studies. For instance, Aim 1, initially, showed a sample of 681 African American men and by the later years, the size decreased to approximately 120 African American men. At first glance, this is alarming, but, similar to other literature in education, it is reported that: there are less African American men enrolling in college than other populations; African American men are less likely to return to school; and, African American men are less likely to graduate (McDaniel, DiPrete, Buchmann, & Shwed, 2011; Reeves & Rodrigue, 2017).

Another limitation lies in the focus of three ethnic groups, limiting the generalizability of the results. Also, those who participated in this study may be more likely to engage in research increasing risk of selection bias in this study (Salazar, Crosby, & DiClemente, 2015). Therefore, numerous populations are excluded and may not face the same issues or may not fully benefit from the findings. Despite this, focusing on African American men and examining aspects related to mental health and help-seeking contributes to the current literature, speaking to the marginalized experiences of a vulnerable population and offering guidance for future avenues of research. African American men, in general, are a severely marginalized population whose mental health issues are steadily climbing and yet despite prevention efforts their help-seeking remains low and they continue to face significant disparities in health. Therefore, this study

provides valuable information and selection bias does not take away from the significance of this work.

Future research can expand on these results and adapt accordingly based on population. From these findings, we can begin to think about or plan to develop research that addresses these limitations and contributes to these findings, offering intervention targets for intervention geared towards help-seeking and mental health improvement. For example, quantitative research can focus on certain factors to gain a sense of which are most mutable for future work. For example, as masculinity is mentioned as a barrier, future research can quantitatively address questions such as how masculinity moderates the relationship between depression and the utilization of counseling services among African American men. Evidence suggests that the relationship between depression and service utilization will be weaker at higher levels of masculinity (Mahalik et al., 2003; McDermott et al., 2017).

Although a strength of this study, the findings are derived from the lens of the SEM which may be limiting to the scope of this model. Data suggests that the inclusion of theory and evidence-based strategies are most effective in health behavior change (Golden, McLeroy, Green, Earp, & Lieberman, 2015); however, the use of theory is lacking in much formative research, as well as in the design, development, and evaluation of research studies and programs (Sniehotta, Presseau, & Araujo-Soares, 2015). There may be other theories, such as the Integrated Behavioral Model (IBM) that may be better suited for this population. IBM posits that an individual's intention or ability to engage in a behavior is directly affected by their attitudes, behavioral beliefs, perceived norms, as well as their control and self-efficacy beliefs (i.e. personal agency) (Glanz, Rimer, & Viswanath, 2008b; Hammond, 2012). The utilization of this model, then, may be effective in increasing perceived behavioral control and self-efficacy,

which, in turn, promotes behavior change (i.e. help-seeking). However, the use of this may be more suitable for intervention work; hence, future researchers should aim to utilize such theories, alone, or in conjunction with one another, promoting comprehensive and sustainable approaches (Glanz, Rimer, & Viswanath, 2008a; Grembowski, 2016). Despite this, the utilization of the SEM is quite beneficial as it provides a framework to capture a variety of social and environmental factors that influence risk and behavior at various ecological levels, some of which may not be captured otherwise.

Implications for Research Practice

There are various implications for future practice. Primarily, as the research examining mental health prevalence among African American men in college or in emerging adulthood are limited, more studies should be conducted to address this. Importantly, findings specific to Aim 1 offer valuable insight into mental health prevalence. The results showed, overall, that though African American men are experiencing anxiety and depressive symptoms, they are reporting less endorsement of symptoms compared to White men and African American women. This result may be due to biases in measures as they are self-report and may not be able to accurately identify symptoms among African American men (Hankerson et al., 2011). From the literature, this is probable as there is evidence to suggest that African American men may express mental health symptomology differently compared to their male and female counterparts (Hankerson et al., 2011). To this end, more research is needed.

On the other hand, it could be that the measures from the Spit for Science survey are suitable and reliable, as we see in the introductory Spit for Science article (Dick et al., 2014). It could be that African American men, on this campus, are, simply, just not experiencing such symptoms at higher rates. It may be beneficial for campus practitioners and public health

professionals to examine this further, quantitively and qualitatively, inquiring why this is the case. Surveys, for example, can be distributed widely with and questions that are designed to understand a) what about this campus is less anxiety inducing and b) what about these men helps them combat anxiety and depressive symptoms. Along this same notion, from the results we also saw that depressive symptoms were more prevalent for all groups. It may be beneficial for practitioners to examine this further, asking what about this campus is increasing student's risk of developing depressive symptoms. This will provide researchers and campus practitioners with valuable information, allowing them to develop programs and initiatives that attenuate depression risk among on college campuses and improve health among severely marginalized groups on their campuses and in their communities.

Future studies can address the unique findings in this study, particular to risk and protective factors and their impact on symptoms prevalence and predicting utilization. For example, results from Aim 2 showed that social support as a protective factor was not as common among this group as stated in literature (Pornsakulvanich, 2017; Pössel et al., 2018; Wang et al., 2018; Wright et al., 2013) and was not predictive for onset of symptoms. However, aligning with literature (Kendler, Gardner, & Prescott, 1997), religion was associated with lower levels of symptoms and predicted symptoms. This may suggest that prevention efforts for this group may need to focus more on the effects of religiosity and whether it is or is not viable among this population. In light of this, practitioners should aim to develop programs that promote relevant aspects associated with religion and spiritual beliefs among African American men. This would require in-depth analyses on the role of religion in African American populations and more specifically, among young, adult African American men.

