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## Correlates of gang involvement and health-related factors among African American females with a detention history<sup>★</sup>

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### Abstract

**Background**—Prior studies have assessed relationships between gang membership and health-related factors. However, the existing literature has largely failed to consider how individual and broader social contextual factors might be related to such gang involvement among African American females. Thus, the aim of the present study was to identify empirically driven correlates of gang involvement and then better understand the relationship between gang membership and health-related behaviors for African American females, after controlling for covariates of gang involvement.

**Methods**—Data were collected from a convenience sample of detained African American adolescents females, between the ages of 13–17, currently incarcerated in a short-term detention facility in Atlanta, Georgia ( $n=188$ ). After obtaining written informed assent and parental permission, participants answered survey questions using A-CASI procedures that assessed socio-contextual factors and health-related behaviors.

**Results**—Multiple logistic regression models controlling for age and SES documented that low self-esteem, emotional dysregulation, trauma history, deviant peers, low parental monitoring,

<sup>★</sup>Disclaimer: The findings and conclusions in this presentation are those of the author and do not necessarily represent the official position of the CDC.

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infrequent parental communication, housing instability and poor neighborhood quality were correlates of gang involvement. In addition, multiple linear and logistic regression models, controlling for these constructs, revealed that gang involvement was independently associated with lower STD prevention knowledge, a higher likelihood of having a gang-involved boyfriend, a greater risk of having current casual sexual partnerships, higher rates of substance abuse, higher incidences of condom misuse and a lower likelihood of ever having been tested for HIV.

**Conclusions**—These results provide information that can help service providers target certain profiles of African American females who may be at risk for joining gangs and address the health risk behaviors that may be associated with such memberships.

## Keywords

gang involved; psychocontextual factors; health-related factors; detained girls

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## 1. Introduction

In the United States (U.S.), youth gang involvement is a major social and public health concern. In 2010 it was estimated that more than 29,000 youth gangs existed with membership of more than 756,000 adolescents and young adults (Egley & Howell, 2012). Adolescents between the ages of 15 and 17 account for one in four gang members (Egley, 2002) and several studies have documented that gang-involved youth are at higher risk than their non-gang-involved peers for reporting delinquent acts such as property offences, violent crime, substance use and drug sales (Barnes, Beaver, & Miller, 2010; Esbensen & Carson, 2012; Katz, Webb, & Decker, 2005; Thornberry, Krohn, Lizotte, Smith, & Tobin, 2002). In addition, gang involvement has been recognized as a significant correlate of unsafe sexual behaviors (Biswas, Olate, & Vaughn, 2011; Little, Gonzalez, Snell, & Molidor, 1999; Minnis et al., 2008; Voisin et al., 2004; Wingood et al., 2002). For example, male gang members, compared to non-gang members, report higher numbers of serial sexual partners (Little et al., 1999; Voisin et al., 2004). Additionally, gang-involved females, compared to those who report no gang involvement, report higher rates of casual sexual partnerships (Voisin et al., 2004; Wingood et al., 2002) and incidences of *Trichomonas* and *Gonorrhea* infections (Wingood et al., 2002). Moreover, there are higher pregnancy rates among females who report having a male gang-involved romantic partner compared to those whose partners report no history of gang involvement (Minnis et al., 2008). Consistent with these findings and the insular nature of gangs (Thornberry et al., 2002), it is likely that such memberships might also be related to lower STD prevention knowledge.

Notable, not all gangs may endorse antisocial norms or be involved in criminal activity (Decker, Van Gemert, & Pyrooz, 2009). Recent findings have documented that it is not simply gang involvement versus non-gang involvement that infers risk but the norms inherent within those networks (King, Voisin, & DiClemente, 2013). More specifically after controlling for the potential effects of gender, socioeconomic status and family structure, gang norms were independently associated with a variety of sexual risk factors for youth with juvenile justice histories. Adolescents classified as endorsing “high risk” versus “low risk” gang norms were almost three times more likely in the 2 months prior to being detained, to be high on alcohol or drugs during sex; to have sex with a partner who was high

on alcohol or drugs during sex; to experience a condom breaking or leaking during sex; and to have sex with two or more people simultaneously (King et al., 2013).

