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Gender, Ethnicity and Race in Incarcerated and Detained Youth: Services and Policy Implications for Girls

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Abstract

Objective—While work has been conducted on gender differences to inform gender-specific programming, relatively little work has been done regarding racial and ethnic differences among incarcerated and detained girls in particular. This is an important gap, considering gender, race and ethnicity may be important factors in responding to the needs of incarcerated and detained girls within the Risk-Needs-Responsivity (RNR) model. We hypothesize girls will show relatively more pathology than boys, and that White girls will show relatively more pathology as compared to girls of other groups. Implications of findings for services delivery and policy are presented.

Methods—Data were collected on $N=657$ youth using structured interview and record review. Analyses included χ^2 and t -tests.

Results—As compared to boys, girls were older at first arrest yet younger during most lock-up, received poorer grades, experienced more family difficulty, and more were lesbian/bisexual. As compared to minority girls, White girls began hard drugs at a younger age, had more conduct disorder symptoms, and more frequently experienced parental difficulty and abuse.

Conclusions and Implications for Practice—Age-appropriate programming that addresses family difficulty and sexuality is needed for girls. As compared to White girls, re-entry planning

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may more readily rely on family support for minority girls. Systems should consider use of actuarial methods in order to reduce bias in making placement decisions.

Keywords

detainees; prisoners; youth

Introduction

Factors putting youth at risk for incarceration and detention are largely similar between girls and boys; however, the incidence of those factors may differ by gender (Zahn et al., 2010). While work has been conducted on gender differences (Zahn, Day, Mihalic, & Tichavsky, 2009) to inform gender-specific programming, relatively little work has been done regarding racial and ethnic differences among incarcerated and detained girls in particular. This is an important gap, considering gender, race and ethnicity may be important factors in responding to the needs of incarcerated and detained girls within the Risk-Needs-Responsivity model (RNR; Andrews, Bonta, & Wormith, 2011).

The RNR model (Andrews et al., 2011) outlines three principles for offender rehabilitation: Match program and offender *Risk* levels (e.g., high intensity to high risk); target criminogenic *Needs* (e.g., antisocial peers, thinking and behavior; substance abuse; family, school and leisure activity); be *Responsive* to offender motivation, mental status, circumstances, demographics and strengths when tailoring interventions. Several areas of the literature address differential risk assessment with respect to boys and girls and gendered pathways to delinquency (Emeka & Sorensen, 2009; Belknap & Holsinger, 2006); however, few examine race and ethnicity as important factors in responding to the needs of incarcerated girls.

Delinquent youth have critical family, social and psychological problems; however, among girls, six factors appear to be especially important including family dysfunction, trauma, mental health and substance problems, high-risk sex, school problems, and negative peers (Lederman, Dakof, Larrea, & Li, 2004). Relatively few studies have presented comprehensive needs assessment on a diverse sample of detained girls (Lederman et al., 2004; Chesney-Lind, 2001) to inform programming. In addressing this gap, Lederman et al. found that, consistent with prior findings, girls evidenced high rates of difficulty in the above six areas, with more dysfunction associated with deeper justice system involvement. Although results speak to needs of detained girls, they do not provide information guiding racial/ethnic considerations, or needs after release; nor did this study include incarcerated girls.

Frequently, delinquency cases involving females are less likely than male cases to be dismissed (Puzzanchera, Adams, & Hockenberry, 2012), and female offenders are often younger than boys (Hockenberry, 2013). African-American girls are detained at higher rates than White girls (Morris, 2003), and African-American youth are more likely than White youth to be formally charged even when referred for the same offense (Hartney & Silva, 2007). White youth have the highest rate of mental health service utilization; whereas Hispanic youth receive the least amount despite their considerable needs (Rawal, Romansky,

Jenuwine, & Lyons, 2004). White females are the most likely to receive services as compared to African-American youth and White males (Herz, 2001). White girls are less likely to be institutionalized while minority girls are institutionalized with problems that warrant home services; this suggests that while minority girls may be presenting with lower level problems than White girls, they may not be receiving services in the community and instead end up in out-of-home placements (Lennon-Dearing, Whitted, & Delavega, 2013).

Within the RNR model, it is important to match level of recidivism risk to level of services via validated risk assessment. Intervention is then designed to respond to criminogenic needs, including peers, antisociality, substance use, family functioning and school performance, as these can directly influence crime. Although factors such as mental health, demographics and strengths do not have a direct effect on recidivism within the RNR model, it is important to take these into account to the extent that they may impact offender response to treatment (Andrews et al., 2011).