In Aim 3, focus groups, men often discussed that social support (i.e. significant others and family) (McNeil, Fincham, & Beach, 2014) and religion were not preferred methods of help-seeking. Particularly for social support, some relationships actually negatively impacted one's mental health or, rather, was not sufficient enough for addressing one's personal issues. Future research should aim to further analyze the effects and impacts of social support on mental health risk and help-seeking. It could be with this group that social support and religion may not be primary intervention targets for future programming efforts geared towards help-seeking improvement. Though, further research would provide insight into the role of protective factors. Nevertheless, it would benefit researchers to, first, focus more so on other social and environmental factors for help-seeking and prevention of mental health symptoms. For example, from the focus groups results, we see that going to the gym or listening to music are common methods for coping and, also, that talking to friends are a preferred method for informal help-seeking. Future work can focus on establishing intervention components that utilize these methods.

Similarly, overall, findings show that campus service utilization remains low among African American men, despite them experiencing mental health symptoms. This offers evidence that formal help-seeking methods may not be optimal for this population. Reasons for this underutilization or lack of, according of these men, have been associated with social constructions of masculinity, lack of trust and insincerity, fear of breaches in confidentiality, and affordability. These should be taken into consideration when developing programs and initiatives that are geared towards closing the gap in mental health service use among African American men on a college campus (Kessler et al., 2001; Pattyn, Verhaeghe, & Bracke, 2015). For example, as men are more likely to talk to their peers and seek informal help from their friends,

practitioners should look into creating opportunities for research that leverage peer-to-peer relationships. It may be effective to: train students in being peer support and develop activities and initiatives that are not formally therapeutic in nature. In addition, as mental health literature has shown evidence for social campaigns in reducing mental health stigma and conformity to masculinity (Hui, Wong, & Fu, 2015; Livingston, Tugwell, Korf-Uzan, Cianfrone, & Coniglio, 2013; Watkins, Allen, Goodwill, & Noel, 2017) and other barriers to help-seeking, it may be beneficial for researchers to leverage campaigns on college campuses and, even, on social media.

The utilization of social media may be an avenue for this (Carlyle, Guidry, Williams, Tabaac, & Perrin, 2018; Williams K., 2020). A key component of effective health promotion programming is using channels relevant to your target audience. Among young adults, more than 80% are using social media platforms extensively, being active for longer than six hours per week (Eagan & Hurtado, 2014; Eagan et al., 2014). Supporting evidence suggests that social media platforms are already being used to discuss mental health concerns, such as suicide and depression (Carlyle et al., 2018; Guidry, 2016), and has the potential to reach large numbers of individuals, as well as those who may otherwise be difficult to reach (Robinson et al., 2015). Given this potential and the lack of research in this area, an understanding about mental health on visual-based social media platforms is of interest. Importantly, researchers and health organizations have begun adopting social media as a platform for prevention and improving help-seeking among African American men (Watkins et al., 2017).

Future research should also aim to work directly with individuals from the communities they wish to serve—young, African American men, utilizing a community-based framework. Such framework and approach will increase researchers' ability to recruit and retain men (Minkler & Wallerstein, 2008) in research despite the sensitive nature. As mentioned in much of

the qualitative results, having someone that one can relate to or be able to understand what these men are going through will aid in men's ability to trust and speak to professionals. A community-based or -participatory framework will also ensure methods are culturally relevant and gender appropriate (Jemmott, Jemmott, Lanier, Thompson, & Baker, 2016; Victor et al., 2011; Ward & Brown, 2015) to effectively and accurately capture objectives of studies and aid in researchers ability to interpret results from an empowerment perspective and not a deficit perspective (Berkwits & Inui, 1998; Cypress, 2017).

Further, as conducting such research can be quite intrusive for marginalized, vulnerable populations, in part due to power imbalances, community-based frameworks would be effective. Approaches can include the practice of reflexivity in an effort to mitigate power imbalances (Palaganas, Sanchez, Molintas, & Caricativo, 2017; Research, 2006). Methods for this include self-reflection and becoming aware of personal biases (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014; Palaganas et al., 2017). This will ensure researchers are able to design studies that are culturally relevant and appropriate (Palaganas et al., 2017; Ulin, Robinson, & Tolley, 2005). Another method suggests the establishment of a community advisory board (CAB) which would ensure those who are helping develop these studies, programs and initiatives are from the community and can serve as gateways to the overall community (Corbin & Strauss, 2015; Minkler & Wallerstein, 2008). This aids in the mitigation or power imbalance as well as promote trust (Minkler & Wallerstein, 2008; Palaganas et al., 2017; Research, 2006; Sanjari, Bahramnezhad, Fomani, Shoghi, & Cheraghi, 2014).

Conclusion

Depression and anxiety are public health concerns, with prevalence expected to increase over the years; however, it is preventable. As psychological distress is a major risk factor,

intervening on this determinant is a step forward in the reduction of this prevalence. Young, African American men, ages 18 to 25, who are enrolled in college are at particular risk of developing psychological distress. This risk has been associated with everyday racial discrimination, disproportionate experience with reduced socioeconomic opportunities, and increased likelihood of adverse experiences. Unfortunately, these young men are not seeking the care they desperately need to combat the onset of psychological distress, prolonging their experiences with poor psychological health. This dissertation was designed and implemented with this in mind, consisting of three separate but interrelated studies that aimed to examine, ascertain, and understand what about social and environmental factors in the lives of African American men on a college campus impact their mental health risk and their help-seeking behaviors.

This study's key findings suggest that various stressors at numerous ecological levels can interact to negatively impact one's mental well-being and increase African American men's risk of developing anxiety and depression. Aim 1 showed that African American men underutilized available campus health resources despite reporting one or more symptoms associated with anxiety and depression. Aim 2 demonstrated that African American men's mental health is affected significantly by stressful live events. Results also showed that utilization is not impacted by the risk and protective factors assessed in this study. Lastly, Aim 3 findings showed that underutilization is attributed to social expectations for these men and ecological factors, such as race, stigma, access to services, and preferences for help-seeking methods.