In summary, a growing body of research documents that youth gang involvement and gang norms are associated with social and sexual risk behaviors (Biswas et al., 2011; Little et al., 1999; Minnis et al., 2008; Voisin et al., 2004; Wingood et al., 2002). The above findings make significant contributions to the extant literature. However, little is known about the correlates of gang involvement for females since the vast majority of research on factors associated with gang involvement has been conducted among males (Alleyne & Wood, 2010; Klein & Maxson, 2006; Melde, Diem, & Drake, 2012; Thornberry, Lizotte, Krohn, Smith, & Porter, 2003). Additionally, it remains unknown whether after controlling for the correlates of gang involvement whether such memberships might be related to a broad spectrum of health-related factors. These questions represent the primary aims of this study.

### 1.1. A focus on detained African American females

Our focus on detained African American/Black female youth with regard to gang involvement and associated health factors makes an important contribution to the extant literature for several reasons. First, although the rates of detention are higher among adolescent African American males than females, the rates among females are increasing (Snyder, 2008). In addition, providers have noted that females entering detention tend to have higher-risk profiles than their male counterparts (Cauffman, 2004). Second, female gang membership is on the rise (Miller, 2001) and African American females report higher rates of such memberships relative to their other ethnic female counterparts (Egley & Howell, 2012). In addition, gang involvement may be one of the primary reasons bringing adolescent females to the attention of juvenile justice authorities (Egley, 2002). Third, detained African American adolescent females are a relatively understudied population, yet one that bears a considerable STD burden. For example, in 2009, rates of *Chlamydia* were 49 times higher among detained females (ages 12–18 years) than those found in the general population, with the highest prevalence (18.4%) among African American female offenders (Joesoef et al., 2009; CDC, 2012). Finally, although females generally report fewer sexual risk behaviors, they have an STD prevalence that is almost double their male counterparts (Voisin, Hong, & King, 2012). There are higher STD viral loads present in semen than in vaginal fluids, and such biological factors may predispose females to higher rates of STD acquisition than their male counterparts (Bolan, Ehrhardt, & Wasserheit, 1999; Dembo, Belenko, Childs, Greenbaum, & Wareham, 2010).

### 1.2. Correlates of gang involvement

In poorly resourced neighborhood, it is understood that gangs may serve several functional purposes for its members especially when important family and community resources are diminished or absent (Thornberry et al., 2002). For example, gang membership may provide social benefits, such as allowing youth to be around family members (i.e. siblings or cousins) who are already gang members. In addition, in disorganized neighborhoods they may provide physical protection and opportunities for selling drugs to make money when few opportunities for legitimate employment exist (Howell & Egley, 2005).

Consequently, there are several psychocontextual factors that may be related to gang involvement. One application of social control perspectives (Gottfredson, 2011) posits that weak bonds to prosocial agents at home and in the community might increase linkages to negative peer groups such as gangs. In congruence with this perspective, deficits in positive parental monitoring and communication are expected to be correlated with increased gang involvement. In addition, social disorganization due to housing instability and poor neighborhood quality might also weaken the ability of families and communities to monitor their youth, thereby resulting in higher rates of gang involvement (Thornberry et al., 2002).

In addition, research has shown externalizing behaviors (McCloskey & Stuewig, 2001; Pope & Bierman, 1999) and trauma histories (Margolin & Gordis, 2002) are significant correlates of interpersonal problems and rejection by prosocial peers (Hodges, Boivin, Vitaro, & Bukowski, 1999; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999). Consistent with these findings, longitudinal results have also indicated that poor emotional regulation predicted peer problems in elementary school through adolescence, resulting rejection by positive cohorts (Pope & Bierman, 1999). Consequently, driven by the need for acceptance, individuals who are rejected by positive peers may be drawn to or recruited by negative youth networks such as gangs (Thornberry et al., 2002). Likewise youth with low self-esteem and weak prosocial bonds may be more likely to look toward gangs for a sense of belonging than peers who are more confident (Dukes, Martinez, & Stein, 1997).

