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Correlates of depression among Black girls exposed to violence

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Abstract

Depression rates for youth remanded to juvenile detention is double that of the general population and Black girls are especially vulnerable. A dearth of literature analyzes the factors that are correlated with depression among system-involved Black girls, ages 12–17 years old. We utilized personal agency to examine the relationship between risk factors (i.e., abuse history, and fear of condom negotiation) and protective factors (i.e., condom self-efficacy, and perceived social support) that might correlate with depression among Black girls exposed to violence. Findings indicate that fear of condom negotiation, abuse history and low condom self-efficacy are correlated with depressive symptomology while self-esteem and perceived social support are protective factors that may serve as a buffer against girls' feelings of helplessness and hopelessness. The findings of this study suggest several implications for prevention and intervention efforts to reduce the depression-related risks among justice-involved Black females, including strategies that promote healing within their social support networks.

Keywords

Black girls; depression; trauma; mental health

Introduction

Girls who are involved with the juvenile justice system reflect high rates of major depressive disorder as a result of having experienced sexual abuse and/or trauma within their lifetime [1, 2]. Moreover, Black girls are disproportionately represented within the juvenile justice

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Conflict of Interest Bernadine Waller declares that she has no conflict of interest. Camille R. Quinn declares that she has no conflict of interest. Donte Boyd declares that he has no conflict of interest. Ralph DiClemente declares that he has no conflict of interest. Dexter R. Voisin declares that he has no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent and assent were obtained from all individual participants included in the study.

system where high rates of depression are reported [2, 3]. Although Black youth comprise 18% of the overall population in the United States, Black girls account for 35% of the over 48,000 youth within the juvenile justice system due, in part, to perceiving and treating them as harshly as adults rather than youth [3, 4]. This is in stark contrast to their White peers who are significantly underrepresented in the juvenile justice system [4]. According to the Georgetown Law Center on Poverty and Inequality, Black girls are 2.7 times more likely to be referred to juvenile justice, 0.8 times less likely to have their cases diverted and 1.2 times more likely to be detained than White girls [3]. Although Black girls generally underreport depressive symptomology, they are at particular risk since they are overwhelmingly represented among girls of all racial/ethnic backgrounds who are system-involved [1, 3]. An important step toward reducing rates of depression among Black girls who are juvenile justice-involved is understanding what factors are correlated with their depressive symptomology.

Depression

Depression among youth within the juvenile system continue to rise and Black girls' disproportionate presence underscores their elevated risk [3, 5]. Depression rates among system-involved youth is double that of the general population [1, 6], and of those who are system-involved girls' depression rates are double that of boys [1]. Moreover, detention rates increase the likelihood of a major depressive episode among system-involved girls [7]. Girls in detention are more likely than boys to experience depression as a result of trauma and exposure to other adverse childhood experiences (ACEs), interaction with the child welfare system prior to system involvement, and childhood delinquency, as well as increased likelihood of internalizing behaviors and fears related to their detention [1, 2]. As detention rates of Black girls continue to escalate, the numbers of those experiencing a major depressive episode have also increased [3, 5]. In fact, more than half (54%) of Black girls in detention report experiencing depressive symptomology [5]. Goodkind et al. [6] examined 186 girls involved with the juvenile justice system found that girls who had histories of physical and/or emotional abuse and no family support are more likely to experience depression. Moreover, Black girls are more readily given harsher sentences than White girls [3]. Rather than remanding Black girls within home or open residential settings, they are typically detained in closed residential settings, which elevates the likelihood they will experience depression [6]. Notably, Black girls' intersectional social location, specifically their gender and ethnicity, often precludes them from receiving the treatment they need to improve their overall health and wellbeing while in the justice system [8].

Trauma History and History of Abuse

Trauma and adverse childhood experiences (ACEs) are evidenced among Black girls within the juvenile justice system. Girls within the juvenile justice system reflect the highest prevalence and multiple exposures to ACEs prior to their interaction with the system and Black girls are particularly vulnerable [9]. ACEs include any physical, sexual or verbal abuse; neglect and/or household dysfunction, namely family violence, mental illness or incarceration as well as separation or divorce [10]. Recent research that examined racial differences from the National Survey of Children's Health 2016, which is a nationally representative sample of all youth, ages 0–17, reveals that Black children are more likely

than White children to experience at least two ACEs [11]. Existing literature points to a correlation between ACEs and system involvement among youth. Specifically, 62% of girls within the juvenile justice system report that they have experienced at least four types of ACEs [9]. This is an issue among Black girls since both girls and Black children are more likely to report experiencing ACEs [9]. The sequela of trauma experiences are further compounded once they are system-involved and experience the psychological distress of processing and/or confinement [12, 13].

Self Esteem

Self-esteem is a concept that denotes the way individuals feel about and/or value themselves, which is related to depression [14]. Some of the established factors associated with selfesteem include peer influences like peer acceptance and family relationships [15], which are also associated with their sexual behaviors [16]. Self-esteem has been associated with more positive mental health outcomes [17]. However, low self-esteem has been associated with a greater probability of exhibiting sexual risk behaviors [18] along with early sexual debut [19]. Yet, findings from another research study suggest that higher self-esteem was not associated with age of sexual debut [20]. Further, Penfold and colleagues [21] did not find any relationship between self-esteem and sexual risk behaviors (i.e., having had sexual relations at an early age). A dearth of literature examines self-esteem among system-involved Black girls [22, 23]. However, the literature does note that positive self-esteem may influence girls' motivation to improve their overall quality of life [23], despite their elevated risk for experiencing depression due to their histories of trauma [22, 24]. This warrants further examination of the relationship between self-esteem and depression among Black girls who are system-involved.

