



# HHS Public Access

Author manuscript

*Soc Work Ment Health*. Author manuscript; available in PMC 2022 January 01.

Published in final edited form as:

*Soc Work Ment Health*. 2021 ; 19(2): 88–104. doi:10.1080/15332985.2021.1879345.

## Mental Health Burden among Black Adolescents: The Need for Better Assessment, Diagnosis and Treatment Engagement

**Ijeoma Opara, PhD, LMSW, MPH,**  
Stony Brook University School of Social Welfare

**Guy M. Weissinger, PhD, MPhil, RN,**  
University of Pennsylvania School of Nursing

**David T. Lardier Jr., PhD,**  
University of New Mexico

**Yzette Lanier, PhD,**  
New York University

**Sierra Carter, PhD,**  
Georgia State University

**Bridgette M. Brawner, PhD, MDiv, APRN**  
University of Pennsylvania School of Nursing

### Abstract

This study examines mental health symptoms among Black adolescents who were currently in mental health treatment and those who were not in treatment. The study uses a sample of Black adolescents ( $N=154$ ) and logistic regression was performed to determine which psychological factors were associated with exhibiting mental health symptoms. Both groups experienced high amounts of trauma exposure history, recent suicidality, substance use, and depressive symptoms. Nearly one in four adolescents in the out of treatment group met diagnostic criteria for anxiety disorders. Implications include better screening for mental health symptoms to ensure Black adolescent have access to mental health treatment.

### Introduction

National surveys and large-scale studies of adolescent mental health have found that about 49.5% of adolescents in the United States are living with a mental health disorder (National Institute of Mental Health [NIMH], 2020). Yet only 20–50% of adolescents receive services (Merikangas et al., 2010). Black adolescents, between the ages of 12–18 years old, have been characterized as a particularly disadvantaged group given misdiagnosis and overdiagnosis of certain mental health disorders, and underdiagnosis of others, and limited

**Corresponding Author:** Ijeoma Opara, PhD, LMSW, MPH. Assistant Professor, Stony Brook University School of Social Welfare. ijeoma.opara@stonybrook.edu, Mailing address: 100 Nicolls Road, Health Sciences Center, L2-093Q, Stony Brook, NY 11794.

**Conflicts of Interest:** The authors report no conflicts of interest related to this study. The study sponsors had no role in the study design, collection, analysis or interpretation of the data, nor the writing of the report or decisions related to submission of the manuscript.

access to mental health treatment (Liang et al., 2016; Rose, Joe, & Lindsey, 2010). Black adolescents living with mental health disorders are less likely than non-Black adolescents with mental health disorders to receive treatment for various reasons including, negative perceptions of services and providers and lack of access to mental health services (Lindsey et al., 2013).

Among Black adolescents, mental health disorders are associated with adverse early childhood experiences (Schilling, Aseltine, & Gore, 2007), exposure to trauma (Suliman et al., 2009; Turner, Finkelhor, & Ormod, 2006), and social-environmental stress (Tully, Iacono, & McGue, 2008). These stressful experiences are related to systemic injustices such as higher rates of incarceration (Copeland et al., 2007; Kutcher & McDougall, 2009) and racial discrimination (Seaton et al., 2014) which can influence poor outcomes across the developmental lifespan (e.g., lower educational attainment; Breslau et al., 2008; Riglin et al., 2014), increased suicidality (Shain, 2019), and substance use (McKenzie et al., 2010; Pardini, White, & Stouthammer-Loeber, 2007). Black adolescents who live in urban, under-resourced environments are also at risk for poor mental health outcomes due to increased exposure to violence and other types of traumatic events (Gaylord et al., 2016; Opara et al., 2020a). Therefore, increased attention is needed to address mental health disparities that may be impacting Black adolescents.

### **Lack of access to mental health resources**

Adolescence is a complicated developmental stage that includes both identity formation and vulnerability to risk-taking, which can exacerbate poor mental health outcomes for marginalized groups such as Black adolescents. While quality mental health treatments have lasting and significant effects on adolescents (Weisz et al., 2017), access to and use of mental health treatments is not equitable among all adolescents. Black adolescents, specifically, have lower rates of utilization of mental health services (Merikangas et al., 2011) that is not accounted for by health insurance access (Ayalon & Alvidrez, 2009). Further, stigma and discrimination (Rose, Joe & Lindsey, 2011), coupled with lack of access to mental health services (Cummings & Druss, 2011) negatively influence mental health treatment in the Black population. Moreover, treatment approaches for Black adolescents may not be culturally appropriate (Lindsey et al., 2013). Even among Black people who receive mental health treatment, a majority continue to experience poorer mental health outcomes (Maura, & de Mamani, 2017). Therefore, Black adolescents, both those who receive mental health treatment and those that do not, may still continue to be at a significant disadvantage as their symptoms may not be properly treated. In the literature, there is a paucity of data on how the mental health of Black adolescents, who are receiving treatment, differ from those who are not in treatment (Cummins & Druss, 2011). Therefore, it is important to understand whether Black adolescents who are not receiving mental health treatment are experiencing mental health symptoms. As this work is done, it is equally imperative to note that Black adolescents are not powerless victims subject to the shortcomings of the mental health system and/or society at large. Despite facing significant challenges and injustices, this demographic continues to exhibit incredible resilience in the face of opposition, with strengths, ideas and agency that enable them to excel in every area of life (Jones, Andersen, & Metzger, 2020; Opara et al., 2020b).

The purpose of this study was to examine mental health diagnoses, symptoms, and risk factors among Black adolescents who were currently receiving mental health treatment and those in the general community (hereafter referred to as out of treatment). The intent was to: 1) identify differences in mental health diagnoses and symptoms between the two groups, and 2) explore which factors may be associated with being in mental health treatment. The ultimate goal is to inform research, clinical practice and policy through a better understanding of mental health among Black adolescents.