Importantly, this study offers guidance for mental health researchers and campus-based practitioners. For future research and programming efforts, practitioners and public health professionals should take the following into consideration:

1) African American men on this college campus are experiencing anxiety and depressive symptoms at lower rates.
2) Depressive symptoms are more prevalent on this college campus.
3) Despite experiencing symptoms, African American men underutilize campus health services.
4) Stressful life events are a robust predictor of anxiety and depressive symptoms among African American men on this college campus during their first two years
5) Social support may not be an avenue for future prevention work; however, religion may be worth leveraging in public health prevention efforts
6) Formal therapeutic services may not be preferred or suitable for these men; however, peer-to-peer support and informal, nontraditional methods, such as social media, may be a viable point of scientific inquiry and program development, implementation, and evaluation.

In conclusion, researchers, practitioners, and policymakers who wish to develop effective mental health prevention programs that attenuate mental health risk and increase help-seeking behavior among African American men should aim to expand on these findings and considerations. Conducting research in this area will provide more evidence for future work, contributing to a evidence-base that is limited. Future research in this area, therefore, will aid in improving the well-being of African American men on a college campus and in reducing racial, educational, and health disparities that negatively impact this community. It is the hope that this dissertation study’s findings and future work would provide a theoretically-based foundation for the development of relevant and effective mental health prevention programs that are sustainable and

promote an empowering social and institutional environment for severely marginalized populations, like African American men on a college campus and within various area in society.

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APPENDICES

Appendix 1: Chapter 2 Paper 1

List of Measures (from Spit for Science Working Group)

Alcohol consumption (past 30 days) was measured using the frequency and quantity items from the Alcohol Use Disorder Identification Test (AUDIT; Bohn, Babor, & Kranzler, 1995). Response options for frequency ("How often do you have a drink containing alcohol?") were "never", "monthly or less", "2 to 4 times a month", "2 to 3 times a week", or "4 or more times a week." Response options for quantity ("How many drinks containing alcohol do you have on a typical day when you are drinking?") were "1 or 2", "3 or 4", "5 or 6", "7" and "10 or more." Combining across frequency and quantity items allows for creation of an additional past 30 days alcohol consumption variable.

Subjective response to alcohol was measured using the 4-item Self-Rating on the Effects of Ethanol instrument (SRE; Schuckit, Smith & Tipp, 1997). The SRE measures low level of response to alcohol and is strongly correlated with risk for future alcohol-related problems. Participants were asked how many drinks it took them, the first five times they drank, to (1) "begin to feel different", (2) "begin to feel a bit dizzy or begin to slur your speech",(3) "begin stumbling, or walking in an uncoordinated manner", and (4) "pass out, or fall asleep when you did not want to."

Alcohol use disorder symptoms/diagnoses were assessed using items adapted from the Semi-Structured Assessment for the Genetics of Alcoholism (SSAGA; Buckholz et al., 1994). Diagnoses and symptom counts for each of the following are available at all waves: DSM-IV alcohol abuse, DSM-IV alcohol dependence, and DSM-5 alcohol use disorder.

Risky alcohol use was measured in several ways: maximum number of drinks in 24 hours was assessed using the respective item from the Semi-Structured Assessment for the Genetics of Alcoholism (SSAGA; Buckholz et al., 1994); blackouts were measured using 1 yes/no item ("Have you ever awakened after a night of drinking not able to remember things that you did or places that you went?"); and binge drinking frequency was assessed separately for men ["How often do you have five or more drinks in a single sitting (considered about a 2 hour period"] and women ["How often do you have four or more drinks in a single sitting (considered about a 2 hour period"].

Drinking motives were queried using a 4 item subset from the Drinking Motivations Questionnaire (Cooper, 1994). 1 item for each of the 4 subscales was included: Social Drinking ($\alpha = 0.88$), Conformity Drinking ($\alpha = 0.89$), Drinking to Cope ($\alpha = 0.89$), and Drinking to Enhance($\alpha = 0.85$). Response options were on a Likert-type scale ranging from "strongly agree" to "strongly disagree."

Alcohol use expectancies were measured using the Comprehensive Effects of Alcohol Questionnaire (CEOA; Fromme, Stroot & Kaplan, 1993). A subset of items was included to cover each of the seven subscales: Sexuality, Cognitive and Behavioral Impairment, Risk and Aggressiveness, Tension Reduction, Liquid Courage, Self-Perceptions and Sociability.

Age of first use of alcohol, nicotine, and cannabis was measured using 1 item from SAMSHA ([SAMSHA], 2013).

Nicotine use questions were asked across 4 categories: cigarettes, cigars, smokeless tobacco, and hookah. Lifetime use and total quantity consumed was assessed using items adapted from the SSAGA (Buckholz et al., 1994). Recent (past 30 days) frequency of use was measured using items adapted from SAMSHA ([SAMSHA], 2013). For each nicotine category, participants were asked how frequently they used the product in the last 30 days. Answer options were "I did not use," "Once or twice," "A few days (3 to 4 days a month)," "A couple of days a week (5 to 11 days a month)," "3 times a week (12 to 14 days a month)," "most days of the week (15 to 25 days a month)," and "daily or almost daily (26 to 30 days a month)."

Nicotine dependence was measured using the 6 item Fagerstrom Test for Nicotine Dependence (FTND; Heatherton, et al., 1991). The FTND has been extensively used and validated in a range of populations. Reviews indicate good internal consistency (Cronbach's alphas range from 0.55 to 0.74) and diagnostic sensitivity (~70%) and specificity (~80%).

Caffeine use and withdrawal symptoms. Frequency of caffeine use was assessed with one item, "In the last month in a typical week on how many days did you have...", for each of several beverage categories including coffee and energy drinks. Withdrawal symptoms were assessed using DSM-IV caffeine withdrawal criteria, to include report of headaches, fatigue, anxiety, depression, or nausea or vomiting upon cessation of use (Kendler & Prescott, 1999; American Psychiatric Association, 2000).