Prior studies have already indicated that socioeconomic status and age are significant correlates of gang involvement. Youth living in impoverished communities are at greater risk for gang involvement, given that crime, violence and social disorganization are prevalent in poorly resourced communities (Howell & Egley, 2005). In addition, as youth age, parents are likely to reduce levels of monitoring especially when such resources are already scarce and stretched over a high number of children, with a greater focus perhaps on younger children who may require more monitoring given their heightened level of vulnerability (Li, Feigelman & Stanton, 2000).

Informed by the above formulations, we posit that after controlling for age and SES, that factors such as low self-esteem, emotional dysregulation, trauma histories, negative peer groups, low parental monitoring, infrequent parental communication, housing instability, and poor neighborhood quality are potential correlates of gang involvement,

### **1.3. The relationship between gang involvement and health-related factors**

Based on social learning perspectives (Bandura, 1983), membership in gangs may reinforce risky norms, such as drug use and unsafe sexual behaviors (Petraitis, Flay, & Miller, 1995). For instance, some gangs perpetuate norms that may be especially relevant to male dominance (e.g., treating women as sexual objects) or using drugs and engaging in unsafe sex as rights-of-passage for gang initiation (Block & Block, 1993; Vigil, 2008). The sociological literature on gang involvement has theorized that gang norms, functions, and roles influence what is considered normative and valued behaviors within these groups (Vigil, 1988). Therefore we posit that gang involvement would be related to a number of broad health-related factors such as drug and alcohol use and risky sexual behaviors. In

addition, we anticipate that given the risk behaviors generally presented within gangs, that membership in such peer groups would be related to lower STD prevention knowledge.

In summary, the theoretical frameworks for this study are informed by social control (Thornberry et al., 2002) and social learning theories (Bandura, 1983). These theories are complementary in that the former illuminates why certain factors (e.g., trauma history, parental communication, neighborhood quality, etc.) might be associated with gang involvement. The latter perspective provides insights why after joining gangs, such involvement might be associated with poor health-related factors (e.g., drug and sexual risk behaviors, low HIV testing).

#### 1.4. Study aims and research questions

The first aim of this paper was to explore the correlates of female African American gang involvement. We examined age, socioeconomic status, self-esteem, emotional regulation, trauma history, parental monitoring, parental communication, housing instability and poor neighborhood quality as potential correlates of such involvement (research question 1). Next, after controlling for empirically driven correlates of gang involvement, we examined the relationship between gang involvement and a broad array of health-related factors such as having a gang-involved sex partner, casual sex partners, STD prevention knowledge, problematic drug or alcohol use, condom misuse, condom misuse last sex and HIV testing (research question 2).

## 2. Methods

This paper reports findings based on baseline data collected from the IMARA Project. This is a randomized control trial (RCT) to test the efficacy of an adapted behavioral intervention for African American females in juvenile detention in Atlanta Georgia (DiClemente et al., submitted for publication). Eligibility criteria included self-identifying as African American, being 13–17 years of age, and having ever had vaginal intercourse. Adolescents who were married or pregnant were excluded from the study because we were assessing unprotected sex (i.e., vaginal sex without a condom) as a dependent variable, and such practices are common for married couples. After obtaining written informed assent and parental permission, participants answered survey questions using audio-computer-assisted self-interviewing (A-CASI) which has been found to decrease reporting bias (Kissinger et al., 1999). By providing a voice track that delivered each question to adolescents through headphones, A-CASI technology may have reduced problems that would otherwise have been posed by illiteracy. Moreover, the technology creates a user-friendly interview method that automatically handles skip patterns in the questionnaire and provides adolescents with an interactive experience, possibly increasing task attentiveness and completion. Adolescents' responses to the computer-delivered questions were automatically encrypted to ensure confidentiality. The Emory University Institutional Review Board approved all study protocols.