This is an archival study examining elements of the RNR model among a large ($N=657$) racially and ethnically diverse sample of incarcerated and detained youth. As stated earlier, relatively little work has been done regarding racial/ethnic differences among incarcerated/detained girls; this is an important gap, considering gender, race and ethnicity may be important factors in responding to the needs of this population within the RNR model (Andrews et al., 2011). Similarly, as indicated above, although the literature has addressed differential risk assessment with respect to boys and girls, little work has been done to examine race and ethnicity as important factors in responding to the needs of incarcerated girls. Finally, as explicated above, although Lederman et al. (2004) conducted comprehensive needs assessment on a diverse sample of detained girls to illustrate treatment targets, no information was provided to guide racial and ethnic considerations or needs after release; nor did this study include incarcerated girls. We therefore will assess constructs relevant to the RNR model among incarcerated and detained youth, and examine gender and racial/ethnic differences among girls. Although we conduct analyses comparing boys and girls, emphasis will be given to girls since they are relatively understudied as compared to boys. We hypothesize that girls will show relatively more pathology than boys, and that White girls will show relatively more pathology as compared to girls of other groups. Implications of findings for services delivery and policy are presented within the RNR model.

Methods

Participants

The sample was recruited from a state juvenile correctional facility in the Northeast from 2001 – 2012. Immediately after adjudication or detention adolescents were identified as potential candidates for the study if they were between ages 13 – 19 years, had a stay in the facility long enough to engage in the parent study, and met substance use criteria for the parent study (see below description of parent study). The sample ($N=657$) comprised the following racial/ethnic backgrounds: 32.0% Hispanic, 24.2% African American, 48.5% White, and 11% self-identified as “other.” Most were boys (86.6%); mean age was 16.9 years (SD , 1.10).

Procedures

Data, collected from the same facility, were pooled across three funded studies. This was done to increase *N* and because measures and methods used among studies were similar. Procedures received institutional review board (IRB) approval; informed written consent was obtained; and follow-up assessment occurred 3 months after release from the facility. Studies 1 and 2 targeted incarcerated youth sentenced to secure facility, whereas study 3 primarily targeted pre-adjudicated youth, briefly detained and then placed in community.

Study 1—Juveniles sentenced 4 – 12 months were eligible if they met the following substance criteria: Used marijuana, drank at least weekly, or drank heavily (boys: 5 drinks, girls: 4) at least once in the year before lockup; or used marijuana or drank in the 4 weeks before incarceration or before the offense for which they were incarcerated. Following recruitment, baseline assessment was conducted, followed by randomization to behavioral intervention for substance use. Research staff conducted all procedures. Of 190 youth who were recruited and completed initial assessment, 9 were missing at 3-month follow-up after release (5 were lost to follow-up, and 4 withdrew before follow-up).

Study 2—Recruitment, assessment, and randomization to behavioral intervention for substance use were similar to study 1. Of 205 youth who were recruited and completed initial assessment, 34 were missing at 3-month follow-up (21 withdrew before follow-up, 2 were released early and did not complete initial phases, 11 were lost to follow-up).

Study 3—Adolescents detained or incarcerated with 4 – 21 days remaining in the facility were eligible if they smoked daily before detention or incarceration; detained youth comprised about 90% of the sample. Following recruitment, baseline assessment was conducted followed by randomization to behavioral intervention for smoking. Research staff conducted all procedures, similar to studies 1 and 2 above. Of 262 youth who were recruited and completed initial assessment, 69 were missing at 3-month follow-up (32 were not yet due for follow-up, 14 withdrew before follow-up, 5 were released unexpectedly before completed initial phases, 16 were in the process of being located, 2 were lost to follow-up).

Combining studies—The 3 samples were compared on age, gender, ethnicity, race, age began committing crime weekly, and days used substances in the past year. Detainees were significantly ($F(2, 654)=12.5, p<.001$) younger ($M=16.7, SD=1.1$) than incarcerated youth ($M=17.09, SD=1.07$); however, the difference was well under 6 months and not practically meaningful. The proportion of non-White incarcerated youth was significantly higher than the proportion of non-White detainees (77% vs. 23%, $X^2(2)=82.03, p<.001$), and there were significantly more incarcerated Hispanics than detained Hispanics (66% vs. 34%, $X^2(2)=9.05, p=.011$). These differences reflect racial and ethnic bias in the United States (Hartney & Silva, 2007; Hockenberry, 2013) and are not idiosyncratic to the samples. Detainees drank alcohol on 18 fewer days during the previous 12 months as compared to only one of the incarcerated samples ($F[2, 652]=4.24, p=.015$); because this is inconsistent across incarcerated samples and amounts to only about 2.5 weeks, the difference is not viewed as practically meaningful. Each sample differed from the other with respect to smoking (Welch[2, 364.2]=134.9, $p<.001$), with $M=304$ and $SD=95.3$ for detainees, and for