Other Drug Use. Lifetime use and total times used was measured using items adapted from the SSAGA (Buckholz et al., 1994). Recent use was assessed using items adapted from SAMSHA ([SAMSHA], 2013). Separate questions were asked for each of the illicit drug categories (cannabis, stimulants, opioids and cocaine). Separate questions were also asked related to non-prescription use of prescription drugs across 4 categories: pain, sedative, anti-anxiety and stimulant medications. In baseline surveys, participants were asked if they had ever used (yes/no response options) and, if so, how many times (free response). During their follow-up spring survey the first year, participants were asked about use "since VCU", roughly corresponding to past 6 months use. In all other follow-up surveys, participants were asked about past 12-months use and number of times used. Two additional questions are asked related to cannabis use: first, participants are asked how often they use cannabis with 4 categorical response options ranging from "monthly" to "4 or more times a week"; and second, an item asking how many hours/typical day the participant felt "stoned" when using cannabis was included.

Drug-related problems/symptoms were asked with items also adapted from the SSAGA. Substance dependence, substance abuse and substance use disorders information is available for each drug category the participant reported to have used 6 times or more.

Antisocial Behavior items were based on conduct disorder symptomatology from the Semi-Structured Assessment for the Genetics of Alcoholism (Bucholz et al., 1994). High school

delinquency was measured with 6 items (skipping school, running away from home overnight, stealing, using a weapon in a fight, robbing someone, and starting a fight) and college behavior with 3 (damaging property, breaking into a vehicle, and carrying a knife or other weapon).

Attention Deficit Hyperactivity Disorder (ADHD) diagnosis (ever)**:** participants were asked to report on whether they had ever been diagnosed with ADHD. Current ADHD medication usage was also addressed with 1 yes/no item.

Physical aggression was measured using 3 items from the Physical Aggression subscale of The Aggression Questionnaire (Buss & Perry, 1992). The instrument is a gold-standard in the field and well validated in college-aged samples. Frequency of physical fighting was also queried with a single, continuous item (free response).

Anxiety and Depression symptoms were measured using a subset of items from the SCL-90 (Derogatis, Lipman, & Covi, 1973), a measure widely used in both clinical and research settings. four items for past month anxiety (α=0.85) and four for past month depression (α=0.89) were included.

Post-traumatic stress disorder (PTSD) was measured using items from the PCL-5, assessing symptoms of DSM-5 PTSD (Weathers, et al., 2013). The instrument has excellent internal consistency (α =0.96) and validity.

Eating disorders (anorexia nervosa, bulimia nervosa, eating disorder not otherwise specified [EDNOS], and binge eating disorder) were each queried separately with 1 yes/no item regarding previous diagnoses. In addition, diagnostic questions related to DSM-IV criteria for Anorexia nervosa and bulimia nervosa were also assessed (American Psychiatric Association, 2000).

Family history of drinking problems, drug problems and/or depression and anxiety was assessed separately for each of the following 4 categories of biological relatives: mothers, fathers, siblings, and aunts, uncles, or grandparents. Response options were yes or no.

Personality was measured using the Big-Five trait taxonomy (BFI), to include agreeableness (α =0.76), conscientiousness (α =0.79), extraversion (α =0.84), neuroticism (α =0.81), and openness (α =0.75) (John & Srivastava, 1999).

Trait-related substance use risk was assessed using a subset of items from the Substance Use Risk Profile Scale (SURPS; Woicik et al., 2006). The SURPS was designed to quickly assess 4 personality traits correlated with substance use: hopelessness, anxiety sensitivity, sensation seeking and impulsivity. Designed for population-based samples, the measure has been validated specifically in undergraduates and reported Cronbach's alpha is typically 0.7 higher.

Impulsivity was queried with 15 items from the abbreviated version of the UPPS Impulsive Behavior scale (Whiteside & Lynam, 2001). 3 items were asked for each of the five

subscales: Negative Urgency, Positive Urgency, Lack of Premeditation, Lack of Perseverance, and Sensation Seeking. The abbreviated version was validated in a college sample and maintained the original factor structure, and strong psychometric properties of, the original UPPS.

Delay discounting was assessed with 27 questions from the Monetary-Choice Questionnaire (MCQ; Kirby & Maraković,1996). Participants choose between immediate monetary reward or waiting a varying amount of time for a larger sum.

Social, emotional and psychological wellbeing were queried with the 14 item Mental Health Continuum-Short Form (MHC-SF; Keyes, 2009). Each item asks about past-month frequency of an aspect of positive mental health (e.g., I felt happy) with response options ranging from "never" to "every day." The short version conforms to the factor structure of the original scale and has excellent internal consistency (α =0.89).

Trait mindfulness was measured using the 7 item Mindful Awareness Attention Scale (MAAS; Brown & Ryan, 2003). It has been validated for use in college students with reported Cronbach alphas of 0.8 or higher.

Life events. Lifetime (baseline survey) and past-12 month (follow-up surveys) exposure to stressful and traumatic experiences were queried, allowing for calculation of recent and cumulative experience variables for analyses. 15 items reflecting potentially stressful events (e.g., separation from a loved one; Kendler, Karkowski, & Prescott, 1998) and 5 potentially traumatic items from the Life Events Checklist (e.g., sexual assault; Gray, et al, 2004) were asked.

Romantic relationships. One item queried relationship status (e.g., single, dating several people and in an exclusive relationship) and a subsequent item, if applicable, queried length of said relationship. Participants in a romantic relationship of at least 3 months duration were administered the 7 item Relationship Assessment Scale (α=0.86; Hendrick, 1988). An additional 5 items queried (if applicable) the significant others' substance use and perception of substance-related problems.