### 3. Measures

#### 3.1. What are the correlates of gang involvement?

This first question examined the correlates of gang involvement among African American female adolescents. Here we conceptualized gang involvement as the dependent variable and examined whether a number of individual, relational and structural factors were related to such involvement.

**3.1.1. Independent variables**—*Age* was identified by one item “What is your age?”

*Socioeconomic status* was identified by one item “In the past 12 months, did you or anyone you live with receive food stamps?”

*Self-esteem* was measured with a 10-item scale (Rosenburg, 1965), which asked participants to rate their level of agreement on items such as, “I feel that I am a failure” and “On the whole, I am satisfied with myself.” Responses were on a 4-point scale where 1 indicates “strongly disagree” and 4 “strongly agree.” Negative items were reverse coded, such that high scores indicated higher levels of self-esteem. Cronbach alpha for this scale was .75.

*Emotional regulation* (Phillips & Power, 2007) was assessed by two subscales, each comprised of five items. For the first subscale, functional coping strategies, adolescents indicated how frequently they engaged in a variety of behaviors when they were upset (e.g., I put the situation into perspective). External dysfunctional emotional coping strategies were also assessed by five items (e.g., I take my feelings out on others physically like by fighting or lashing out). All responses were on a 5-point scale, where 0 indicates “never” and 4 “always.” Low scores on the functional coping scale and high scores on the external dysfunctional emotional coping scale were indicative of poor emotional coping abilities. Cronbach alphas for these two subscales were .79 and .77 respectively.

*Trauma history* (Conger & Elder, 1994) 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.

*Negative peer groups* (Elliott, Ageton, & Huizinga, 1985) was assessed by 17 items asking adolescents to indicate how many of their friends engaged in a variety of risk behaviors in the past three months (e.g., skipped school without an excuse, sold drugs, or had sex). All items were assessed on a 4-point scale ranging from 0 (“none of them”) to 3 (“all of them”), with higher scores indicating higher levels of affiliation with negative peer groups. Cronbach alpha was .92.

*Parental monitoring* (Loeber & Stouthamer-Loeber, 1998) was assessed by first asking participants to identify their primary caregiver (i.e., mother, father, other relative). Next, they were asked two items, “When you are away from home and not at school or work, does this person know where you are?” and “When you are away from home and not at school or work, does this person know who you are with?” Responses were provided on a 5-point scale with 1 (“never or almost never”) to 5 (“almost always”). Total parental monitoring

scores ranged from 2 to 10, with higher scores indicating higher levels of parental monitoring. Cronbach alpha was .85.

*Parental communication about health behaviors* (Sales et al., 2008) was assessed with a five-item scale, which asked adolescents to report how often, in the last 90 days, they talked to their primary caregiver about: sex, how to use a condom, and how to protect themselves from STDs, HIV and becoming pregnant. Response options ranged from 1 (“never”) to 5 (“always”), with higher scores indicating higher levels of parental communication. Cronbach alpha was .90.

*Housing instability* was assessed by one Yes/No item which asked, “In the past 12 months, have you ever been thrown out of your house or run away from home for more than one night?”

*Neighborhood quality* was assessed with three items, “On your street, are there any: abandoned homes or apartments; buildings with broken windows; and/or homes with bars on the windows & doors.” Participants were instructed to select “No” or to “Check all that apply.” Scores ranged from 0 to 3, which higher scores indicating poor neighborhood quality. Cronbach alpha was .77.

**3.1.2. Dependent variables—*Gang involvement*** was assessed with one Yes/No item which asked, “Have you ever been a member of a gang?”

### 3.2. What is the relationship between gang involvement and health-related factors?

This second research question examined the relationship between gang involvement and health related factors. Here we conceptualized gang involvement as the independent variable and explored its relationship to a number of health-related factors such as drug and sexual risk behaviors.

**3.2.1. Independent variables—*Gang involvement*** was assessed with one Yes/No item which asked, “Have you ever been a member of a gang?”