incarcerated samples: $M=212$ and $SD=158$, and $M=112$ and $SD=150$. Smoking is overrepresented among detainees based on selection procedures in the parent study; whereas lower smoking rates among one of the incarcerated samples is likely related to escalating cigarette costs and increased public health campaigns over time. Differences among samples with respect to cigarette use, though explicable, are meaningful. No differences were found across samples for gender, age began committing crime weekly, and days used marijuana in the past year.

Sample sizes of incarcerated or detained girls are small in the literature relative to boys. Therefore, to facilitate empirical studies on this relatively understudied group, it is sometimes necessary to pool data. Optimal conditions for pooling data exist when samples are fairly homogeneous. Since the 3 studies used similar procedures and measures, came from the same facility, and were collected at about the same time-period, this reduces heterogeneity among them. Furthermore, analyses above indicate no meaningful differences across samples on important variables, except for smoking, further supporting combining samples. Analyses below involving smoking are viewed with caution.

Assessments—The assessments were 60–90 minute interviews conducted by a trained bachelor-, masters- or doctoral-level researcher. Following 20 hours of training, weekly supervision was provided; all assessment data were reviewed by a senior-level staff member. Adolescents received ~\$110 for assessments.

Measures

A *Background Questionnaire* was used to collect socio-demographic data at baseline including gender, age, ethnicity, race, and school grades at follow-up; and data regarding peer and family information, adolescent substance use before incarceration, prior legal contacts, and services use at follow-up. The *Delinquent Activities Scale* (DAS; Reavy, Stein, Paiva, Quina, & Rossi, 2012; Reavy, Stein, Quina, & Paiva in press), a reliable and valid instrument, was utilized at baseline to obtain Conduct Disorder symptom count within the last 12 months. Items from the *Risks and Consequences Questionnaire* (Stein et al., 2010) were chosen to examine sexually risky behavior during the previous 12 months at baseline (Rosengard et al., 2006). It assesses number of times alcohol was involved during sex without a condom, and during sex with an unknown partner. During *Record Review*, data regarding physical abuse were collected at baseline. The *Diagnostic Interview Schedule for Children IV-Youth* version (DISC-IV-Y; Columbia, 1999) was administered at baseline to assess Post-Traumatic Stress and Conduct Disorders (PTSD, CD). PTSD covered previous 4 weeks; CD covered previous year.

Data Plan

Data were checked for conformity to distributional assumptions and transformed as needed. Number of weeks previously incarcerated/detained, number of times attended alcohol/drug treatment after release, and sex without a condom with alcohol involved were log-transformed in order to meet distributional assumptions. Number of times had sex with an unknown partner with alcohol involved did not conform under transformation and so was dichotomized for non-parametric analysis using X^2 . Studies 1 and 2 utilized the DAS to

ascertain CD during the past 12 months, whereas Study 3 utilized the DISC. Since both are based on the Diagnostic and Statistical Manual-IV (American Psychiatric Association, 1994), CD symptom count was simply utilized across studies.

A series of *t*-tests for continuous data and X^2 analyses for categorical data were conducted. For analyses using continuous data, although sample sizes were somewhat uneven, because standard deviations were not very disparate, the entire sample of girls and boys was maintained for comparisons. Similarly, to avoid difficulty with small cell size (<5 cases) during X^2 analyses, wherever possible all participants and 2×2 tables were utilized for analyses. These efforts assist to boost power and meet assumptions for statistical analyses. Ethnicity was dichotomized into Hispanic and non-Hispanic; race was dichotomized into White and non-White, with White as the referent because this group comprised the largest number of participants in the sample. Although detailed measures exist to assess ethnic and racial identity (e.g., Phinney, 1992), this approach was used because the parent studies did not employ such measures and because this approach maintained the analytic strategy of using 2×2 tables. Because sample sizes mitigated power in some analyses, effect sizes were utilized to enhance interpretability.