Body Mass Index (BMI) was calculated from subjects' self-reported weight and height (American Psychiatric Association, 2000).

Reward-based motivations for eating were measured using the Reward-Based Eating Drive Scale (RED; Epel, et al., 2014). The RED scale was designed for use in population samples, has strong validity and internal consistency (α=0.81), and is correlated with both BMI and change in BMI over time.

Parenting style was measured in baseline surveys using the Steinberg Parenting Style Index (Steinberg et al., 1992). Parental autonomy granting (α=0.82) and parental involvement (α=0.68) were each asked with 3 items. Participants were asked to respond regarding their parent or guardian during development.

Parent-child communication regarding alcohol, marijuana, and tobacco was assessed using a series of items developed and validated in Ennet et al. (2001). For each substance, participants were asked 3 items about frequency of past 6 months parental communication: "...talked to you about the negative consequences";"...how to resist peer pressure to use";and "...encouraging you not to use." Parent openness in discussions is also assessed for each drug category.

Peer deviance was measured using items from two instruments (Johnston, Bachman, &O'Malley, 1982; Tarter & Hegedus, 1991) compiled for use together in Kendler et al. (2008). Baseline surveys reported on high school friends while spring follow-up surveys concentrated on college peers. Participants responded to each of 6 prompts with how many of their peers endorsed each delinquent behaviors (e.g., smoking marijuana). Response options ("none" ," a few" ," sum" ," most" ," all") can be summed across the 6 items to create a peer deviance sum score for each participant.

Resilience was measured using 2 items from the positive acceptance of change factor subset of the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003). Participants were asked about bouncing back after illness/hardship and being able to adapt to change. The test-retest correlation for the full scale is 0.87.

Sleep duration and sleep quality were measured using the Pittsburgh Sleep Quality Index (PSQI;Buysse et al., 1989). The PSQI reliably assesses sleep in multiple age groups, including college students.

Physical activity was assessed using the International Physical Activity Questionnaire (IPAQ; Craig et al., 2003). For each of three categories of activity (walking, moderate and vigorous), past-week frequency (days) and duration (hours and minutes/day) was asked. From these responses, both metabolic equivalents and overall level of physical activity ("low", "moderate," and "high") can be calculated.

Religiosity was measured using a scale developed and validated in Kendler, Gardner, & Prescott (1997). The scale combined/adapted items from the National Comorbidity survey, Strayhorn's religiousness scale and a Gallup poll.

Risky Sexual Behavior was measured using 8 items adapted from the CDC Youth Risk Behavior Survey (CDC). Items included the number of sexual partners in the past 3 months, condom usage and frequency of sexual activity while under the influence of alcohol.

Social support was measured using 3 items (someone available to...give advice in a crisis, get together with for relaxation, and confide in) from the RAND Medical Outcomes Study Social Support Survey (Hays, Sherbourne & Mazel, 1995). Answer options were "none of the time", "some of the time", "most of the time" and "all of the time."

Participation in social activities was queried using 6 items adapted from the IMPACTS study (Sher & Rutledge, 2007). Participants were asked how often they participate in organized sports activities, fraternity and/or sorority parties and events, school activities

(e.g.,student organizations), community activities (e.g., mentor for Big Brothers Big Sisters), religious services and church-related activities.

In addition to the measures listed above, which were routinely asked in multiple assessments across cohorts, we have included a variety of other items assessing areas of relevance to substance use, based on faculty submissions for item content related to their particular areas of expertise. Constructs included in a subset of Spit for Science surveys include: empathy, narcissism, perfectionism, emotional competence, neurocognitive items, civic engagement, chronic health conditions, food allergies, ethnic-racial identity, childhood experiences, work and finances, pet ownership, smoking sensation, E-cigarettes, sound sensitivity, suicidality, alcohol flushing, reasons to limit alcohol consumption, drinking locations, post-VCU plans for graduates, and screener questions for major depression, generalized anxiety disorder, a range of phobias.

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Appendix 2: Chapter 3 Paper 2

See List of Measures in Appendix 1

Appendix 3: Chapter 4 Paper 3

Recruitment Materials

Flyer used for social media, in-person and active recruitment:

BLACK MALE VOICES MATTER!

JOIN THIS STUDY TO TALK ABOUT IT!

PURPOSE: To understand what impacts Black men's mental health and where they would go for help or support

WHO: Black, male, undergraduate students between the ages of 18 and 25

WHAT: A 60-minute focus group discussion in a private room on campus

Refreshments will be provided and
Compensation will be given to those
eligible.
We hope that you choose to participate!

If interested, please contact Kofoworola Williams at williamsk24@vcu.edu for more information. She is currently a doctoral candidate in the Department of Health Behavior and Policy at Virginia Commonwealth University.

TelegRAM Announcement:

Participants Sought for the "Understanding Mental Health of University-Enrolled African American Men" Study!

My name is Kofoworola Williams, I am a 4th-year Social and Behavioral Sciences PhD candidate in the Department of Health Behavior and Policy through VCU's School of Medicine. I would like to invite you to participate in "Understanding Mental Health of University-Enrolled African American Men" study. The purpose of the study is to learn about the social and environmental factors impacting the mental health and help-seeking behaviors of young men on a college campus. To participate, you must be a Black/African American male, undergraduate student between the ages of 18 and 25. Participation will require a 60 to 90 minute focus group discussion in a private room on campus. You will be compensated $30 for your time. If you choose to participate, please contact Kofoworola Williams for more information at williamsk24@vcu.edu or (301) 529-1729. We hope you decide to participate!

Recruitment Email:

Note: This recruitment email will be sent to participants being recruited from VCU's general population.

[The subject line will read: You're invited to participate in the "Understanding the Mental Health of University-Enrolled African American Men" Study!]

Hello!