**3.2.2. Dependent variables—*Gang involved sex partner*** was assessed by one item “Have you ever had a boyfriend involved in a gang?” Response category was (Yes/No).

*Casual sex partnerships* were assessed with one Yes/No item which asked participants, “Do you currently have a casual sex partner(s)?”

*STD prevention information* (Sikkema et al., 2000) was assessed with 11 items which included statements such as, “Condoms cause men physical pain,” “Birth control pills protect women against the HIV virus” and “If a man has a STD, he will have noticeable symptoms.” Adolescents were asked to respond to each statement with, “True,” “False” or “Don’t know” with higher scores indicating lower levels of STD prevention knowledge. “Don’t know” responses were coded as wrong answers and all scores were calculated to create an index ranging from 0 to 11.

*Problems with drugs or alcohol* were assessed with a 13-item scale, which asked questions such as “How many times have you spent all or most of the day, using alcohol or other drugs, or getting over their effects?” “How many times have you missed work or school because of alcohol or other drug use?” and “How many times have you used so much alcohol or other drugs that the next day you could not remember what you had said or done?” Responses were provided on a 7-point scale where, 0 indicates “None” and 6 “11 or more times”. Scores ranged from 0 to 78, with high scores indicating higher levels of drug/alcohol dependency. Cronbach alpha was .856.

*Condom misuse at last sex* was assessed by one Yes/No item, “Did you start having sex without the condom, then put the condom on later?”

*HIV testing* was assessed with one Yes/No item, “Have you ever taken an HIV test?”

### 3.3. Statistical analyses

First, univariate analyses were used to describe the overall sample. Next, we computed logistic regression models, their 95% confidence intervals, and respective  $p$ -values (Hosmer & Lemeshow, 1989). We examined whether self-esteem, emotional regulation, trauma history, parental monitoring, parental communication, housing instability or poor neighborhood quality were significant correlates of gang involvement (research question one). Age and as SES proxy were entered simultaneously into each model as a control variable along with each hypothesized correlate. Next, using linear and logistic regression, we constructed a number of individual models to examine the relationships between gang involvement and health-related factors, controlling for correlates of gang involvement. Given our sample size and the large number of potential covariates, we identified empirically driven covariates to include in individual logistic models by identifying variables that were significantly associated with our dependent variables with  $p < .25$ . This approach is detailed by Hosmer and Lemeshow (1989). Notably, covariates may differ across various models because they may indicate various domains of influence specific to particular dependent variables. Missing data were minimum and were handled by list wise delete. In final models, all variables retained were significant at  $p < .05$ . Data were analyzed using SPSS 19.0.

## 4. Results

### 4.1. Description of the sample

The analytic sample comprised 188 African American adolescent females with a mean age of 15.3. Among the overall sample 66% ( $N=124$ ) reported having received food stamps, 58% ( $N=109$ ) reported housing instability, over half (52% [ $N= 97$ ]) reported living in neighborhoods with poor quality and 27% ( $N= 51$ ) indicated gang involvement. See Table 1 for full sample descriptives.

### 4.2. The correlates of gang involvement

After controlling for age and SES, several constructs emerged as significant correlates of gang involvement. Participants who indicated current or previous gang involvement reported significantly lower levels of parental monitoring ( $p < .001$ ) and parental communication ( $p$

= .001). In addition, housing instability in the previous 12 months ( $p = .024$ ) and living in a neighborhood where there were more abandoned homes, barred doors and broken windows ( $p = .014$ ) were associated with gang involvement. Reporting low self-esteem ( $p = .032$ ), poor emotional processing skills (e.g., dwelling or ruminating on my feelings ( $p = .031$ ) and high levels of emotional reactivity (e.g., yelling or physically hitting someone ( $p = .001$ ), affiliation with negative peer groups ( $p < .001$ ) and higher scores on the trauma checklist ( $p < .001$ ) were all also significant correlates of gang involvement (Table 2).