## Methods

### Design

A secondary analysis was conducted on a subsample of participants ( $N = 154$ ) who underwent screening to participate in a pilot randomized controlled trial (RCT). Details on the parent study are published elsewhere (Brawner et al., 2016). The study was approved by Institutional Review Boards (IRBs) at the University of Pennsylvania, the Philadelphia Department of Public Health, and the School District of Philadelphia. The purpose was to design and test a psychoeducational HIV/STI prevention intervention to address the role of mental illness and emotion regulation in HIV/STI risk among heterosexual, sexually-active Black adolescents aged 14 to 17. The data reported in this paper are from the structured clinical interview administered to determine RCT eligibility; these data were collected from May 2014 to September 2016.

### Sample

Participants in the “mental health treatment” (MHT) group ( $n = 72$ ) were recruited from community mental health agencies in Philadelphia, PA. These agencies are part of a network that contracts with the city to provide behavioral health services, primarily to low income and/or underserved populations (City of Philadelphia, n.d.). Participants that were not currently in treatment and were recruited from the community were labeled the “out of treatment” [OT] group ( $n = 82$ ). The OT participants were recruited from public areas, including parks, recreation centers, schools and community events in Philadelphia. The research team focused on these areas based on feedback from an established community advisory board comprised of adolescents who mirror the study population. Adolescents were assigned to the OT group if they self-reported that they were not currently receiving mental health treatment at the time of screening.

The inclusion criteria were: 1) aged 14 to 17 years old, 2) self-identify as Black (e.g., African-American, Caribbean-American, or mixed-race), 3) have ever had vaginal sexual intercourse, 4) able to provide signed informed consent, and 5) able to speak, read and write in English. Additionally, all participants in the MHT group had to be enrolled in mental health treatment (including counseling, psychiatric treatment, group treatment, etc.) at a community mental health agency for at least 1 month to be eligible. Participants were excluded if they: 1) displayed significant cognitive deficit, as determined by staff during screening and consent procedures, 2) reported active suicidal ideation that required intervention by staff, or 3) displayed symptoms of active psychosis. In Pennsylvania, adolescents who are aged 14 or older can consent to sexual health services, including

HIV/STI testing and treatment, as well as mental health treatment without parental consent. Thus, all participants provided written informed consent for participation and parental consent/permission was not required (Brawner & Sutton, 2018).

### Procedure

Potential participants were recruited through fliers posted in high-traffic areas frequented by the target sample, street recruitment in public spaces, and community mental health providers and referrals. After an initial screening in person or by telephone, all eligible adolescent participants met with a member of the research staff for informed consent procedures, a sociodemographic survey, and a structured clinical interview to ascertain mental health diagnoses. The entire process took approximately 2 hours. All interviews were conducted by research staff trained by a doctoral-prepared mental health nurse and a doctoral nursing student with experience in psychodiagnostic assessment.

### Measures

Participants underwent an interviewer-administered computer-assisted personal interview. The survey asked questions about age, gender, living condition, household make up, socioeconomic status and mental health treatment history. The MINI International Neuropsychiatric Inventory (MINI; Van Vliet & De Beurs, 2007) was used for the structured clinical interview. The MINI is a structured diagnostic instrument that assesses psychiatric mental health disorders based on the Diagnostic Statistical Manual of Mental Disorders (DSM-IV TR) criteria (American Psychiatric Association [APA], 2004); at the time of the study (2014) the DSM-IV and not DSM-5 criteria were used.

Diagnoses were taken from results of the MINI. Table 2 presents the full list of diagnoses used in the analysis. Alcohol abuse, alcohol dependence, substance abuse, and substance dependence were grouped into a *substance use disorders* variable for analyses. Besides diagnostic categories, additional variables were taken from the MINI. *Suicidality* was assessed dichotomously with a “yes” answer to the question “Have you had thoughts of suicide or ending your life in the past 6 months?” *Depressive symptoms* were measured dichotomously with a “yes” answer to one of the following questions “In the past two weeks, have you felt down, depressed or hopeless?” or “In the past two weeks, have you felt little interest or pleasure in doing things you usually enjoy?” *Trauma exposure history* was a “Yes” response to “Have you ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury to you or someone else?” *Alcohol use* was determined dichotomously with a “yes” answer to “In the past 12 months, have you had a 3 or more alcoholic drinks, within a 3 hour period, on 3 or more occasions?” and substance use to “In the past 12 months, have you used any medications not prescribed by your doctor or ‘street drugs’ to get high, to feel elated, to get “a buzz” or to change your mood?”

### Data Analysis

The analyses were conducted in STATA 15.0. Descriptive statistics were used to describe the demographics of the sample. Between group chi-square analyses were conducted to determine if there were any significant demographic or clinical differences between the

mental health treatment group and out of treatment group. Regression analyses used the results of the descriptive and comparative analyses. Selected variables with a  $p < .20$  were chosen to determine which demographic and psychological factors were associated with being in mental health treatment (Bursac et al., 2008). Traditional levels such as 0.05 can fail in identifying variables known to be important (Bursac et al., 2008). Variables were retained based on meaningful contribution and statistical significance to the final analytical model (Aneshenseel, 2012). Cases with missing data were excluded from the analyses. Of the 180 participants in the parent study, 14% were excluded for missing data, for a final sample of 154 for the current analyses.