I hope everyone's semester is going well! My name is Kofoworola Williams, I am a 4th-year Social and Behavioral Sciences PhD student in the Department of Health Behavior and Policy through VCU's School of Medicine. I would like to invite YOU to participate in "Understanding Mental Health of University-Enrolled African American Men" focus groups, a spin-off study of the Spit for Science: The VCU Student Survey. The *purpose* of this study is to get a better understanding of how social norms and social relationships might impact the likelihood of men experiencing mental health issues and seeking help. The focus groups are intended to last no more than 90 minutes and you will be compensated in the amount of $30 for your time. There is no obligation to participate in the focus groups, they are completely voluntary. If you choose not to participate, your eligibility for future Spit for Science surveys is not affected.

If you are interested in participating or would like to decline participation, please click on the link below. Thank you for your time. We hope that you choose to participate in "Understanding Mental Health of University-Enrolled African American Men"!

Sincerely,

Research Team

Principal Investigator:
Kellie Carlyle, Ph.D.
kellie.carlyle@vcuhealth.org
Phone: 804-628-4623

Research Coordinator:
Kofoworola Williams
williamsk24@mymail.vcu.edu

Phone: 301-529-1729

Study Information Sheet:

VCU IRB PROTOCOL NUMBER: HM20013909

RESEARCH PARTICIPANT INFORMATION SHEET

Study Title: Understanding Social and Contextual Factors Impacting Help-Seeking for Mental Health Disorders Among University-Enrolled African American Men

VCU Investigator: Kofoworola Williams, PhD Candidate, Department of Health Behavior and Policy, School of Medicine, (301) 529-1729

Dr. Kellie Carlyle, Associate Professor, Department of Health Behavior and Policy, School of Medicine, (804) 628-4623

You are invited to participate in the "Understanding the Mental Health of University-Enrolled African American Men" Study!

Purpose of Study

The purpose of this study is to learn about the mental health of young, black men on a college campus. We would like to hear from you about what might lead to mental health issues (e.g. stress, anxiety, depression) among young, black men like yourselves. Though you may not have experienced these issues personally, you may know others close to you who have, either way we value your opinions, thoughts, and perspectives. We hope this will be an opportunity for Black college men's voices to be heard in a society that rarely cares to listen.

Study Procedure

If you choose to participate, you will be asked to attend a focus group session (dates and times will be offered and you would choose one) located in a room on Monroe Park campus. After you receive a confirmation email, you will come to your session at the chosen time. Refreshments will be offered and you will be seated with 4 to 9 other participants. The session is expected to last no more than 90 minutes. There will be a moderator and assistant in the room with you and the session will be audio-recorded. Please note there will be no identifying information gathered from you all and all data collected from these sessions will be used for research purposes only. The moderator will ask you questions meant to facilitate discussion. Questions will ask about things that might affect men's mental health issues and why they may or may not seek help or support for those issues. We ask that you do not disclose any personal identifying information. The moderator will refrain from asking any

direct, personal questions. The assistant will be there to distribute documents and maintain recording equipment.

Voluntary Participation

Please note that your participation is completely voluntary and you can withdraw at any moment. If at any time you wish to stop being in the study, you are allowed to stop. Leaving this study will not affect your medical care, employment status, academic standing at VCU or VCU Health.

Risks and Benefits

As for any research study, there are risks and benefits for participation. Here are a few:

Risks and Discomforts:

- Participation in this study might cause some emotional stress and discomfort. The topic of mental health is sensitive and can cause someone to feel overwhelmed or uncomfortable.
- Participation in this study might involve loss of privacy or confidentiality. There is the small risk that you may know someone in the group and they may misuse information about you.

Benefits to You and Others:

There is no guarantee of direct benefit to individuals participating in this study. However, offering a safe space for Black men, like yourselves, to discuss their thoughts and opinions about mental health and seeking help provides an opportunity for Black men to be heard and perspectives validated, which in itself may have positive mental health effects.

Compensation

As a display of our appreciation for your participation in this study, you will be compensated $30 in cash for your participation in the focus group.

If you have any questions, concerns, or complaints about this study now or in the future, please contact Kofoworola Williams, (301) 529-1729, williamsk24@vcu.edu . We hope you choose to participate!

Eligibility Screener:

<u>Screener for Group Placement</u>

1. Do you identify as a Black or African American male?

   □ Yes □ No

2. Are you between the ages of 18 and 25 years old? (this may be a drop down question)

   □ Yes □ No

   a. If so, what is your age? __________

3. Are you currently enrolled at Virginia Commonwealth University?

   □ Yes □ No

   a. If yes, are you an undergraduate or graduate student? (please circle one)

4. Have you participated in the Spit for Science VCU Student Survey?

   □ Yes □ No

5. Have you used campus health services (i.e. counseling services, health services, disability services, etc.)?

   □ Yes □ No

   a. If so, which? __________

Focus Group Guide:

Welcome and Introduction

Hello Everyone. Welcome to today's focus group session and thank you for taking the time to be here with us. My name is Kofoworola Williams and I will be your moderator today. I am a third-year, social and behavioral sciences, doctoral student at the Department of Health Behavior and Policy in the School of Medicine. Assisting me today is (*insert assistant's name here*). He/she will be responsible for distributing and collecting focus group documents and materials; ensuring the equipment is working properly; and taking notes.

Purpose: We've invited you here today to talk about the mental health of young, black men on a college campus. We would like to hear from you about what might lead to the stress, anxiety, depression, self-pressure, etc. among young, black men like yourselves. Though you may not have experienced these issues personally, you may know others close to you who have, ether way we value your opinions, thoughts, and perspectives. We hope this will be an opportunity for Black college men's voices to be heard in a society that rarely cares to listen.

This session is expected to last no more than 90 minutes and compensation for this session will be distributed after. The session will be audio-recorded. The recordings will not contain any names or personal information and will only be used for research purposes.