#### 4.3. The relationship between gang involvement and health-related factors

As noted earlier, we controlled for empirically identified covariates associated with each dependent variable with  $p < .25$  (Hosmer & Lemeshow, 1989). Major findings indicated that gang involvement was independently related to a number of health-related factors. With regard to sexual behaviors, results indicated that gang involvement was significantly related to having one or more casual sex partners ( $p = .04$ ), controlling for parental monitoring. Gang involvement was also related to higher rates of condom misuse ( $p = .04$ ), controlling for parental monitoring and parental communication. In addition, gang involvement was significantly associated with a lower likelihood of ever having been tested for HIV ( $p = .027$ ), controlling for age. Finally, gang involvement was also significantly associated with lower STD prevention knowledge ( $p = .038$ ), controlling for age, SES, external dysfunctional emotional regulation and deviant peers. With regard to drug use, gang involvement was associated with higher levels of drug/alcohol use ( $p = .046$ ), controlling for age, self-esteem, recent trauma and deviant peers. Finally, gang involvement was associated with having had a boyfriend who was a gang member ( $p = .004$ ), controlling for previous trauma and external emotional dysfunction (Table 3).

### 5. Discussion

Few studies have examined empirically driven correlates of gang involvement among females and particularly those who African American females with a detention history. In addition there is an absence of studies which determine the extent to which gang involvement is independently associated with a broad range of health-related factors after controlling empirically identified correlates of gang involvement. Prior research on correlates of gang involvement mostly among British males indicate that gang members, compared to non-gang members, were more anti-authority and both gang and those peripherally involved in gangs valued social status more than non-gang youth (Alleyne & Wood, 2010). Other findings also based on British youth noted that gang-involved, compared to non-gang-involved members, were older, and that parental management, deviant peer pressure, and commitment to school had indirect relationships with gang involvement (Alleyne & Wood, 2010). Findings have also suggested that joining gangs for protection, increased victimization after initial gang involvement, and greater involvement in violent delinquency are significantly associated with stable gang membership (Melde, Diem, & Drake, 2012).

This study contributes to the extant literature by corroborating and extending earlier findings. For instance, major findings noted that several individual, interpersonal and

community-level constructs were correlated with African American females' gang involvement. On an individual level, low levels of self-esteem and poor emotional processing skills were significantly correlated with gang involvement. As documented in prior findings, youth with low self-esteem (who may lack social connections in other spheres) may be drawn to gangs because of the status it may represent among some at-risk populations (Savenije, 2009). Similarly, our findings support earlier studies documenting that emotional processing ability has been associated with the quality of social interactions with both friends and family (Eisenberg, Fabes, Guthrie, & Reiser, 2000; Lopes, Salovey, & Straus, 2003), and antisocial behavior and delinquency over time (Trentacosta & Shaw, 2009).

Major findings also indicated that low levels of parental monitoring, poor parental communication and housing instability were significantly associated with gang involvement. Our findings support social control theory (Hirschi, 1998). Based on this theory, the risk for delinquency (e.g., crime activity) occurs when social bonds are weak. Therefore, adolescents who have strained relationships with positive family and community members and have displaced housing may find a sense of belongingness with gangs, thereby satisfying the need for social connections, and survival. Finally, poor neighborhood quality was correlated with gang membership. It is highly possible that in poorly resourced communities there might be a higher proliferation of gangs and prior research has documented that gang density is correlated with gang membership (Spiegel, 1995). Consequently, poorer social control of youth combined with a higher density of community gangs may account for this finding which future research would need to explore.

The second aim of this study was to examine the relationships between gang involvement and health-related factors after controlling for covariates associated with gang involvement. Our major findings indicated that gang involvement was associated with having a boyfriend who was a member of a gang, having one or more casual sexual partnerships, lower levels of STD prevention knowledge, high levels of drug and alcohol abuse, condom misuse and a decreased likelihood of having been tested for HIV. Taken together these findings confirm that certain behaviors and norms presented within some gangs are associated with increased psychosexual risk factors for their members. As supported by earlier research (Block & Block, 1993, Vigil, 2008), some gangs might perpetuate and reward norms that may place their members at heightened social and health risk. Such memberships as illustrated in these findings might be associated with drug use and risky sexual behaviors.