## Results

### Demographics

Table 1 highlights the sample demographics. The majority of participants were male (62%) and self-identified as only Black (89.61%). Participants average age was 15.84 years ( $SD = 0.87$ ) with most (97%) currently enrolled in high school. Forty percent of youth reported that someone in their family had ever received mental health treatment. There were no statistically significant differences between the two groups on any selected demographic variables with the exception of age ( $\chi^2=10.47, p = .02$ ). Those in the MHT group ( $M_{age}=16.06, SD = 0.76$ ) were slightly older, when compared to those in the OT group ( $M_{age}=15.664, SD = 0.92$ ).

### Psychiatric Diagnoses

Table 2 shows the breakdown of mental health diagnoses for the entire sample and by group. Across groups, nearly one-third of participants (32%) met diagnostic criteria for any mental health disorder. Substance use disorders were the most commonly diagnosed mental health disorder (15%). Between groups, more youth in the MHT group met criteria for a mental health disorder than youth in the OT group ( $\chi^2 = 5.21, p = 0.02$ ). However, 24% of participants in the OT group met diagnostic criteria for mental health disorders, primarily but not exclusively in the anxiety disorders classification of the DSM-IV. Only panic disorder was found to be significantly more common in the OT group ( $\chi^2 = 3.97, p = 0.04$ ), while agoraphobia ( $\chi^2 = 4.67, p = 0.03$ ) was the only diagnosis that was significantly more common in the MHT group. For all other diagnoses, there were no statistically significant differences between the two groups.

### Symptoms and Risk Factors

In addition to diagnosable mental health disorders, other variables relevant to adolescent mental health were collected in the MINI and analyzed. Table 3 examines mental health symptoms such as depressive symptoms in the last two-weeks, as well as substance use and suicidality as related to but distinct factors in adolescent mental health. Trauma exposure history was also included in analyses. Almost 41% ( $n = 63$ ) of participants reported experiencing or witnessing at least one traumatic event in their lifetime, 44% reported recent use of illegal drugs (all but one of these was use of marijuana) and 13% reported recent alcohol use (3 or more alcoholic drinks, within a 3 hour period, on 3 or more occasions in the past 12 months). Additionally, 10% of the sample reported recent suicidality and 12%

depressive symptoms in the past two weeks. Those in the MHT group were more likely to report a history of trauma exposure ( $\chi^2 = 12.00, p = 0.001$ ). All other mental health related variables showed no significant differences between the MHT and OT groups.

In the multivariate logistic regression analysis, age and a diagnosis of a mental health disorder were chosen because of their significance to identifying as either in the MHT group or OT group, as noted in Table 1. Recent history of substance use, trauma exposure history, and recent suicidality were chosen because these variables are clinically significant and would require mental health treatment for adolescents. Post-traumatic stress disorder was initially included due to  $p = .21$  and retained based on statistically significant contribution to the overall model. Age (OR = 1.70,  $z = 2.53, p < .05$ ), trauma exposure history (OR = 2.88,  $z = 2.98, p < .01$ ), and diagnosis of a mental health disorder (OR = 2.45,  $z = 1.84, p < .05$ ) were found to be significantly related to being in mental health treatment. One way to interpret clinically meaningful findings is that for every one-unit increase in trauma exposure history and diagnosis of a mental health disorder, there was a 188% and 145%, respectively, greater odds of being in mental health treatment. The model accounted for 12% of the variability in treatment disposition.

## Discussion

This study aimed to examine mental health diagnoses, symptoms, and risk factors between Black adolescents who were currently receiving mental health treatment and those out of treatment. The findings advance the literature on mental health in this demographic by highlighting the stark need for mental health treatment engagement. More than half of the sample (53%) were not receiving mental health treatment, yet nearly one in three participants met criteria for a mental health disorder. It is important to note that Philadelphia, where the study was conducted, has a rich behavioral health treatment landscape, where adolescents aged 14 and older can access mental health and substance abuse treatment independent of their parents and guardians. Therefore, if Black adolescents have unmet needs in this environment, it calls into question accessibility issues within Philadelphia and points to further mental health disparities in other areas (e.g., rural settings) that do not have such resources at all.

Study results indicate that there are important differences and similarities among Black adolescents who are receiving MHT and those in the OT group. As expected, there were significantly more diagnosable mental health disorders (e.g. substance use disorders, Post-Traumatic Stress Disorder) in the MHT group than the adolescents in the OT group. In addition, participants in the MHT group also had high rates of suicide ideation. Among the OT group participants, there were also high rates of suicide ideation and high rates of substance use disorder and depressive symptoms. Participants in the OT group also seemed to have higher rates of symptoms associated with panic disorder than participants in the MHT group. More participants in the MHT group also reported having a family member who ever received mental health treatment. While the exact reason for this is unknown, the finding could speak to the genetic and contextual basis of different mental health disorders and shared chronic experiences within and across generations of families (Brave Heart, 2011; Donovan et al., 2013). This concept, which has been coined as, generational or

historical trauma, can contribute to mental health symptoms or even lack of modeling/support within families to seek mental health care due to mistrust or lack of culturally-appropriate resources and treatment options (Hanna, Boyce, & Yang, 2017).

About 41% of participants in the study reported a history of trauma. This finding could be due to the environmental context where participants were recruited from in Philadelphia. Within urban communities, adolescents may be exposed to more social and structural injustices such as increased access to substances, high rates of crime and violence, and increased rates of external stressors (e.g., racism)—all of which contribute to an increase in depressive symptoms and substance use disorder due to exposure to traumatic events (Lindsay et al., 2013; Opara et al., 2020a). While many individuals will experience trauma at some point in their lifetime, it can be implied from the study that even when adolescents are currently in treatment, repeated exposure to trauma could lead them to continue to struggle with mental health issues. Higher levels of trauma exposure may have more lasting psychological impact on adolescents (Dunn et al., 2017).