In Case of Distress: The focus group questions are not specific to your personal lives; however, we understand that asking certain questions may be touchy and can cause some distress. Your participation in this session is completely voluntary. If at any time you feel uncomfortable or distressed, please don't hesitate to leave the group. The focus group assistant is here to assist you as best they can, direct you to Counseling Services in the building, and provide you with a list of relevant resources. Also, please note that, for you and your fellow students' safety, I will have to break confidentiality if anyone mentions that they have been harmed, are harming oneself, or have/will harm(ed) others. As part of VCU's policy and procedures, I will have to report this to the appropriate outlets.

At this time, we ask that you please take a moment to complete the informed consent document and demographics questionnaire. Feel free to take some refreshments in the back.

Ground Rules

This is a safe space for everyone to talk freely and be themselves as best they can but before we start, let's get some ground rules together. I'll start:

1. Please try not to interrupt a person when they are speaking (however, there is no need to raise your hand before speaking).
2. Everyone has their own opinions and points of view, please listen and respect differing views and perspectives.
3. I encourage you to have a normal conversation and talk with one another as you would anyone, but remain respectful and cognizant of other people, people's cultures, and background.
4. Please refrain from using inappropriate language.

5. Do you all have any ground rules to offer?

Ice Breaker:

- I love music, like Trap, Afrobeats, Hip-Hop, etc., listen to it every day. For some people music is a form of self-expression, stress relief, or party/pre-game starter, etc.
  Question Option #1: If you had to choose a music lyric that best describes how you're feeling in life right now, what would it be?
  Question Option #2: What's one song in your Recently Played or Most Played playlist on your iTunes or Spotify?

Focus Group Questions

Mental Health

Individual

- Describe a person, like yourself, who may be suffering from depression or anxiety?
- What are other types of mental health issues do you all know about or have heard of?

Relationship

- How might you or your friends express yourself when feeling stressed?
- In your circle of people, is there any discussion of depression and what does that look like?

Community

- What would stress you or your friends out?
- In your everyday interactions, what things could cause you stress or cause you to feel a way?

Societal

- How do you think society views students like you who are dealing with depression or anxiety?
- Where do your views on mental health, depression, or stress come from?

Help-Seeking

Individual

- How does a person know they need help or that they need to seek help?
- How might a guy like you deal with depression or anxiety, feelings of stress?

Relationship

- Do you talk about your stress with your peers, family or friends? If so, what does that conversation look like?
- When it comes to seeking help from someone or a professional, does a person's race or gender matter? Why or why not?

Community

- What might stop a student like you from going to your professor or campus (officials) for help when you're feeling down? What might make it easier?
- What would be the barriers to seeking help on campus for college students like yourself?

- What would make it easier for you to seek help on campus?
- Where, on campus, would you or your friends go If you were dealing with stress, anxiety or depression (or mental health issues)?

Societal

- How do you feel society views people who go to therapy or counseling?
- What are some ways you've heard depression or anxiety described in the news or on social media (for Black men)?
- Why might a student like you refrain from seeking help outside of campus?

Additional questions for clarification or probing:

- Can you expand on that/what do you mean by that statement?
  If participant willingly discusses a personal situation and is comfortable, may want to ask: What was it like for you to be in that situation?

Closing

At this time, the session is coming to an end. Does anyone have any last-minute thoughts or questions?

Thank you all very much for being here. This was a very valuable session and your input was much appreciated. I would like to remind you that the information you all shared will not have any identifying information, will be reviewed by myself and advisors, and will be used for research purposes only.

If you wish to connect with us outside of this session, please contact me at this email address: williamsk24@vcu.edu

Thank you so much for being here and participating!

Materials for all Focus Group Sessions

- Informed consent form
- Demographics questionnaire
- Consent forms (one copy for participants, one copy for the team)
- Pads & Pencils for moderator and assistant
- Focus Group Guide for moderator and assistant
- 1 recording device
- Batteries for recording device
- Marker for labeling tapes with FGD name and date
- Notebook for note-taking
- Refreshments
- Incentives for participants

Appendix 4: Coding Table Highlighting Results and Themes from all Aims 1, 2, and 3

This table was used to highlight which themes; 1) converge; 2) complement; 3) contradict; and/or, 4) silence one another (i.e. one set of results shows something the other does not).

Key:

Direction	Color
Converge	
Complement	
Contradict	
Silence	

Aim 1

Results		
Anxiety Prevalence	**Depression Prevalence**	**Utilization Prevalence**
Year 1F – 60.7 (different to women) Year 1S – 58 (both) Year 2 – 47.6 (to men) Year 3 – 54.6 (both) Year 4 – 49.6 (both) Lower than other groups at all time points 8 to 18% lower than groups 10% decline by year 4; 60 to 50	Year 1F – 83% (to women) Year 1S – 84.5% (both) Year 2 – 79 % (both) Year 3 – 83.2% (both) Year 4 – 72.7% (to women) Lower than other groups at all time points 6 to 16% lower than groups 10% decline by year 4; 83 to 73	Anxiety Year 1S – UCS and Rec lower for BM compared WM; rec higher for BW to W Year 2 – the Well higher for BW Year 3 – HS higher for BW Year 4 – HS higher for BW; BM used Rec more the W Depression Year 1S – BM used Rec more than both groups Year 2 – No differences Year 3 - BW used HS more Year 4 – BW used HS more
Key Findings		
Prevalence: • Men are experiencing Symptoms; however, at lower rates (8 to 18% for anxiety; 6 to 16% for depression) according to analyses • By Senior Year, rates drop ~ 10% for Black men • Depressive symptoms are more prevalent among all groups, even among Black men *For those with Anxiety Symptoms:* • Black men are utilizing counseling services (1S) and rec sports less than White men (1S and 4)		

- Black men are using The Well less than BW (2)
- Black men are using Rec Services higher than women (1S)
- Black men are using HS less than BW (3 and 4)

For those with Depressive Symptoms:

- BM used Rec services more than their peers
- Black men used HS less than BW (3 and 4)

In other words, while in college, Black men who are experiencing depression are using Rec services more than their peers and health services less than Black women.