Condom Negotiation and Self-Efficacy

Girls' ability to ensure condom utilization during sexual intercourse evidences a sense of sexual self-efficacy [25, 26]. Sexual self-efficacy (SSE) is postulated as the level of confidence and perceived control that a person has over her own sexual outcomes during intimacy with her partner [25, 27]. It has been operationalized to elucidate girls' interest, desire, arousal and orgasm within their sexual relationships. SSE reflects girls' level of self-sufficiency and confidence during sexual encounters [28, 29]. SSE is an extension of self-efficacy, which is posited as one's belief in her own ability to control the outcome of a situation [30]. Both theories elucidate the positive correlation between this population's perception of control and the ways they feel empowered to employ strategies to respond during sexual encounters. As such, girls who reflect low SSE and poor condom negotiation skills contract a range of sexually-transmitted infections, including HIV, and/or becoming pregnant [25, 31].

Social Support

The view that an individual is appreciated and acknowledged in their social environment enhances their well-being, including their self-efficacy, self-esteem and confidence that guards against depression [32]. Perceived social support, operationalized with respect to the quality of a given relationship, is one of the most robust concurrent predictors of depressive symptomology [33]. Research on social support suggests that associations with higher levels

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of depressive symptoms in adolescents found that lower parental support was associated with depressive symptoms [34]. Adolescent girls who possess fewer social supports are more likely to rely on specific relationships, i.e., romantic relationships. Specifically, adolescents are more vulnerable to developing depressive symptoms when parents are absent and unable to assist them with regulating emotions that are often associated with the stress of romantic experiences [35, 36]. Further, research showing the principles of communal cultures of Black/African Americans, and their greater belief in family and kinship networks for social support [37-39]. One previous study with a sample of Black and Afro Caribbean girls from the National Study of American Life-Adolescent survey results suggested that high levels of perceived peer support was associated with low levels of depressive symptoms, while parental support (i.e., perceived maternal and paternal support) did not mediate depressive symptoms [32]. To this end, assessing Black girls' depression symptoms based on their social support from peers and parents is a critical factor in promoting protective factors that improve their psychological well-being.

Personal Agency

Personal agency is a key aspect to understanding how an individual uses her power to engage in intentional decision-making based on information accessible to her [40-42]. Personal agency illuminates the ways that girls are actively involved in implementing their beliefs to ensure a predetermined outcome and comprises two dimensions: perceived control and self-efficacy [42, 43]. Perceived control is postulated as the amount of control girls have over their behaviors and is influenced by environmental factors that may preclude their ability to complete their predetermined actions [43]. Self-efficacy is posited as girls' ability to perform specific actions [30, 43]. Personal agency has been used to inform the behavior of Black youth, including girls in the context of sexual risk behaviors, i.e., HIV testing, etc. [40, 44]. Investigating different aspects of an individual's agency must be considered with other salient factors to understand their overall mental health and well-being. Within the context of the current study, we seek to examine the role that personal agency and individual, parent and peer factors play in regard to depression among justice-involved Black girls. Specifically, is personal agency a protective mechanism against depression among Black girls (12–17 years old) exposed to trauma? By prioritizing their personal agency, we can highlight how Black girls engage in acts of resistance (or lack thereof) that may not always be evident [45].

Methods

Participants

The current study used data from the Imara parent study, a randomized controlled study designed to test the efficacy of a sexual risk reduction intervention to decrease the incidence of sexually transmitted infections, improve HIV-preventive behaviors, and enhance psychosocial outcomes for Black females in a juvenile detention center [40, 44-48]. Eligibility criteria for the study participants consisted of girls who self-identified as Black or African American, were ages 12–17, were currently incarcerated in short term detention facility in Atlanta, Georgia, who self-reported having vaginal intercourse prior to detention, not in steady relationships, and were not pregnant or wanting to be pregnant [46]. Additional

information about the full efficacy study is described elsewhere [47]. Data for this study were drawn from the baseline data.

Procedures

Consent and assent in the parent study was obtained from participating girls and their parents respectively prior to the implementation phase of the study. Data collection was completed while girls were still in detention, including 93% (N= 188) of the eligible participants enrolled in the study were included in the current study. The study participants completed surveys using audio computer-assisted self-interviewing (ACASI) technology. ACASI has shown to reduce selection bias and may help with literacy problems and touts numerous benefits, including its ability to be self-administered, recognition of inconsistencies in the client's self-report prompting them to resolve the discrepant data while also enhancing confidentiality and accurate recall using timeline follow-back techniques [49, 50].

Measures

The measures used in this study were selected based their previous use, which was validated with this population [51].

Dependent variable

Depression: Depression was assessed using the Center for Epidemiologic Studies Depression Scale (CES-D) [47, 52, 53]. Respondents were asked questions such as "I felt that I could not shake off the blues even with help from my family and friends;" "I felt depressed;" and "I thought my life had been a failure." Response categories ranged from (1 = less than a day, 2 = 1 to 2 days, 3 = 3 to 4 days, 4 = 5 to 7 days), where higher scores indicate more depression. The Cronbach's alpha for this scale is .91.

Independent Variables

Trauma History: Trauma History [54, 55] was assessed using a 12-item, Yes/No index, which included questions such as, "In the past 12 months, did a friend die?" and "In the past 12 months, was a family member a victim of a violent crime." Scores ranged from 0 to 12, with higher scores indicating higher levels of exposure to traumatic events in the previous year.