Adolescents that were currently receiving mental health treatment were more likely to report a history of being exposed to trauma. It is possible that adolescents in this group were experiencing more severe psychological symptoms due to trauma exposure that more readily prompted parents and/or adolescents to seek mental health services. These conceptualizations coincide with the study findings that all adolescent participants that were diagnosed of agoraphobia (characterized by extreme distress when outside home or other safe spaces) were in the MHT group as this distress is likely to be readily noticed by parents/guardians and may be related to trauma exposure (Zlotnick et al., 2008). Adolescents who experience mental health symptoms that are more likely to be internalized such as depressive symptoms, or hidden, like substance abuse, may fly under the radar is not identified for treatment engagement (Bailey et al., 2019; Oser et al., 2016).

In addition, among the OT group, due to their mental health issues such as depression, anxiety and suicidal ideation being undiagnosed, adolescents in the sample may be using substances as a coping mechanism to unknowingly treat their symptoms (Clark, 2014; Merikangas et al., 2010). It is also important to note that while 13% may appear to be low for alcohol use, it was operationalized in the MINI as 3 or more alcoholic drinks, within a 3-hour period, on 3 or more occasions in the past 12 months. The fact that more than one in ten participants endorsed this level of heavy drinking is alarming, particularly given that the sample is underage and coping with various mental health challenges.

While it would be expected to find elevated rates of mental health diagnoses for adolescents who are actively receiving mental health treatment, there was also a high rates of mental health symptoms such as depression and substance use disorder in the OT group. Unlike national samples that may not capture both those in treatment and those not in treatment, this study included samples of adolescents in both populations. It is evident from the findings that there were some shortfalls in the area of healthcare screening, access and/or utilization for the adolescents in the OT group. Because untreated mental health problems in adolescence can have serious repercussions for a youth's life trajectory, these findings are important for promoting the health equity of Black adolescents.

Unfortunately, consistent with the recent trends in suicidal ideation and rates among Black children and adolescents, our study reports high rates of suicidal ideations among youth in both treatment and community sample. Exposure to trauma, racial discrimination, and lack of access to culturally competent mental health treatment providers are all possible contributors to this complex phenomenon among Black adolescents (Opara et al., 2020c).

Though the number of mental health diagnoses differed between the two groups, the differences in depressive symptoms, suicidality and substance use were not significant between the MHT and OT groups. However, it is important to note that even at subclinical thresholds (i.e., when symptoms do not reach diagnostic levels or warrant mental health treatment), depressive symptoms, suicidality and substance abuse are key risk factors for poor short term (Breslau et al., 2008; Riglin et al., 2014) and long term (van Dijke et al., 2015) outcomes for adolescents. In particular, suicidality and substance use, when found together, increase the risk of suicide attempts (Pompili et al., 2012; Scheidell et al., 2018) and should be addressed promptly with evidence-based practices.

### Implications

For clinical practice, it is vital that practitioners who work with Black adolescents screen for and are able to address any mental health problems or concerns. As recent suicidality, substance use, and depression were particularly high in both the MHT and OT groups, those who work with Black adolescents in any settings (e.g., sports leagues, schools, primary care offices) should be trained and comfortable addressing these concerns, while also being aware of other issues related to mental health, such as trauma exposure history. Primary care providers can be trained to provide assessment and intervention for adolescents with mental health disorders like depression (Zuckerbrot et al., 2018) and provide effective and efficacious treatments (Richardson et al., 2014). Similar programs could be adapted for use by school-nurses (Cheung et al., 2018); additional research is needed to examine these imbedded resources for the mental health of adolescents, especially for underserved populations like Black adolescents. It is also critical that screening and diagnostic instruments be assessed for cultural relevance. With the numbers of Black adolescents who have sub-clinical symptom presentations, it is possible that current assessment tools do not adequately capture the language and manifestation of their mental health symptoms/ experiences (e.g. depression manifesting as anger and not sadness; Jones et al., 2020).

Besides clinical practice changes, this study also has implications at the system and policy level. Supportive mental health services should be created that are available in a variety of settings, including outside the traditional mental health settings. For example, schools and recreation centers are a vital part of the lives of adolescents and by creating programs that are adapted to these settings, the needs of this and other vulnerable populations may be more adequately addressed. While multi-systemic and school-based therapies for adolescents have been shown to be both effective and implementable (Fisher et al., 2018; Mason-Jones et al., 2012) much of our mental health services rely on traditional, office-based outpatient treatment. Furthermore, in order to reduce barriers to seeking and accessing mental health treatment such as mental health stigma, culturally relevant and culturally-informed mental health treatments should be available to Black adolescents in these settings that acknowledge



the multifaceted types of stressors that they could be facing. When additional or expanded mental health systems are available, Black adolescents and their families should be made fully aware of mental health treatment resources through a variety of avenues such as school notices and public advertising. Given the association between adolescent mental health disorders, risk behaviors and outcomes that last into adulthood, prompt intervention and additional inquiry are warranted to determine the extent of problems and how mental health practice and policy can better reach the need of Black adolescents. Those working with Black adolescents must also be mindful not to pathologize their lived experience and presume that they are weak, helpless or inherently flawed in other ways. Historical injustices (e.g., structural racism) have made it such that some Black adolescents are hindered from achieving their full health potential at no fault of their own. People who engage this demographic to promote mental wellness can do so in ways where they are treated as equal partners in the care paradigm, consulted for their expertise about their daily lives and viewed with dignity and respect.

The World Health Organization (WHO) defines mental health as, “a state of wellness in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to society” (World Health Organization [WHO] n.d.). The promotion of mental wellness may be beneficial for Black adolescents. Mental wellness includes understanding what it means to flourish within environments that may contribute to traumatic experiences and working with adolescents to overcome adverse experiences (Brown, King, & Wissow, 2017; Preskitt et al., 2015). As psychological and mental health research often focuses on identifying risk factors and problem trajectories, more effort is needed to support the development of positive psychosocial programming and interventions that address mental wellness specifically for adolescents who do not qualify for a mental illness diagnosis, yet experience challenges with their mental health.