Using the RNR model, two constructs relate to recidivism risk: Age of 1st arrest and number of previous weeks in lock-up (Emeka & Sorensen, 2009). To control for family wise error within gender, α was set to .025 for these two constructs; and this correction was applied separately to comparisons by race and ethnicity as well. Within the RNR model, pre-release services address mental health factors such as CD and PTSD symptoms (representing need and responsivity principles, respectively); with $\alpha=.025$. Similarly, pre-release services address marijuana use (criminogenic need), the most frequently used drug in this setting (Lebeau-Craven et al., 2003); with $\alpha=.05$. Post-release services might target family dysfunction (criminogenic need) such as father/mother substance involvement and child abuse; $\alpha=.017$. Additional post-release treatment targets include gang involvement, grades (criminogenic needs) and services use (a proxy for motivation, within responsivity); $\alpha=.017$. Other factors tapping responsivity include sexual risk (condom non-use, unknown partners; $\alpha=.025$), demographics (age, sexual orientation; $\alpha=.025$), and age of first hard drug use ($\alpha=.05$), which can impact brain development (Winters & Arria, 2011). Finally, although drug/cigarette use when pregnant ($\alpha=.025$) does not directly impact recidivism within the RNR model, we view this as a particularly salient health-risk for girls that merits consideration within the responsivity principle.

Results

The number of White and non-White girls and boys were compared with $X^2(1)=.033$, $n=654$, $p=.856$, Cramer's $V=.01$, indicating that genders did not differ on the basis of racial background (within girls, 47.7% and 52.3% were White and non-White, respectively; for boys, 48.9% and 51.2% were White and non-White, respectively). Similarly, genders did not differ on the basis of ethnicity with $X^2(1)=2.27$, $n=657$, $p=.132$, Cramer's $V=.06$ (25% and 33% of girls and boys were Hispanic).

Age of first arrest and number of weeks previously incarcerated/detained were compared by gender, and across ethnicity and race for girls. Girls were significantly older than boys at first arrest ($p=.020$; 13.70 vs. 13.22 years) but effect size was small. There was a trend ($p=.057$) for White girls to be detained or incarcerated for about 2½ weeks longer than non-White girls, with small-medium effect size. See Table 1.

Number of CD symptoms in the previous year were significantly ($p=.022$) higher for Whites than non-Whites (8.55 vs. 6.64), with medium effect size. There was a trend ($p=.058$) for girls to have significantly more PTSD symptoms than boys (4.05 vs. 1.48), with large effect size. Although comparisons for ethnicity and race were non-significant, the effect size for race was medium, indicating non-White girls had more PTSD symptoms than White girls. Findings for marijuana use were unremarkable.

Gang involvement 3 months following most recent detention/incarceration was compared across genders, and across ethnicity and race for girls. Analysis for gender indicated a trend towards significance ($p=.069$) for gang involvement (boys, 12.7%; girls, 5.4%), but effect size was small. Self-reported grades at 3 months after release were dichotomized into D's or F's versus C's or better. A significant ($p=.003$) effect was found for gender with 21.1% and 6.5% of girls and boys, respectively, reporting grades of D's or F's, but effect size was small. Prior to α correction, girls attended substance treatment significantly ($p=.042$) more than boys 3 months post-release (1.68x vs. 1.28x, on average), but effect size was small.

Gender, ethnicity and race were compared with respect to biological mother or father's substance abuse history. A significant difference was found on mother's substance abuse ($p<.001$, 40.2% for girls, 23.9% for boys), but effect size was small. Prior to α correction, differences were significant ($p=.046$) when comparing genders for father's substance abuse, but again, effect size was small (67.9%, girls; 56%, boys). However, effect size was large when comparing White (84.2%) and non-White (52.5%) girls for father's substance abuse ($p=.003$). Incidence of physical abuse was compared separately by gender and by ethnicity and race for girls. Significant differences were found on abuse by gender ($p=.005$; small effect size), with more girls being abused. In addition, significant differences ($p=.005$) were found on race for physical abuse with more White girls experiencing abuse than non-White girls (76.2% vs. 35.7%), representing medium-large effect size.

There was a trend for significant difference by gender for number of times had alcohol-related sex without a condom ($p=.094$), with girls reporting more risk. On average, girls and boys reported alcohol-related sex without a condom 2.12x and 1.55x, respectively; however, effect size was small. Although alcohol-related sex without a condom was non-significant for race, the effect size was in the small-medium range ($d=.41$) with White girls reporting slightly more risk-taking than non-White girls (2.72x vs. 1.70x). For alcohol-related sex with an unknown partner, comparison by gender was significant with more boys than girls at risk ($p=.014$; 31.3% vs. 14.3%); however, effect size was small.