History of Abuse: History of Abuse was a measure of cumulative childhood abuse that is specific to abuse and does not include other types (e.g., neglect) of victimization. This measure was created in the parent study to invetigate participants' demographic and behavioral factors [44, 46]. Items have been used in prior research and measured three dichotomous variables: physical, emotional, and sexual abuse [48]. Participants responded to questions such as "Have you ever been emotionally abused?" "Have you ever been physically abused?" and "Has anyone ever forced you to have vaginal sex when you didn't want to?" Response categories were *yes* (=1) or *no* (=0). Responses were summed to a three-point scale (Range = 0.1-3.0) with higher scores indicating more abuse. The Cronbach's alpha for this scale was 0.66.

<u>Self-Esteem</u>: Self-Esteem was measured with 10 items from the Rosenberg Self-Esteem scale ([44, 48]; Rosenberg, 1965; $\alpha = 0.843$). Examples of items included "I feel that I have a number of good qualities" and "I feel that I am a failure" with response categories ranging from 1 to 4 (1 = *strongly disagree*, 4 = *strongly agree*), where higher scores indicated greater self-esteem (Range = 13–40). The Cronbach's alpha for this scale was 0.90.

Fear of Condom Negotiation: Fear of Condom Negotiation was measured with a 7-item scale. Respondents were asked questions such as "I have been worried that if I talked about using condoms with my boyfriend or sex partner he would ignore my request." and "I have been worried that if I talked about using condoms with my boyfriend or sex partner he would leave me." Response categories ranged from (1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, 5 = always), higher scores indicate higher fear of condom negotiation. The Cronbach's alpha for this scale is 0.90.

Condom Self-Efficacy: Condom Self-Efficacy was measured with a 9-item scale. Respondents were asked questions such as "How much of a problem would it be for you to take a condom off without spilling the semen?'; 'How much of a problem would it be for you to start over using a new condom if you placed it on the wrong way?'; and 'How much of a problem would it be for you to put a condom on a hard penis?''. Response categories ranged from (1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, 5 = always), where scores indicate higher fear of condom negotiation. The Cronbach's alpha for this scale is 0.90.

Social Support: Social Support (family and friends/peers) was measured with an 11-item scale. Respondents were asked questions such as "I get the emotional help and support I need from my family" and "My friends really try to help me". Response categories ranged from (1 = strongly disagree, 2 = disagree, 3 = neither disagree or agree, 4 = agree, 5 = strongly agree), where higher scores indicate more family and friends support. The Cronbach's alpha for this scale is 0.88.

Covariate: Age was used a continuous variable.

Data Analysis

Univariate analyses were computed to describe all study variables (see Table 1). Next, bivariate correlation analyses (Table 2) were conducted to examine the associations between all study variables: depression, trauma history, history of abuse, self-esteem, condom self-efficacy, fear of condom negotiation, social support, and age. Next, a multiple regression analysis was conducted with all independent variables: trauma history, history of abuse, self-esteem, condom self-efficacy, fear of condom negotiation, social support, and age. Next, a multiple regression analysis was conducted with all independent variables: trauma history, history of abuse, self-esteem, condom self-efficacy, fear of condom negotiation, social support, and age; on the dependent: depression. Also, to test the hypothesis that the depression of juvenile justice involved Black females are a function of multiple risk factors, and more specifically whether their depression moderates the relationship between condom self-efficacy and fear of condom negotiation a moderation analysis was conducted (Table 3). The authors conducted post estimation test to check for multicollinearity between independent variables trauma

history, history of abuse, as well as condom self-efficacy and fear condom negotiation; the variance inflation factor was under 10 meaning there was no collinearity [56].

Sample Characteristics

The analytic sample consisted of 188 Black girls between the ages 12–17, and the mean age was 15.32 (see Table 1). Fifty-six percent of girls reported low to moderate levels of depression (M= 17.45, SD= 17.67). In terms of the different types of abuse: 56% of girls experienced emotional abuse, 43% experienced physical abuse, and 24% experienced sexual abuse. Overall, Black girls experienced moderate levels of history of abuse (M= 0.40, SD = 1.10). Girls reported high levels of social support (M= 42.61, SD= 8.70) and moderate levels of self-esteem (M= 30.21, SD= 5.73). They also reported low levels of efficacy around condoms (M= 19.40, SD= 9.00) and fear of condom negotiation (M= 8.46, SD= 3.66). Among the overall sample, girls reported low levels trauma (M= 3.91, SD= 2.08).

Bivariate Correlation Analysis

Table 2. provides bivariate correlations between the primary study variables and the outcome variable of depression symptomology. Results of the Pearson correlation indicated that there was a significant negative association between history of abuse and depression symptoms (r = .39, p < .001). There were negative relationships between social support and depression (r=-.31, p < .001) and history of abuse (r=-.31, p < .001). A positive correlation also existed between condom self-efficacy and depression (r=.16, p < .01) and history of abuse (r=.26, p < .001). Results also indicated a positive correlation between fear of condom negotiation and depression symptoms (r=.16, p < .05), and history of abuse (r=.25, p < .01) and condom self-efficacy (r=.24 p < .001). Self-esteem was negatively associated with depression symptoms (r=-.33, p < .01), history of abuse (r=-.33, p < .01), condom self-efficacy (r=-.20, p < .001) and fear of condom negotiation (r=-.33, p < .01). Lastly, trauma history was positively associated with history of abuse (r=.20; p < .01).