### Limitations

Though this study contributes significantly to the literature on mental health among Black adolescents, there are limitations that should be acknowledged. First, the aims of this secondary analysis were different from the intent of the larger study. Resultantly, it is possible that the sample, who consented to a sexual health research study and not a mental health study, may have experienced different psychological risks and disorders than those who would not consent to such a study. Second, some have argued that psychiatric structured clinical interviews and screening assessments are not always normed to various cultural contexts, especially minority cultures, which can lead to under or over reporting of diagnoses (Brawner & Waite, 2009). Thus, the conditions participants met or did not meet criteria for may not accurately reflect their actual mental health. Third, the study did not specifically address the role of environmental poverty and its effect on the mental health of the participants. While there is documented literature that accounts for exposure to environmental stressors such as neighborhood violence, high rates of poverty, and community trauma (Opara et al., 2020a), we did not take into account the role of environment on the sample. We encourage future researchers to utilize geographic spatial analysis techniques to contextualize the findings in relation to the environment. Lastly, the

small sample size may limit generalizability. However, the study findings do advance the science on mental health among Black adolescents in both treatment and out of treatment groups, as well as advocate for additional screening, prevention and treatment options to improve mental health and wellbeing for Black youth.

## Conclusion

There was a significant mental health burden for Black adolescents in the sample, both those receiving treatment and those without treatment. Our findings indicate that our current mental health treatment net may not be broad enough to reach all youth in need of services, and that we need more strategic ways to: 1) engage vulnerable adolescents and their families in existing care models, 2) expand the capacity of providers to recognize, screen, and refer or treat adolescent mental health disorders and 3) transform the care system/paradigm to provide mental health support outside of traditional mental health centers. Creative partnerships between behavioral health providers and recreation centers, schools and community-based organizations must be built and maintained to adequately address adolescents' needs.

## Acknowledgements:

This research was funded by the Centers for Disease Control and Prevention (Minority AIDS Research Initiative) grant # U01PS003304 awarded to Dr. Brawner. Dr. Weissinger received support from the Hillman Scholars Program in Nursing Innovation, the Jonas Nurse Leader Program and a Predoctoral Fellowship through the T-32 on Vulnerable Women, Children and Families (NR007100). Dr. Opara is supported with funding from the National Institutes of Health, Office of the Director (1DP5OD029636). Dr. Opara, Dr. Lanier, Dr. Carter, and Dr. Brawner received partial funding support from a National Institute of Mental Health education grant (R25-MH087217).

## References

- Alegria M, Vallas M, Pumariega AJ (2010). Racial and ethnic disparities in pediatric mental health. *Child Adolescent Psychiatry Clinics of North America*, 19, 759–774.
- Aneshensel CS (2012). *Theory-based data analysis for the social sciences*. Sage Publications.
- Ayalon L, & Alvidrez J (2007). The experience of Black consumers in the mental health system—identifying barriers to and facilitators of mental health treatment using consumers perspective. *Issues in Mental Health Nursing*, 28(12), 1323–1340. [PubMed: 18058337]
- Bailey RK, Mokonogho J, & Kumar A (2019). Racial and ethnic differences in depression: current perspectives. *Neuropsychiatric disease and treatment*, 15, 603–609. 10.2147/NDT.S128584 [PubMed: 30863081]
- Bursac Z, Gauss CH, Williams DK, & Hosmer DW (2008). Source code for biology and medicine. *Source code for biology and medicine*, 3, 17. [PubMed: 19087314]
- Brave Heart MYH, Chase J, Elkins J, & Altschul DB (2011). Historical trauma among indigenous peoples of the Americas: Concepts, research, and clinical considerations. *Journal of psychoactive drugs*, 43(4), 282–290. [PubMed: 22400458]
- Brawner B, Waite RL (2009). Exploring patient and provider level variables that may impact depression outcomes among African American adolescents. *Journal of Child and Adolescent Psychiatric Nursing*, 22, 69–76. [PubMed: 19490277]
- Brawner BM, Fannin EF, Reason JL, & Weissinger G (2016). Addressing unmet sexual health needs among Black adolescents with mental illnesses. *Journal of Black Sexuality and Relationships*, 3(3), 75–88. [PubMed: 29119132]
- Brawner BM, & Sutton MY (2018). Sexual health research among youth representing minority populations: To waive or not to waive parental consent. *Ethics & Behavior*, 28(7), 544–559.