Comparisons between boys and girls, Hispanic and non-Hispanic girls, and White and non-White girls were conducted for age. Boys were significantly ($p<.001$) older than girls during most recent lock-up by about 6 months, with medium effect size. Differences between

genders on sexual orientation were significant ($p<.001$), with 26.2% and 1% of girls and boys, respectively, reporting being lesbian/gay, bisexual or questioning their orientation (LGBQ). This represents a medium-large effect size.

Age of first hard drug use was compared by gender, and by ethnicity and race for girls. Non-White girls were significantly ($p=.016$) older than White girls by about 13 months; this represents a large effect size. Although results for Hispanic versus non-Hispanic girls were non-significant, the effect size was in the medium range ($d=.53$), with Hispanic girls being older by over 6 months.

Of 657 participants, 88 were girls, with 36 having been pregnant. Of these 36, $n=30$ reported not having children currently (lost/gave up custody, pregnancy terminated, child deceased) and 6 reported having one or more children; 1 youth reported parenting a child without having been pregnant. Of these 36 girls, 41.7% smoked cigarettes during pregnancy. Study 3 did not assess substance use during pregnancy; however, of 21 girls in studies 1 and 2 who had been pregnant, 71.4% reported using drugs other than cigarettes during pregnancy. There were trends for significance when comparing Hispanic and non-Hispanic youth for use of substances ($p=.075$) and cigarettes ($p=.058$) during pregnancy: More non-Hispanic girls used substances and cigarettes during pregnancy than Hispanic girls. Effect sizes were in the medium-large to medium range.

Discussion

Overall, consistent with hypotheses, girls showed relatively more pathology than boys, and White girls showed relatively more pathology than girls of other racial and ethnic groups. Results extend prior literature in that needs of racially and ethnically diverse girls were studied, including both detained and incarcerated girls. Results point to the potential complexities in girls' relationships relative to boys' in considering how best to respond to needs. Similarly, results point to relative strengths for minority girls, as compared to White girls, when considering how best to respond to criminogenic needs.

Gender differences were found with girls being older at first arrest but younger during most recent incarceration or detention. This suggests that courts may not tolerate girls' transgressions as well as boys' transgressions; and may be more apt to incarcerate boys later, and girls sooner, after first arrest. More girls than boys were found to have a mother with previous substance abuse; and as might be anticipated, significantly more girls than boys had a history of abuse. Of youth enrolled in school after release, significantly more girls than boys had poor grades. Although fewer girls relative to boys were involved in alcohol-related sex with an unknown partner, over 40% of girls had been pregnant, and nearly 8% of girls reported parenting at least one child. A significant proportion of girls (26%) considered themselves to be lesbian, bisexual or questioning. Within the RNR model, effective treatment to reduce recidivism will address family dysfunction and academic performance for girls; however, in order to be maximally responsive, interventions must also address additional important relationships for these girls including sexual and parenting relationships. Of note, effective programming for boys may need to address the spectrum of sexuality, as unusually low rates (1%) endorse being LGBQ.

As compared to White girls, non-White girls were significantly older by over a year at first hard drug use and had fewer CD symptoms. When compared to White girls, fewer non-White girls had a substance abusive father or had experienced abuse. Summarized differently, White girls appear to have a more problematic profile in that they begin hard drugs at a younger age, have more CD symptoms, and more frequently experience parental difficulty and abuse. That White girls appear to have a more problematic profile suggests that minority girls may be placed in a controlled environment when perhaps they are not as severe. Within the RNR model, effective treatment to reduce recidivism will address antisocial behavior, and for White girls in particular, such intervention should account for chaotic home environment, which is often associated with early drug use.

Effect size, irrespective of significance, is informative (Hojat & Xu, 2004) and allows for interpretation of results for underpowered analyses. In placing more emphasis on effect size, gender differences are somewhat mitigated, whereas additional findings emerge for minority girls. Compared to White girls, non-White girls are detained for 2.5 fewer weeks, have more PTSD symptoms, and engage in risky sex less frequently. As compared to non-Hispanic girls, Hispanic girls are older at first hard drug use, and fewer have used substances or smoked during pregnancy. These findings further indicate important potential racial and ethnic differences in responding to the needs of incarcerated and detained girls. Planning for release may need to occur sooner for non-White girls. Less drug involvement at vulnerable periods (when younger or pregnant) is a relative strength for Hispanic girls.