Multiple Regression

In the multiple regression, variables included: trauma history, history of abuse, self-esteem, social support, age, and the interaction between condom self-efficacy and fear of condom negotiation on depression. The model was statistically significant and the variables accounted for a significant amount of variance in justice involved Black girls, $R^2 = .25$, F (8, 179) = 7.31, p < .001. Our results revealed, that for every one-unit increase in history of abuse there was 5.89 increase in depression (B = 5.89, *p* < .001). Social support was found to be statistically significant and negatively associated with depression (B = -.19, *p* < .05) as was self-esteem (B = -.13, *p* = .01). Condom self-efficacy was positively associated with depression among girls (B = .36, *p* < .01). Lastly, fear of condom negotiation was positively associated with depression (B = .68, *p* = .042).

Moderation

Examination of the interaction plot showed an enhancing effect that as condom self-efficacy and fear of condom negotiation increased, depression among Black girls increased. High fear in condom negotiation, and low condom self-efficacy was associated with Black girls

having low levels of depression. Further, their high levels of fear, and average condom self-efficacy, led to slight increase in depression though it was still low.

Discussion

This purpose of this paper was to examine correlates of depression among Black girls in detention with histories of trauma and violence. This study utilized personal agency theory to analyze the relationships between depression and trauma history, history of abuse, condom self-efficacy, fear condom negotiation, and perceived social support among justiceinvolved Black girls. The study findings suggest that fear of condom negotiation, history of abuse and low condom self-efficacy are correlated with depressive symptomology while self-esteem and perceived social support may serve as buffers against girls' feelings of helplessness and/or hopelessness. We noted significant associations between depression and history of abuse, i.e., sexual, physical and emotional abuse, which is noteworthy since girls reported moderate levels of depression. Justice-involved girls typically experience multiple ACEs during their childhood that may predispose them to greater internalization of feelings of helplessness and hopelessness, which are consistent with symptomology included within a depressive episode [1, 57]. Girls within the juvenile justice system are likely to have trauma histories that may further exacerbate any trauma they experience while getting processed within the juvenile justice system. This further increases the likelihood that they will report a depressive episode. However, Black girls in this study did not report moderate or high rates of trauma. Previous research studies with Black adolescents and incarcerated women suggest they may underreport mental health correlates like post-traumatic stress disorder and depression, etc. [58]. The difference among these girls may be the high levels of social support they are receiving. This is notable, specifically since social support is a protective factor and may serve as a buffer against the trauma experiences they encounter within the detention center.

We also found that Black girls who have a history of abuse are more likely to report experiencing feelings of depression. This finding is consistent with some existing literature. Fasula et al. [5] found that more than half of Black girls in detention reported feelings of depression. Black girls who have a history of abuse may have difficulties exerting control during sexual encounters, which results in feelings of depression. Their inability to communicate their needs, specifically requesting that their partners wear a condom or understanding how to safely remove a condom without spilling sperm, may be a challenge for a population who has experienced feelings of helplessness throughout childhood. Although improving SSE, alone, may not serve as a buffer against girls experiencing partner violence in adulthood, incorporating trainings designed to improve girls' sense of control of their own sexual wellbeing may be helpful with decreasing the number of STIs and unwanted pregnancies among this population [25]. Prior research has also examined the long-term effects of depression on adolescents having vaginal sex without a condom, specifically Black female adolescents are likely to engage in sexual activity with more partners than those who are not depressed [59].

Further, participants who reported self-esteem suggest that it could serve as a buffer against their depression. Black girls who have high self-esteem or a strong, positive sense of self

could be more likely to note that they have strong social supports, from either parents are peers, who are also less likely to report experiencing a depressive episode. Girls with a high self-esteem may have a more positive outlook and less likely to feel like they are alone even when they are experiencing adversity. As such, they may more readily internalize feelings of strength, courage and persistence in spite of the adversity they may experience.

An investigation of the overall analyses indicated that the model was statistically significant with all variables accounting for the significant variance associated with depression. We noted both strong positive and negative associations with this study sample and depression based on history of abuse, self-esteem, condom self-efficacy, fear of condom negotiation and social support. History of abuse strengthened the association with depressive symptoms, which poses a significant risk for this population. Though unexpected, some factors did not correlate with greater depressive symptomatology for other model covariates like trauma and age. Much attention is often paid to trauma given that previous research has established the prevalence with justice-involved Black girls. This understanding may point to the need to incorporate ways of improving self-esteem among girls within the juvenile justice system. Further, justice-involved Black girls' depression was slightly moderated by condom self-efficacy and fear of condom negotiation so our hypothesis was partially supported.

Limitations

This study has limitations that future research may improve upon. It is important to note that sexual abuse and trauma are included as part of the findings in the context of the history of abuse. This population reported considerably low rates of trauma although the literature notes that Black girls involved with the juvenile justice system, including those in detention are likely to experience at least four ACEs or polyvictimization, which are traumatic experiences during childhood [9, 60]. The girls also reported relatively low rates of trauma despite noting moderate rates of sexual abuse. Dating violence was not included in this analytic model despite accounting for forcible sex, physical and emotional abuse that are consistent with dating violence (CDC, [61]). As the rates of dating violence are elevated among Black girls [62], additional research could specifically focus on dating violence and intimate partner violence. Furthermore, participants' definition of abuse is subjective. This is notable particularly since Black girls and women may not readily identify abuse as abuse [63, 64]. Including sexual self-efficacy (SSE) as the overarching theory was done to highlight the cultural differences associated with Black girls and their decisions about their sexuality and behavior. Although personal agency, and in particular, SSE primarily represented agency this was due to limitations of the dataset. A more exact measure of personal agency would provide more specificity in understanding personal agency as a construct to reflect strengths and the role of other factors and their association with justiceinvolved Black girl's depression. Future work should consider developing measures that assess personal agency. Few studies have focused on personal agency as a strength for Black girls involved with the juvenile justice system.