- Brown JD, King MA, & Wissow LS (2017). The central role of relationships with trauma-informed integrated care for children and youth. *Academic Pediatrics*, 17(7), S94–S101. [PubMed: 28185977]
- Breslau J, Lane M, Sampson N, & Kessler RC (2008). Mental disorders and subsequent educational attainment in a US national sample. *Journal of psychiatric research*, 42(9), 708–716. [PubMed: 18331741]
- Cheung AH, Zuckerbrot RA, Jensen PS, Laraque D, Stein RE, & Glad-PC Steering Group. (2018). Guidelines for adolescent depression in primary care (GLAD-PC): Part II. Treatment and ongoing management. *Pediatrics*, 141(3).
- City of Philadelphia. Community Behavioral Health. Accessed September 26th, 2017 2017.
- Clark TT (2014). Perceived discrimination, depressive symptoms, and substance use in young adulthood. *Addictive Behaviors*, 39(6), 1021–1025. [PubMed: 24629325]
- Cooper J (2001). *Diagnostic and statistical manual of mental disorders (4th edn, text revision) (DSM-IV-TR)* Washington, DC: American Psychiatric Association 2000. 943 pp.£ 39.99 (hb). ISBN 0 89042 025 4. *The British Journal of Psychiatry*, 179(1), 85–85.
- Copeland WE, Miller-Johnson S, Keeler G, Angold A, & Costello EJ (2007). Childhood psychiatric disorders and young adult crime: A prospective, population-based study. *American Journal of psychiatry*, 164(11), 1668–1675.
- Cummings JR, & Druss BG (2011). Racial/ethnic differences in mental health service use among adolescents with major depression. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(2), 160–170. [PubMed: 21241953]
- Donovan RA, Huynh QL, Park IJ, Kim SY, Lee RM, & Robertson E (2013). Relationships among identity, perceived discrimination, and depressive symptoms in eight ethnic-generational groups. *Journal of Clinical Psychology*, 69(4), 397–414. [PubMed: 23124607]
- Dunn EC, Nishimi K, Powers A, & Bradley B (2017). Is developmental timing of trauma exposure associated with depressive and post-traumatic stress disorder symptoms in adulthood?. *Journal of psychiatric research*, 84, 119–127. [PubMed: 27728852]
- Fisher JH, Lichvar E, Hogue A, & Dauber S (2018). Perceived need for treatment and engagement in mental health services among community-referred racial/ethnic minority adolescents. *Administration and Policy in Mental Health and Mental Health Services Research*, 45(5), 751–764. [PubMed: 29525929]
- Garland AF, Lau AS, Yeh M, McCabe KM, Hough RL, & Landsverk JA (2005). Racial and ethnic differences in utilization of mental health services among high-risk youths. *American Journal of Psychiatry*, 162(7), 1336–1343.
- Gaylord-Harden Noni K., Dickson Daniel, and Pierre Cynthia. “Profiles of community violence exposure among African American youth: An examination of desensitization to violence using latent class analysis.” *Journal of interpersonal violence*, 31, no. 11 (2016): 2077–2101. [PubMed: 25716195]
- Hanna MD, Boyce ER, & Yang J (2017). The impact of historical trauma and mistrust on the recruitment of resource families of color. *Adoption Quarterly*, 20(1), 65–82.
- Jones SCT, Anderson RE, & Metzger IW (2020). “Standing in the gap”: The continued importance of culturally competent therapeutic interventions for Black youth. *Evidence-Based Practice in Child and Adolescent Mental Health*, 5(3), 327–339. 10.1080/23794925.2020.1796546
- Kutcher S, & McDougall A (2009). Problems with access to adolescent mental health care can lead to dealings with the criminal justice system. *Paediatrics & Child Health*, 14(1), 15–18. [PubMed: 19436458]
- Liang J, Matheson BE, & Douglas JM (2016). Mental health diagnostic considerations in racial/ethnic minority youth. *Journal of Child and Family Studies*, 25(6), 1926–1940. doi:10.1007/s10826-015-0351-z [PubMed: 27346929]
- Lindsey MA, Chambers K, Pohle C, Beall P, & Lucksted A (2013). Understanding the behavioral determinants of mental health service use by urban, under-resourced Black youth: Adolescent and caregiver perspectives. *Journal of Child and Family Studies*, 22(1), 107–121. [PubMed: 23355768]

- Maura J, & de Mamani AW (2017). Mental health disparities, treatment engagement, and attrition among racial/ethnic minorities with severe mental illness: a review. *Journal of clinical psychology in medical settings*, 24(3–4), 187–210. [PubMed: 28900779]
- Mason-Jones AJ, Crisp C, Momberg M, Koech J, De Koker P, & Mathews C (2012). A systematic review of the role of school-based healthcare in adolescent sexual, reproductive, and mental health. *Systematic reviews*, 1(1), 49. [PubMed: 23098138]
- McKenzie M, Olsson CA, Jorm AF, Romaniuk H, & Patton GC (2010). Association of adolescent symptoms of depression and anxiety with daily smoking and nicotine dependence in young adulthood: findings from a 10-year longitudinal study. *Addiction*, 105(9), 1652–1659. [PubMed: 20707783]
- McLaughlin KA, Koenen KC, Hill ED, Petukhova M, Sampson NA, Zaslavsky AM, & Kessler RC (2013). Trauma exposure and posttraumatic stress disorder in a national sample of adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 52(8), 815–830. [PubMed: 23880492]
- Merikangas KR, He JP, Brody D, Fisher PW, Bourdon K, & Koretz DS (2010). Prevalence and treatment of mental disorders among US children in the 2001–2004 NHANES. *Pediatrics*, 125(1), 75–81. [PubMed: 20008426]
- Merikangas KR, He JP, Burstein M, Swendsen J, Avenevoli S, Case B, ... & Olfson M (2011). Service utilization for lifetime mental disorders in US adolescents: results of the National Comorbidity Survey–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(1), 32–45. [PubMed: 21156268]
- Merikangas KR, He JP, Burstein M, Swanson SA, Avenevoli S, Cui L, ... & Swendsen J (2010). Lifetime prevalence of mental disorders in US adolescents: results from the National Comorbidity Survey Replication–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(10), 980–989. [PubMed: 20855043]
- National Institute on Mental Health (2020). Mental Illness. Retrieved from: [https://www.nimh.nih.gov/health/statistics/mental-illness.shtml#part\\_155771](https://www.nimh.nih.gov/health/statistics/mental-illness.shtml#part_155771)
- Opara I, Lardier DT, Metzger I, Herrera A, Franklin L, Garcia-Reid P, & Reid RJ (2020a). “Bullets Have no Names”: A Qualitative Exploration of Community Trauma Among Black and Latinx Youth. *Journal of Child and Family Studies*, 29(8), 2117–2129.
- Opara I, Lardier DT Jr, Garcia-Reid P, & Reid RJ (2020b). Measuring Intrapersonal Psychological Empowerment and Ethnic Identity: Highlighting Strengths of Urban Black Girls. *Youth & Society*, 0044118X20970226.
- Opara I, Assan MA, Pierre K, Gunn III JF, Metzger I, Hamilton J, & Arugu E (2020c). Suicide among Black Children: An Integrated Model of the Interpersonal-Psychological Theory of Suicide and Intersectionality Theory for Researchers and Clinicians. *Journal of Black Studies*, 51(6), 611–631.
- Oser R, Karakos HL, & Hennessy EA (2016). Disparities in youth access to substance abuse treatment and recovery services: How one recovery school initiative is helping students “Change Tracks”. *Journal of Groups in Addiction & Recovery*, 11(4), 267–281.
- Pardini D, White HR, & Stouthamer-Loeber M (2007). Early adolescent psychopathology as a predictor of alcohol use disorders by young adulthood. *Drug and alcohol dependence*, 88, S38–S49. [PubMed: 17257781]
- Preskitt JK, Menear KS, Goldfarb SS, & Menachemi N (2015). Wellness among US adolescents ages 12–17 years. *Child: Care, Health and Development*, 41(6), 1207–1215.
- Seaton EK, Upton R, Gilbert A, & Volpe V (2014). A moderated mediation model: Racial discrimination, coping strategies, and racial identity among Black adolescents. *Child Development*, 85(3), 882–890. [PubMed: 23668685]
- Shain BN (2019). Increases in rates of suicide and suicide attempts among black adolescents. *Pediatrics*, 144(5).
- Riglin L, Petrides KV, Frederickson N, & Rice F (2014). The relationship between emotional problems and subsequent school attainment: A meta-analysis. *Journal of adolescence*, 37(4), 335–346. [PubMed: 24793380]
- Rose T, Joe S, & Lindsey M (2011). Perceived stigma and depression among black adolescents in outpatient treatment. *Children and youth services review*, 33(1), 161–166. [PubMed: 21499533]