This study has several implications for practice and interventions with high-risk African American females with detention histories. This study employed a convenience sample which may have resulted in some selection bias, and may limit our ability to generalize findings to the larger population of detained African American female youth in Georgia, as well as the larger population of detained youth across the country. We utilized highly sophisticated A-CASI technology to minimize response bias, although such bias is always present with self-reported data. Finally, findings are also limited by use of cross-sectional baseline data, which may limit any causal inferences and our findings only support correlations among major study constructs, several of which may be bidirectional.

A principal strength of this study is our examination of the correlates of gang involvement followed by a subsequent examination of the relationship between gang involvement and health-related factors (controlling for empirically driven confounders of gang membership) across the same population. Our findings suggest that child welfare and other youth service providers should target African American females who report low self-esteem, emotional regulation problems, have housing instability and poor relationships with parents for anti-gang interventions, given their increased vulnerability for such memberships. Consequently, these findings provide empirical evidence that can help target and design specific intervention strategies for certain sub-populations of detained African American females. In addition, our findings also suggest that gang-involved African American females have lower HIV testing and STD knowledge relative to their non-gang-involved female peers. Consequently, these youth may be the focus of targeted STD prevention and intervention initiatives.

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**Table 1**Demographic characteristics of sample ( $n = 188$ ).

Characteristic	Total	
	n	%
<b>Correlates of gang involvement</b>		
Age (y)		
13–15	92	48.9
16–17	96	51.1
Received food stamps	124	66.0
Housing instability	109	58.0
Poor neighborhood quality 1 or more indicator	97	51.6
Gang involvement	51	27.1
	<i>Mean</i>	<i>SD</i>
Self-esteem	30.2	5.7
Emotional regulation		
Internal function	10.9	4.3
External dysfunction	5.9	4.4
Trauma	3.9	2.1
Negative peer groups	17.4	9.8
Parental monitoring	16.9	2.3
Parental communication	13.9	6.3
<i>Health-related factors</i>		
Drug and alcohol abuse	5.7	8.7
STD prevention misinformation	17.7	2.4
	<i>n</i>	<i>%</i>
Boyfriend gang member	134	71.3
Current casual sex partner(s)	67	35.6
Condom misuse at last sex	19	21.3
Previous HIV test	106	56.4

**Table 2**Correlates of gang involvement ( $n = 188$ ).

Predictors	AOR	95% CI	<i>p</i> -Value
Self-esteem	.938	.884, .995	.032 *
Emotional regulation			
Internal functional	.914	.843, .992	.031 *
External dysfunctional	1.14	1.05, 1.23	.001 **
Trauma	1.54	1.28, 1.85	<.001 ***
Negative peer groups	1.08	1.04, 1.12	<.001 ***
Parental monitoring	.759	.65, .886	<.001 ***
Parental communication	.909	.859, .963	.001 **
Housing instability	2.27	1.12, 4.61	.024 *
Poor neighborhood quality	1.43	1.01, 1.90	.014 *

Note. Each logistic regression model controlled for age and SES.

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

\*\*\*  $p < 0.001$ .

**Table 3**

Associations between gang involvement and health factors.

<b>Logistic regression</b>	<b>AOR</b>	<b>95% CI</b>	<b>p-Value</b>
Boyfriend gang member	19.58	2.57, 149.15	.004 **
Casual sex partner(s)	2.06	1.03, 4.09	.04 *
Condom Misuse <sup>a</sup>	3.64	1.06, 12.47	.04 *
HIV testing	.471	.24, .92	.027 *
<b>Linear regression</b>	<b><math>\beta</math></b>	<b>95% CI</b>	<b>p-Value</b>
STD prevention misinformation	.833	.045, 1.62	.038 *
Drug/alcohol abuse	2.81	.047, 5.57	.046 *

\*  $p < 0.05$ .\*\*  $p < 0.01$ .<sup>a</sup>Defined as initiating sex without a condom.

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