It is also important to note that the scales used as markers for depression did not include a clinical cut-off and are not sensitive enough to identify symptomology among Black people. As such, findings should be interpreted with caution. Future research should specifically

focus on understanding the impact of sexual violence as well as trauma. Additional research is needed to examine this population's experiences with dating violence and its association with depression. Girls' meanings of abuse could further be explored to identify markers utilized to build a tool that more accurately measures abuse among this population. Further, analysis is needed to determine the development of individual and peer-based interventions that would reduce this population's feelings of depression. Qualitative or mixed methods studies may provide information to develop interventions that are culturally tailored and effective for this population. There is preliminary evidence that mindfulness-based interventions (MBIs) are effective for justice-involved populations, which target psychological health [50, 65]. Specifically, previous research has shown the effectiveness of mindfulness-based interventions with African American women in the community who have histories of depression, which could be effective with justice-involved Black girls [66].

The Black girls in the Imara parent study are an indicated population of detained girls, so there is a limit to the generalizability of the study findings to all girls in the United States. Consequently, our study results may not be generalizable to a national representative sample of Black girls who are not system-involved, including clinic samples and individuals who were born outside of the United States. Furthermore, findings may not be generalizable to Black girls in detention in other geographical locations, i.e., rural Midwest. There are contextual nuances related to their experiences of trauma and detention that may be specific to this region of the country as well as an urban setting. This study is also based upon self-reported data among girls who are known for seeking approval from peers and authority figures. Data may reflect over- and underreporting since participants may seek to appeal to what they believe is a more favorable response of different phenomena [67]. Cross sectional data—only identifies correlations not temporal ordering or causal inferences some relationships might be bi-directional. For instance, having less depression might allow persons to seek more social supports and we could not establish the timing of social support relative to girls' depressive symptoms. Furthermore, we do not know whether the girls in our study were sexually active and/or preferred to use condoms, so it is uncertain if their fear of condom negotiation led to their depression or vice versa, so future work should consider this. However, we do know based on the study inclusion criteria that girls who agreed to participate in the study self-reported having vaginal intercourse prior to detention, so it is plausible that this sample of girls were sexually active. Longitudinal studies would likely reduce the limitations of cross-sectional studies and help inform whether fear of condom negotiation increases depression or the reverse, or if there is a reciprocal relationship.

Notwithstanding, findings are still substantial and add to the literature. Girls who have a positive and healthy self-esteem and strong social supports are less likely to experience depressive symptomology even though they have histories of arrest and being detained. This finding points to the need to shore up girls' social supports, specifically when they are remanded to detention centers. The strengths of our study lie in the use of personal agency theory to assess these variables and their association with depression among Black girls in detention.

Conclusion

By examining personal agency, we found factors that greatly contribute to positive and negative associations of justice-involved Black girls' depressive symptomatology. Our study results suggest that they are facing difficult life consequences, and have been affected by ACEs [68] but they also possess healthy self-esteem and social support. Of particular note is the powerful role of abuse history and its significant relationship to justice-involved Black girls' depression. Evidence from our investigation extends the literature by delineating the positive relationship that justice-involved Black girls' fear of condom negotiation and condom self-efficacy have upon depression. We identified that increased condom self-efficacy and fear of condom negotiation are contributing factors to girls feelings of depression. Similarly, parents and peers also represent a vital influence that could reinforce their mental health and well-being as well as their decision-making in positive or negative ways. Thus, prevention and intervention efforts to reduce the depression-related risks among justice-involved Black females should consider a micro- and macro-focus and context with strategies that promote healing within their social support networks, i.e., parents/caregivers and peers. It should also enhance culturally tailored knowledge about mental health equity to increase their seeking of efficacious services. In addition, prevention and intervention programs should be designed with input from parents/caregivers, family members, and other important figures (mentors, teachers, coaches, etc.) who could offer insight about the barriers and facilitators that could be associated with service access and utilization. These efforts coupled with effective training for service providers who work with this population is needed to reduce the effects of risk exposure and enhance the positive effects of protective factors in their lives.

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References

- Holzer KJ, Oh S, Salas-Wright CP, Vaughn MG, Landess J. Gender differences in the trends and correlates of major depressive episodes among juvenile offenders in the United States. Compr Psychiatry. 2018;80:72–80. 10.1016/j.comppsych.2017.09.005. [PubMed: 29065310]
- Wakefield SM, Baronia R, Brennan S. Depression in justice-involved youth. Child Adol Psych Cl. 2019;28(3):327–36. 10.1016/j.chc.2019.02.010.
- 3. Epstein R, Blake J, Gonzalez T. Girlhood interrupted: The erasure of black girls' childhood: Georgetown Law Center on Poverty and Inequality; 2017.
- 4. Sawyer W Youth confinement: The whole pie. Prison Policy Initiative. 2019.
- Fasula AM, Gray SC, Vereen RN, Carry M, Sales JM, Abad N, et al. Multiple psychosocial health problems and sexual risk among African American females in juvenile detention: A cross-sectional study. Child Youth Serv Rev. 2018;88:74–80. 10.1016/j.childyouth.2018.02.041.
- Goodkind S, Ruffolo MC, Bybee D, Sarri R. Coping as a mediator of the effects of stressors and supports on depression among girls in juvenile justice. Youth Violence Juv Justice. 2009;7(2):100– 18. 10.1177/1541204008327140.
- Morash M The nature of co-occurring exposure to violence and of court responses to girls in the juvenile justice system. Violence Against Women. 2016;22(8):923–42. 10.1177/1077801215614973. [PubMed: 26597085]