- Scheidell JD, Quinn K, McGorray SP, Frueh BC, Beharie NN, Cottler LB, & Khan MR (2018). Childhood traumatic experiences and the association with marijuana and cocaine use in adolescence through adulthood. *Addiction*, 113(1), 44–56. [PubMed: 28645136]
- Schilling EA, Aseltine RH, & Gore S (2007). Adverse childhood experiences and mental health in young adults: a longitudinal survey. *BMC public health*, 7(1), 30. [PubMed: 17343754]
- Sheehan DV, Sheehan KH, Shytle RD, Janavs J, Bannon Y, Rogers JE, ... & Wilkinson B (2010). Reliability and validity of the mini international neuropsychiatric interview for children and adolescents (MINI-KID). *The Journal of clinical psychiatry*, 71(3), 313–326. [PubMed: 20331933]
- Suliman S, Mkabile SG, Fincham DS, Ahmed R, Stein DJ, & Seedat S (2009). Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. *Comprehensive psychiatry*, 50(2), 121–127. [PubMed: 19216888]
- Swendsen J, Burstein M, Case B, Conway KP, Dierker L, He J, & Merikangas KR (2012). Use and abuse of alcohol and illicit drugs in US adolescents: Results of the National Comorbidity Survey–Adolescent Supplement. *Archives of general psychiatry*, 69(4), 390–398. [PubMed: 22474107]
- Tully EC, Iacono WG, & McGue M (2008). An adoption study of parental depression as an environmental liability for adolescent depression and childhood disruptive disorders. *American Journal of Psychiatry*, 165(9), 1148–1154.
- Turner HA, Finkelhor D, & Ormrod R (2006). The effect of lifetime victimization on the mental health of children and adolescents. *Social science & medicine*, 62(1), 13–27. [PubMed: 16002198]
- van Dijke A, Ford JD, Frank LE, & Van der Hart O (2015). Association of childhood complex trauma and dissociation with complex posttraumatic stress disorder symptoms in adulthood. *Journal of Trauma & Dissociation*, 16(4), 428–441. [PubMed: 25905664]
- Van Vliet IM, & De Beurs E (2007). The MINI-International Neuropsychiatric Interview. A brief structured diagnostic psychiatric interview for DSM-IV en ICD-10 psychiatric disorders. *Tijdschrift voor psychiatrie*, 49(6), 393–397. [PubMed: 17614093]
- Weisz JR, Kuppens S, Ng MY, Eckshtain D, Ugueto AM, Vaughn-Coaxum R, ... & Weersing VR (2017). What five decades of research tells us about the effects of youth psychological therapy: a multilevel meta-analysis and implications for science and practice. *American Psychologist*, 72(2), 79.
- World Health Organization (n.d.). Mental Health: A state of well-being. Available at [https://www.who.int/features/factfiles/mental\\_health/en](https://www.who.int/features/factfiles/mental_health/en)
- Zlotnick C, Johnson J, Kohn R, Vicente B, Rioseco P, & Saldivia S (2008). Childhood trauma, trauma in adulthood, and psychiatric diagnoses: results from a community sample. *Comprehensive psychiatry*, 49(2), 163–169. [PubMed: 18243889]
- Zuckerbrot RA, Cheung A, Jensen PS, Stein RE, Laraque D, GLAD-PC STEERING GROUP. Guidelines for Adolescent Depression in Primary Care (GLAD-PC): part I. Practice preparation, identification, assessment, and initial management. *Pediatrics*. 2018;141(3):e20174081. [PubMed: 29483200]

**Table 1.**

Demographic Variables for Sample and Sub-groups (N = 154)