Among those who are experiencing anxiety, Black men are using Rec services more than Black women but less than White men in the first year. Also in year 1, Black men use counseling services less. Black men are also using The Well and health services less than Black women during years 2, 3, and 4.

The findings pertaining to counseling services and The Well speak to the current state of Black men's mental health-related help-seeking behaviors. The counseling services specifically offer therapeutic services, as well as refer to those to community for mental health services. The Well, on the other hand, though not a counseling center, offers mental, emotional, and behavioral resources for students and referrals to counseling services. As the literature states that men are less likely to use formal services, this finding is not surprising. Interestingly, we ass that White men and Black men are using recreational sports.

Aim 2

Aim 2 Results	**Key Findings**
Risk factors • SLEs predicted anxiety and depression (+) in both Years • MPE (+) predicted anxiety in Year 2 • FSSR (+) in year 1 predicted depression	Stressful life events predicted symptoms Interesting: MPE only did in year 2 (a financial stress factor; what is it about year 2?)
Protective Factors • Year 1: Religion predicted anxiety (-); • Year 2: Religion predicted depression (-) when other factors	Religion could predict anxiety and depression (even with other factors included) and associated with lower levels Social support does not appear as a predictor

Associated Factors • Cannabis use predicted Depression (+) when added to model	In Year 2, cannabis use was associated with high levels of depression and predicted depression
Utilization	No risk or protective factors predicted depression

Aim 3

Organizing Themes	***SubThemes***
Organizing Theme 1: What is Known or Felt About Mental Health	• Theme: Levels to Issues • Theme: Keep It In and Man Up
Organizing Theme 2: Causes or Stressors	• Theme: Learning College is a Big Thing • Theme: Money is Everyone's Stressor • Theme: Self-pressure vs Parental Pressure • Theme: Finding Self and Fitting In
Organizing Theme 3: Signs as Symptoms	• Theme: Feeling A Way and Down on the Inside • Theme: Changing Behaviors on the Outside
Organizing Theme 4: Coping	• Theme: There are Good Ways and Bad Ways
Organizing Theme 5: Help-Seeking and Reasons to Do It	• Theme: If We Trust, We'll Go • Theme: Seeking Help from SOs • Theme: Boiling Points and Meltdowns
Organizing Theme 6: Types of Help-seeking, Barriers and Facilitators	• Theme: Talking to Friends and Family • Theme: Test the Vibe but Remain Surface Level • Theme: Therapy On-Campus • Theme: Therapy Off-Campus
Organizing Theme 7: Societal Views on Help-seeking and Men who Seek Help	• Theme: Some are Strong and Others are Weak • Theme: Mental Health Issues are Normalizing

Vita

Kofoworola Damilola Adenike Williams was born on April 12, 1990 in Washington, D.C., the daughter of Nigerian parents, Cornelius Akinola Williams and Taiwo Emilia Williams. She was raised in Silver Spring, MD and graduated from St. Michael the Archangel Catholic School in 2004 and attended and graduated from St. John's College High School in Washington, D.C. in 2008. She received her Bachelors of Science in Biology from Syracuse University in 2013 then stayed another year to pursue a Certificate of Advanced Study in Global Health. She graduated from Drexel University's Dornsife School of Public Health with a Master of Public Health, concentrating in Environmental and Occupational Health in 2016. She then joined the Department of Health Behavior and Policy at Virginia Commonwealth University's School of Medicine to pursue a doctorate in Social and Behavioral Sciences. During the program, she has prepared and published manuscripts, presented her research at numerous national and international conferences, and collaborated on various research projects and grants geared towards improving mental health among African American men and emerging adults. She is also the recipient of an Institutional Doctoral Scholars award from the Southern Regional Education Board. In July, she will be headed to Chicago to begin her postdoctoral training in Digital Mental Health Northwestern University's Feinberg School of Medicine.

Scholarly Activity

Williams, K., Adkins, A., Kuo, S., LaRose, J., Utsey, S., Guidry, J., Spit for Science Working Group & Carlyle, K (under editorial review). Examining the Prevalence of Mental Health Disorders and Rates of Help-seeking among University-Enrolled, Black Men.

Williams, K., Adkins, A., Kuo, S., LaRose, J., Utsey, S., Guidry, J., Spit for Science Working Group & Carlyle, K (manuscript in preparation). Examining Risk and Protective Factors Associated with Mental Health Symptoms and Rates of Help-seeking among University-Enrolled, Black Men.

Williams, K., Adkins, A., Kuo, S., LaRose, J., Utsey, S., Guidry, J., Spit for Science Working Group & Carlyle, K (manuscript in preparation). Understanding Social and Contextual Factors Impacting Help-Seeking for Mental Health Disorders Among University-Enrolled African American Men.

Williams, K., Dougherty, S., Guidry, J. & Carlyle, K. (manuscript in preparation). #blackboyjoy #theblackmancan on Instagram: A Descriptive Content Analysis Exploring Black Men's Use of Hashtags in Challenging Negative Perceptions of Black Masculinity.

Guidry, J. P. D., Carlyle K. E., Williams, K. and Jin, Y. (under editorial review). Depression on Pinterest: Exploring Interactions between Posts and Comments. *Health Education and Behavior.*

Carlyle, K. E., Guidry, J. P. D., Williams, K., Tabaac, A., & Perrin, P. B. (2018). Suicide Conversations on Instagram: Contagion or Caring? *Journal of Communication in Healthcare*, 11(1), 12-18.