- Ford JD, Kerig PK, Desai N, Feierman J. Psychosocial interventions for traumatized youth in the juvenile justice system: research, evidence base, and clinical/legal challenges. Journal of Juvenile Justice. 2016;5(1).
- Baglivio MT, Epps N. The interrelatedness of adverse childhood experiences among high-risk juvenile offenders. Youth Violence Juv Justice. 2016;14(3):179–98. 10.1177/1541204014566286.
- Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. Am J Prev Med. 1998;14(4):245–58. [PubMed: 9635069]
- Maguire-Jack K, Lanier P, Lombardi B. Investigating racial differences in clusters of adverse childhood experiences. Am J Orthopsychiatry. 2020;90(1):106. 10.1037/ort0000405. [PubMed: 30816722]
- Anderson VR, Walerych BM. Contextualizing the nature of trauma in the juvenile justice trajectories of girls. J Prev Interv Community. 2019;47(2):138–53. 10.1080/10852352.2019.1582141. [PubMed: 30849000]
- Clements-Nolle K, Waddington R. Adverse childhood experiences and psychological distress in juvenile offenders: the protective influence of resilience and youth assets. J Adolesc Health. 2019;64(1):49–55. 10.1016/j.jadohealth.2018.09.025. [PubMed: 30579436]
- McBride DF, Bell CC. Human immunodeficiency virus prevention with youth. Psychiatr Clin N Am. 2011;34:217–29.
- Harter S The development of self-esteem. Self-esteem issues and answers: A sourcebook of current perspectives. 2006:144–50.
- 16. Martins N, Harrison K. Racial and gender differences in the relationship between children's television use and self-esteem: A longitudinal panel study. Commun Res. 2012;39(3):338–57.
- McDade TW, Chyu L, Duncan GJ, Hoyt LT, Doane LD, Adam EK. Adolescents' expectations for the future predict health behaviors in early adulthood. Soc Sci Med. 2011;73(3):391–8. [PubMed: 21764487]
- DiClemente RJ, Crittenden CP, Rose E, Sales JM, Wingood GM, Crosby RA, et al. Psychosocial predictors of HIV associated sexual behaviours and the efficacy of prevention interventions in adolescents at risk for HIV infection: What works and what doesn't work? Psychosom Med. 2008;70:598–605. 10.1007/s40615-020-00937-x. [PubMed: 18541908]
- Price MN, Hyde JS. When two isn't better than one: Predictors of early sexual activity in adolescence using a cumulative risk model. J Youth Adolesc. 2009;38(8):1059–71. 10.1007/ s10964-008-9351-2. [PubMed: 19636771]
- Wheeler SB. Effects of self-esteem and academic performance on adolescent decision-making: an examination of early sexual intercourse and illegal substance use. J Adolesc Health. 2010;47(6):582–90. 10.1016/j.jadohealth.2010.04.009. [PubMed: 21094435]
- Penfold SC, Van Teijlingen ER, Tucker JS. Factors associated with self-reported first sexual intercourse in Scottish adolescents. BMC Res Notes. 2009;2:1–6. 10.1186/1756-0500-2-42. [PubMed: 19121226]
- 22. Loyd AB, Hotton AL, Walden AL, Kendall AD, Emerson E, Donenberg GR. Associations of ethnic/racial discrimination with internalizing symptoms and externalizing behaviors among juvenile justice-involved youth of color. J Adolesc. 2019;75:138–50. 10.1016/ j.adolescence.2019.07.012. [PubMed: 31398475]
- Zahn MA, Day JC, Mihalic SF, Tichavsky L. Determining what works for girls in the juvenile justice system: A summary of evaluation evidence. Crime Delinq. 2009;55(2):266–93. 10.1177/0011128708330649.
- Epstein R, González T. Gender & trauma—Somatic interventions for girls in juvenile justice: Implications for policy and practice. The Art of Yoga Project: The Center on Poverty and Inequality; 2017.
- 25. Jones KA, Cornelius MD, Silverman JG, Tancredi DJ, Decker MR, Haggerty CL, et al. Abusive experiences and young women's sexual health outcomes: Is condom negotiation selfefficacy a mediator? Perspect Sex Reprod Health. 2016;48(2):57–64. 10.1363/48e8616. [PubMed: 27077497]