There are several limitations to this study. Broad racial and ethnic categories (e.g., White; non-White; Hispanic; non-Hispanic) were utilized as compared to finer delineations (e.g., Hispanic African-American; non-Hispanic White; Asian-American; etc.). Given this, it is difficult to make inferences for specific groups with certainty. Future studies may wish to use meta-analysis to overcome issues surrounding sample size, or specifically target girls for recruitment into studies. Also, this study utilized samples with specific inclusion criteria regarding substance use, age and length of stay in facility; therefore, it is possible that results will not generalize to other samples. However, that consistencies were found with the literature, and that samples did not differ meaningfully with each other (even though they were recruited over the course of a decade for different reasons in both detention and youth prison settings) suggests results are generalizable.

Results have implications for policy and programming. Within the RNR model, these data indicate that marijuana use, as a criminogenic need, is not different between genders or between racial/ethnic groups for girls. Legal systems may review whether girls are younger than boys during most recent incarceration, yet older at first arrest, as such disparities could indicate bias. Legal systems might also review whether minority girls are placed in secure environment for less severe infractions. Consistent with the RNR model, systems should consider use of actuarial procedures to assess placement needs in order to reduce potential racial and gender bias. Prevention and treatment should focus on relational factors for girls relative to boys, and in particular, White girls appear to have more problematic family background than non-White girls. Within the RNR model, responsive programming will account for developmental level of girls who are younger than their male counter parts. Similarly, girls may present with complex and emerging sexual histories including

pregnancy, having children, and identifying as LGBTQ. Although these factors do not directly influence recidivism, each of these can impact how well girls respond to treatment if left unaddressed (e.g., difficulty attending to cognitive therapy for criminal thinking if distraught over loss of a child). Responsive programming will also address the spectrum of sexuality in boys, as they may have difficulty acknowledging being LGBTQ for themselves or others. While more work is needed to better understand the needs of racially and ethnically diverse girls, results have important policy and programming implications.

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Table 1

Comparisons by Gender, and Race/Ethnicity for Girls.

	M, SD	Statistic (df)	p	Effect Size	Explanation (%)
<i>Age 1st Arrest</i>					
Gender (n=657)	B 13.22, 2.19 G 13.70, 1.72	$t(134.67^a)=2.35$	.02	$d=.24$	NA
Ethnicity (n=88)	H 14.05, 1.62 NH 13.59, 1.75	$t(86)=1.07$	.287	$d=.27$	NA
Race (n=88)	W 13.71, 1.95 NW 13.70, 1.50	$t(86)=0.05$	.960	$d=.01$	NA
<i>No. Prev. Weeks in Det/Incar.^b</i>					
Gender (n=656)	B .717, .703 G .627, .635	$t(122.48^a)=1.21$	.228	$d=.13$	NA
Ethnicity (n=88)	H .545, .683 NH .655, .621	$t(86)=.702$	.484	$d=.17$	NA
Race (n=88)	W .762, .675 NW .504, .576	$t(86)=1.93$	.057	$d=.41^{cd}$	NA
<i>CD Sx Count</i>					
Gender (n=576)	B 7.20, 3.35 G 7.52, 3.43	$t(574)=.746$	.456	$d=.09$	NA
Ethnicity (n=67)	H 7.35, 3.87 NH 7.58, 3.30	$t(65)=.234$	.815	$d=.06$	NA
Race (n=67)	W 8.55, 3.40 NW 6.64, 3.24	$t(65)=2.35$	.022	$d=.58^d$	NA
<i>PTSD Sx Count^f</i>					
Gender (n=183)	B 1.48, 3.29 G 4.05, 5.62	$t(20.60^g)=2.01$	.058	$d=.56^d$	NA
Ethnicity (n=20)	H 3.93, 6.16 NH 4.40, 4.16	$t(18)=.157$	.877	$d=.09$	NA
Race (n=20)	W 2.45, 4.41 NW 6.00, 6.54	$t(18)=1.45$	.166	$d=.64^d$	NA
<i>Days Used MJ in Last 12 Mo.</i>					
Gender (n=655)	B 222.13, 134.65 G 202.49, 139.37	$t(653)=1.26$	.208	$d=.14$	NA
Ethnicity (n=87)	H 229.41, 152.04 NH 193.38, 134.84	$t(85)=1.05$	.297	$d=.25$	NA