Variable	MHT (n = 72)	OT (n = 82)	Total	Chi Square	df	p
<b>Gender</b>						
Female	30 (42%)	29 (35%)	59 (38%)	0.64	1	0.42
Male	42 (58%)	53 (65%)	95 (62%)			
<b>Age (M = 15.84)</b>						
14	0 (0%)	8 (10%)	8 (5%)	10.47	3	0.02
15	19 (26%)	29 (35%)	48 (31%)			
16	30 (42%)	28 (34%)	58 (38%)			
17	23 (32%)	17 (21%)	40 (26%)			
<b>Race</b>				2.08	4	0.72
Black / African American	64 (88.9%)	74 (90.2%)	138 (89.61%)			
Caribbean/West Indian	1 (1.4%)	2 (1.3%)	2 (1.30%)			
Mixed Race	6 (8.3%)	12 (7.8%)	12 (7.79%)			
Native American	0 (0.0%)	1 (0.6%)	1 (0.65%)			
Other Identity	0 (0.0%)	1 (0.6%)	1 (0.65%)			
<b>Hispanic ethnic group identity</b>						
Yes	1 (33.3%)	0 (0.0%)	1 (0.65%)			
No	2 (66.7%)	0 (0.0%)	2 (1.30%)			
<b>Grade</b>						
9th	12 (17%)	18 (22%)	30 (19%)	8.12	4	0.08
10th	22 (31%)	30 (36%)	52 (34%)			
11th	25 (35%)	18 (22%)	43 (28%)			
12th	13 (18%)	11 (13%)	24 (16%)			
Grad	0 (0%)	5 (6%)	5 (3%)			
<b>Living Arrangements</b>						
In a house (owned)	32 (44%)	31 (38%)	63 (41%)	3.01	5	0.69
In a house (rented)	27 (38%)	39 (48%)	66 (43%)			
In an apartment (rents)	8 (11%)	8 (10%)	16 (10%)			

Variable	MHT (n = 72)	OT (n = 82)	Total	Chi Square	df	p
In a shelter	1 (1%)	0 (0%)	1 (1%)			
Other	2 (3%)	2 (2%)	4 (3%)			
<b>Self-rated Health</b>						
Excellent	15 (21%)	23 (28%)	38 (25%)	1.49	3	0.68
Very Good	29 (40%)	27 (33%)	56 (36%)			
Good	19 (26%)	23 (28%)	42 (27%)			
Fair	9 (13%)	9 (11%)	18 (12%)			
<b>Anyone in Family ever Received Mental Health Treatment</b>						
Yes	31 (43%)	30 (36%)	61 (40%)	0.48 <sup>a</sup>	1	0.48

Note. MHT= Mental Health Treatment Group. OT = Out of Treatment Group (Community Group)

<sup>a</sup> indicates insufficient data / treatment location is a constant.

**Table 2.**

Mental Health Disorders for the Sample and Sub-groups (N = 154)

	MHT (n = 72)	OT (n = 82)	Total (N = 154)	Chi-square	df	p
Diagnosis of any Mental Health Disorder	30 (42%)	20 (24%)	50 (32%)	5.21	1	0.02
Major Depressive Disorder	2 (3%)	2 (2%)	4 (3%)	.02	1	0.89
Bipolar Disorder	0 (0%)	0 (0%)	0 (0%)	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
Generalized Anxiety Disorder	0 (0%)	0 (0%)	0 (0%)	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
Post-traumatic Stress Disorder	6 (8%)	3 (4%)	9 (6%)	1.52	1	0.21
Obsessive Compulsive Disorder	6 (8%)	4 (5%)	10 (7%)	.75	1	0.38
Social Phobia	5 (7%)	1 (1%)	6 (4%)	3.75	1	0.05
Agoraphobia	4 (6%)	0 (0%)	4 (3%)	4.67	1	0.03
Panic Disorder	1 (1%)	7 (9%)	8 (5%)	3.97	1	0.04
Panic Disorder with Agoraphobia	1 (1%)	0 (0%)	1 (1%)	1.14	1	0.28
Substance Use Disorders	12 (17%)	11 (13%)	23 (15%)	.32	1	0.57

Note: MHT= Mental Health Treatment Group, OT = Out of Treatment Group (Community Group)

<sup>a</sup> indicates insufficient data / treatment location is a constant.



**Table 3.**  
Differences in Mental Health-Related Symptoms and Risk Factors (N = 154)

	MHT (n = 72)	OT (n = 82)	Total (N = 154)	Chi-square	df	p
Depressive Symptoms in the Last Two Weeks	8 (11%)	10 (12%)	18 (12%)	.04	1	0.83
Alcohol Use	8 (11%)	12 (15%)	20 (13%)	.42	1	0.51
Substance Use	36 (50%)	31 (38%)	67 (44%)	2.32	1	0.12
Trauma Exposure History	40 (56%)	23 (28%)	63 (41%)	12.00	1	0.001
Recent Suicidality	9 (13%)	7 (9%)	16 (10%)	.65	1	0.42

Note. MHT= Mental Health Treatment Group. OT = Out of Treatment Group (General Community Group)

**Table 4.**

Multivariate Logistic Regression Analysis Results (N = 154)

	OR (SE)	95% CI		p
		LL	UL	
Diagnosis of a Mental Health Disorder	2.45 (1.24)	.91	6.61	.05
Trauma Exposure History	2.88 (1.03)	1.42	5.85	.01
Substance Use	0.58 (.36)	.17	1.97	.55
Recent Suicidality	0.80 (.42)	.28	2.25	.22
Post-traumatic stress disorder	.60 (.55)	.10	3.61	.30
Age (in years)	1.70 (.35)	1.12	1.57	.05
Constant	-1.48 (.70)	-2.86	-.09	.05
LR $\chi^2$	23.26			
df	6			
R <sup>2</sup>	0.12***			

Note. OR = Odds Ratio.