- Sales JM, Salazar LF, Wingood GM, DiClemente RJ, Rose E, Crosby RA. The mediating role of partner communication skills on HIV/STD-associated risk behaviors in young African American females with a history of sexual violence. Arch Pediatr Adolesc Med. 2008;162(5):432– 8. [PubMed: 18458189]
- Closson K, Dietrich JJ, Lachowsky NJ, Nkala B, Palmer A, Cui Z, et al. Gender, sexual selfefficacy and consistent condom use among adolescents living in the HIV hyper-endemic setting of Soweto, South Africa. AIDS Behav. 2018;22(2):671–80. 10.1007/s10461-017-1950-z. [PubMed: 29090395]
- Alan Dikmen H, Cankaya S. Associations between sexual violence and women's sexual attitudes, sexual self-consciousness, and sexual self-efficacy. J Interpers Violence. 2020:1–23. 10.1177/0886260519897339.
- 29. Bailes S, Creti L, Fichten CS, Libman E, Bender W, Amsel R. Sexual self-efficacy scale for female functioning. In handbook of sexuality-related measures, Amsel R (Ed.), 2011;551–4.
- 30. Bandura A Self-efficacy mechanism in human agency. Am Psychol. 1982;37(2):122.
- Casmir E, Kasete A, Ongolly F, Thuo N, Oluoch L, Kiptinness C, et al. Protection at first sexual intercourse among adolescent girls and young women in Kenya. Arch Sex Behav. 2020:1–9. 10.1007/s10508-020-01785-w. [PubMed: 31925746]
- Carter R, Caldwell CH, Matusko N, Jackson JS. Heterosexual romantic involvement and depressive symptoms in black adolescent girls: Effects of menarche and perceived social support. J Youth Adolesc. 2015;44(4):940–51. [PubMed: 25678429]
- Hammen C Stress generation in depression: Reflections on origins, research, and future directions. J Clin Psychol. 2006;62(9):1065–82. 10.1002/jclp.20293. [PubMed: 16810666]
- 34. Stice E, Ragan J, Randall P. Prospective relations between social support and depression: Differential direction of effects for parent and peer support? J Abnorm Psychol. 2004;113(1):155– 9. 10.1037/0021-843X.113.1.155. [PubMed: 14992668]
- Doyle AB, Brendgen M, Markiewicz D, Kamkar K. Family relationships as moderators of the association between romantic relationships and adjustment in early adolescence. J Early Adolesc. 2003;23(3):316–40.
- 36. Steinberg SJ, Davila J. Romantic functioning and depressive symptoms among early adolescent girls: The moderating role of parental emotional availability. J Clin Child Adolesc Psychol. 2008;37(2): 350–62. 10.1080/15374410801955847. [PubMed: 18470772]
- 37. Bryant-Davis T, Ellis MU, Burke-Maynard E, Moon N, Counts PA, Anderson G. Religiosity, spirituality, and trauma recovery in the lives of children and adolescents. Prof Psychol Res Pract. 2012;43(4):306–14.
- Gerstel N (2011, March). Rethinking families and community: the color, class, and centrality of extended kin ties 1. In Sociological forum (Vol. 26, No. 1, pp. 1–20). Oxford, UK: Blackwell Publishing Ltd.
- Hakimi D, Bryant-Davis T, Ullman SE, Gobin RL. Relationship between negative social reactions to sexual assault disclosure and mental health outcomes of Black and White female survivors. Psychol Trauma Theory Res Pract Policy. 2018;10(3):270.
- 40. Boyd D, Waller B, Quinn CR. Understanding of personal agency among youth to curtail HIV rates. Child Youth Serv Rev. 2020. 10.1016/j.childyouth.2020.105179.
- 41. Farber EW. Cultivating agency and autonomy in HIV-related psychotherapy: An integrative approach. J Psychother Integr. 2018;28(2):141.
- 42. Mannell J, Jackson S. Intimate partner violence in Rwanda: Women's voices. London, UK: London School of Economics; 2014. Retrieved December 6, 2019 from http://eprints.lse.ac.uk/ 60014.
- Montaño DE, Kasprzyk D. Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. Health behavior: Theory, research and practice, 4th ed., Jossey-Bass; 2015;67–96.
- 44. Quinn CR, Boyd DT, Elizabeth KB- K, Menon SE, Logan-Greene P, Asemota E, et al. The influence of familial and peer social support on post-traumatic stress disorder among Black girls in juvenile correctional facilities. Crim Justice Behav. 2020.