	M, SD	Statistic (df)	p	Effect Size	Explanation (%)
Race (n=88)	W 207.57, 138.48 NW 197.76, 141.58	t(85)=-.327	.745	d=.07	NA
<i>Gang Involvement</i>					
Gender (n=545)	B NA G	$\chi^2(1)=3.32$	.069	V=.08	12.7 boys=gang involved 5.4 girls=gang involved
Ethnicity (n=74)	H NA NH	$\chi^2(1)=1.36$	.244	V=.14	0 Hisp girls=gang involved 7.1 non-Hisp girls=gang involved
Race (n=74)	W NA NW	$\chi^2(1)=1.18$	.278	V=.13	8.3 White girls=gang involved 2.6 non-White girls=gang involved
<i>Grades (D or F)</i>					
Gender (n=285)	B NA G	$\chi^2(1)=9.07$	.003	V=.18	6.5 boys=D/F 21.1 girls=D/F
Ethnicity (n=38)	H NA NH	$\chi^2(1)=.077$	.782	V=.05	18.2 Hisp girls=D/F 22.2 non-Hisp girls=D/F
Race (n=38)	W NA NW	$\chi^2(1)=.470$	.493	V=.11	26.7 White girls=D/F 17.4 non-White girls=D/F
<i>No. Times Used Svcs at Release^b</i>					
Gender (n=545)	B .107, .330 G .226, .478	t(84.28) ^c =2.06	.042	d=.27	NA
Ethnicity (n=74)	H .274, .559 NH .210, .453	t(72)=.491	.625	d=.13	NA
Race (n=74)	W .290, .494 NW .166, .460	t(72)=1.12	.268	d=.26	NA
<i>Fa Hx Subst Abuse</i>					
Gender (n=582)	B NA G	$\chi^2(1)=3.98$	.046	V=.08	56 boys=fa subst ab 67.9 girls=fa subst ab
Ethnicity (n=78)	H NA NH	$\chi^2(1)=.018$	.894	V=.02	66.7 Hisp girls=fa subst ab 68.3 non-Hisp girls=fa subst ab
Race (n=78)	W NA NW	$\chi^2(1)=9.00$	.003	V=.34 ^d	84.2 White girls=fa subst ab 52.5 non-White girls=fa subst ab
<i>Mo Hx Subst Abuse</i>					
Gender (n=640)	B NA G	$\chi^2(1)=10.43$	<.001	V=.13	23.9 boys=no subst ab 40.2 girls=no subst ab
Ethnicity (n=87)	H NA NH	$\chi^2(1)=.866$	.352	V=.10	31.8 Hisp girls=no subst ab 40.1 non-Hisp girls=no subst ab
Race (n=87)	W NA NW	$\chi^2(1)=.233$	.629	V=.05	42.9 White girls=no subst ab 37.8 non-White girls=no subst ab

Physical Abuse^g

Gender (n=394)	B G	NA	$\chi^2(1)=7.75$	.005	$V=.14$	32.8 boys=phys abuse 53.1 girls=phys abuse
Ethnicity (n=49)	H NH	NA	$\chi^2(1)=.511$	.475	$V=.10$	61.5 Hisp girls=phys abuse 50 non-Hisp girls=phys abuse
Race (n=49)	W NW	NA	$\chi^2(1)=7.89$	.005	$V=.40^{cd}$	76.2 White girls=phys abuse 35.7 non-White girls=phys abuse

Sex^h w/o Condom-Alcohol^b

Gender (n=394)	B G	.191, .450 .326, .531	$t(58.18^c)=1.70$	.094	$d=.27$	NA
Ethnicity (n=49)	H NH	.403, .535 .299, .535	$t(47)=.601$	.551	$d=.19$	NA
Race (n=49)	W NW	.453, .680 .231, .370	$t(28.82^c)=1.47$	.186	$d=.41^{cd}$	NA

Sex^h Unknown Partner-Alcoholⁱ

Gender (n=394)	B G	NA NA	$\chi^2(1)=6.01$	.014	$V=.12$	31.3 boys=at risk 14.3 girls=at risk
Ethnicity (n=49)	H NH	NA NA	$\chi^2(1)=.017$	.895	$V=.02$	15.4 Hisp girls=at risk 13.9 non-Hisp girls=at risk
Race (n=49)	W NW	NA NA	$\chi^2(1)=.681$	.409	$V=.12$	19 White girls=at risk 10.7 non-White girls=at risk