- Parpart JL. Choosing silence rethinking voice, agency and women's. Secrecy and Silence in the Research Process: Feminist Reflections 2010;15–29.
- 46. Davis TL, Boyce LS, Rose E, Swartzendruber A, DiClemente R, Gelaude D, et al. Lessons learned from delivering Imara, an HIV/STI risk reduction intervention for African American girls in juvenile detention. Health Promot Pract. 2016;17(1):31–9. [PubMed: 26452768]
- DiClemente RJ, Davis TL, Swartzendruber A, Fasula AM, Boyce L, Gelaude D, et al. Efficacy of an HIV/STI sexual risk-reduction intervention for African American adolescent girls in juvenile detention centers: A randomized controlled trial. Women & Health. 2014;54(8):726–49. [PubMed: 25190056]
- 48. Logan-Greene P, Kim BKE, Quinn CR, DiClemente R, Voisin D. Ecologies of risk among African American girls in juvenile detention. Child Youth Serv Rev. 2018;85:245–52.
- Kissinger P, Rice J, Farley T, Trim S, Jewitt K, Margavio V, et al. Application of computerassisted interviews to sexual behavior research. Am J Epidemiol. 1999;149(10):950–4. 10.1093/ oxfordjournals.aje.a009739. [PubMed: 10342804]
- Kim BKE, Quinn CR, Logan-Greene P, DiClemente R, Voisin D. A longitudinal examination of African American adolescent females detained for status offense. Child Youth Serv Rev. 2020;108:104648. 10.1016/j.childyouth.2019.104648. [PubMed: 32565590]
- 51. Wingood GM, DiClemente RJ. HIV/AIDS in women. In: Wingood GM, DiClemente RJ, editors. Handbook of women's sexual and reproductive health (pp. 281–301): Springer; 2002.
- 52. King KM, Voisin DR, Diclemente RJ. The relationship between male gang involvement and psychosocial risks for their female juvenile justice partners with non-gang involvement histories. J Child Fam Stud. 2015;24(9):2555–9.
- 53. Santor DA, Coyne JC. Shortening the CES–D to improve its ability to detect cases of depression. Psychol Assess. 1997;9(3):233.
- 54. Elder GH. Families in troubled times: Adapting to change in rural America: Transaction Publishers; 1994.
- Voisin DR, King KM, Diclemente RJ, Carry M. Correlates of gang involvement and healthrelated factors among African American females with a detention history. Child Youth Serv Rev. 2014;44:120–5. [PubMed: 29416192]
- 56. Aiken LS, West SG, Reno RR. Multiple regression: Testing and interpreting interactions: Sage; 1991.
- 57. Corcoran J, Walsh J. Mental health in social work: A casebook on diagnosis and strengths based assessment (DSM 5 update): Pearson; 2015.
- Lu W, Lindsey MA, Irsheid S, Nebbitt VE. Psychometric properties of the CES-D among Black adolescents in public housing. J Society Soc Work Res. 2017;8(4):595–619.
- Foley JD, Vanable PA, Brown LK, Carey MP, DiClemente RJ, Romer D, et al. Depressive symptoms as a longitudinal predictor of sexual risk behaviors among African-American adolescents. Health Psychol. 2019;38(11):1001. 10.1037/hea0000780. [PubMed: 31380687]
- Kerig PK. Polyvictimization and girls' involvement in the juvenile justice system: Investigating gender-differentiated patterns of risk, recidivism, and resilience. J Interpersonal Violence 2018;33(5):789–809.
- 61. Centers for Disease Control and Prevention. Preventing teen dating violence. Atlanta, GA: CDC, National Center for Injury Prevention and Control, Division of Violence Prevention; 2020.
- 62. Eaton AA, Stephens DP. Adolescent dating violence among ethnically diverse youth. In: Adolescent dating violence: Academic Press; 2018. p. 233–60.
- 63. Evans-Winters VE. Black feminism in qualitative inquiry: A mosaic for writing our daughter's body: Routledge; 2019.
- 64. Hooks B Rock my soul: Black people and self-esteem: Beyond Words/Atria Books; 2002.
- Per M, Spinelli C, Sadowski I, Schmelefske E, Anand L, Khoury B. Evaluating the effectiveness of mindfulness-based interventions in incarcerated populations: a meta-analysis. Crim Justice Behav. 2020;47(3):310–30.
- 66. Burnett-Zeigler I, Satyshur MD, Hong S, Wisner KL, Moskowitz J. Acceptability of a mindfulness intervention for depressive symptoms among African-American women in a community health

center: A qualitative study. Complementary Therapies in Medicine. 2019;45:19–24. [PubMed: 31331559]

- 67. Couper MP, Singer E, Tourangeau R. Understanding the effects of audio-CASI on self-reports of sensitive behavior. Public Opin Q. 2003;67(3):385–95.
- Ramiro LS, Madrid BJ, Brown DW. Adverse childhood experiences (ACE) and health-risk behaviors among adults in a developing country setting. Child Abuse Negl. 2010;34(11):842–55. [PubMed: 20888640]

Table 1

Descriptive statistics (N=188)

Variable	Mean	SD	Range
Depression	17.85	7.67	8-32
History of abuse	0.40	1.10	0.1-3.0
Physical (%)	.42(42)	.49	0.1 - 1.0
Emotional (%)	.56(56)	.49	0.1 - 1.0
Sexual abuse (%)	.23(23)	.42	0.1 - 1.0
Trauma	4.00	2.10	01–09
Social Support	42.61	8.72	11-55
Fear of condom neg.	8.46	3.66	7-31
Condom Self-Efficacy	19.40	9.00	9–45
Self -esteem	30.00	5.73	13-40
Age	15.32	1.05	12–17

The percentages are the number of girls who answered yes to experiencing the different types of abuse

Table 2

	1	2	3	4	5	9	7	8
1. Depression	_							
2. History of Abuse	0 39 ***	1						
3. Social Support	-0.31 ***	-0.31 ***	-					
4Condom Self-Efficacy	0.16**	0.26^{**}	-0.11	1				
5. Fear of Cond. Neg.	0.16^{*}	0.25 **	-0.12	0.24	1			
6. Self-Esteem	-0.33 ***	-0.39 ***	0.35	-0.20^{*}	-0.33 ***	1		
7. Trauma	0.10	0.20^{*}	-0.17	0.04	0.08	-0.12	-	
8. Age	0.06	0.08	0.04	0.02	0.02	0.01	0.01	-
* p<.05								
** #*								
P :01 *** r< 001								

Table 3

Multiple regression analysis on depression among Black girls (N= 188)

Variables	В	SE	95% CI
Depression			
History of abuse	5.89 ***	1.54	[2.85, 8.94]
Self-esteem	- 0.13 **	0.63	[-0.25, 0.01]
Social support	- 0.19 *	0.10	[-0.39, 0.00]
Condom self-efficacy	0.36**	0.13	[0.08, 0.63]
Fear of condom neg.	0.68 *	0.33	[0.02, 1.33]
Condom × fear of condom neg.	-0.03*	0.02	[-0.06, -0.00]
Trauma	-0.02	0.24	[-0.50, 0.46]
Age	0.45	0.86	[-4.95, 30.38]

p<	.05
<i>x</i>	

** p<.01

p<.001