Age

Gender (n=657)	B G	16.99, 1.10 16.49, 1.04	$t(655)=4.00$	<.001	$d=.47^d$	NA
Ethnicity (n=88)	H NH	16.32, 0.94 16.55, 1.07	$t(86)=.871$	.386	$d=.20$	NA
Race (n=88)	W NW	16.66, 0.88 16.34, 1.16	$t(83.31^d)=1.47$	.145	$d=.31$	NA

Sexual Orientation

Gender (n=657)	B G	NA	$\chi^2(1)=119.16$	<.001	$V=.43^{cd}$	1 boys=LGBQ 26.2 girls=LGBQ
Ethnicity (n=88)	H NH	NA	$\chi^2(1)=.491$	.484	$V=.08$	31.8 Hispanic girls=LGBQ, 24.2 non-Hispanic girls=LGBQ
Race (n=88)	W NW	NA	$\chi^2(1)=.225$	.635	$V=.05$	23.8 White girls=LGBQ 28.3 non-White girls=LGBQ

Age^j HD Use^j

	M, SD	Statistic (df)	p	Effect Size	Explanation (%)
Gender (<i>n</i> =168)	B 15.06, 1.80	<i>t</i> (166)=1.14	.258	<i>d</i> =.25	NA
	G 14.67, 1.24				
Ethnicity (<i>n</i> =30)	H 15.13, 1.13	<i>t</i> (28)=1.23	.229	<i>d</i> =.53 ^d	NA
	NH 14.50, 1.26				
Race (<i>n</i> =30)	W 14.13, 1.13	<i>t</i> (28)=2.57	.016	<i>d</i> =.94 ^e	NA
	NW 15.20, 1.15				
<i>Substance Use When Pregnant^k</i>					
Ethnicity (<i>n</i> =21) ^f	H NA	$\chi^2(1)=3.18$	.075	<i>V</i> =.39 ^d	40 Hisp girls=subst w/ preg 81.3 non-Hisp girls=subst w/ preg
	NH				
Race (<i>n</i> =21) ^f	W NA	$\chi^2(1)=1.75$	.676	<i>V</i> =.09	75 White girls=subst w/ preg 66.7 non-White girls=subst w/ preg
	NW				
<i>Cig Use When Pregnant^k</i>					
Ethnicity (<i>n</i> =36) ^m	H NA	$\chi^2(1)=3.6$	.058	<i>V</i> =.32 ^d	12.5 Hisp girls=cig w/ preg; 50 non-Hisp girls=cig w/ preg.
	NH				
Race (<i>n</i> =36) ^m	W NA	$\chi^2(1)=2.64$	.607	<i>V</i> =.09	38.1 White girls=cig w/ preg 46.7 non-White girls=cig w/ preg
	NW				

B=Boy, G=Girl, H=Hispanic, NH=Non-Hispanic, W=White, NW=Non-White, NA=Not Applicable, No. Prev Weeks in Det/Incar=Number of Previous Weeks Detained or Incarcerated, CD Sx Count=Conduct Disorder Symptom Count, PTSD Sx Count=Post Traumatic Stress Disorder Symptom Count, No. Times Used Svcs at Release=Number of Times Attended Services for Alcohol or Drugs at Follow-Up, Fa/Mo Hx Subst Abuse=Father/Mother History of Substance Abuse, LGBQ=Lesbian, gay, bisexual or questioning, HD=Hard Drug, Cig=Cigarette.

^aVariances not assumed equal;

^bLog transformed;

^cSmall,

^dmedium,

^elarge effect sizes (Cohen, 1988);

^fPTSD not assessed in studies 1 and 2;

^gAbuse not assessed in study 3;

^hSex risk not assessed in study 3;

ⁱdata dichotomized;

^jHard drugs not assessed in study 3;

^kAnalysis for gender not conducted (boys cannot get pregnant);

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Study 3 did not assess substance use when pregnant, 21 girls had been pregnant in studies 1 and 2;

36 girls had been pregnant across the 3 studies.

Note: For some analyses, n is much smaller than the overall $N=657$ because a few participants may not have responded, the youth could not respond (e.g., father's information was unanswered if the youth did not know father), or data were not collected (e.g., age 1st hard drug use, study 3). In addition, analyses on Ethnicity and Race include only girls. Due to programming error, CD symptom count could not be collected for a subset of participants in study 3.