

Associations of Structural Racism and Forced Sexual Intercourse Among High School  
Students in the United States

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**Abstract**

Associations of Structural Racism and Forced Sexual Intercourse Among High School Students in the United States

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**Background:** Adverse experiences that occur during adolescence are a major public health issue given risky behaviors that begin during this period often continue into adulthood. One of the major adverse experiences that can affect a person's well-being is experiencing sexual assault at a young age. The societal support of hypersexualized race-based stereotypes may serve as a contributing factor that explains the increased risk of sexual assault victimization among American Indian/Alaskan Native (AIAN) and Black youth. The aim of this study was to assess the association between race, as a proxy for having experienced structural racism, and ever having been forced to have sexual intercourse among high school students in the United States (U.S.).

**Methods:** This study used data from the 2013, 2015, 2017, and 2019 National Youth Risk Behavior Surveys (YRBS) to examine associations among a nationally representative sample of U.S. high school students who identify as AIAN, Black, or White. Multivariable logistic regression served as the formal method of analysis with race as the exposure variable and forced sexual intercourse as the outcome variable.

**Results:** Overall, 15% of AIAN female students, 11% of Black female students, and 11% of White female students reported ever having experienced forced sexual intercourse. For male students, 11% of AIAN students, 5% of Black students, and 3% of White

students reported ever having experienced forced sexual intercourse. AIAN female students were 89% more likely to report ever having experienced forced sexual intercourse compared to White female students (Odds Ratio (OR) = 1.89; 95% CI: 1.19, 3.01). AIAN male students were 375% more likely (OR = 4.75; 95% CI: 2.65, 8.51) and Black male students were 59% more likely (OR = 1.59; 95% CI: 1.23, 2.06) to report ever having experienced forced sexual intercourse compared to White male students. In the analysis adjusted for potential mediating variables (binge drinking, cannabis use, and hard drug use), the odds of forced sexual intercourse in AIAN female students and Black female students were comparable to White female students (OR = 1.11; 95% CI: 0.59, 2.09 and OR: 1.02; 95% CI: 0.84, 1.24, respectively), and AIAN male students were 137% more likely to report ever having experienced forced sexual intercourse compared to White male students (OR: 2.37; 95% CI: 1.21, 4.64).

**Conclusion:** Students who identified as AIAN or Black were more likely to report forced sexual intercourse than their White counterparts. Also, the results of adjusting for potential mediators suggest that part of the effect of race, as a proxy for structural racism, on forced sexual intercourse operated through binge drinking, cannabis use, and hard drug use for AIAN female students and Black students, while for AIAN male students, it operated through pathways beyond the mediating variables that were accounted for.

## Introduction

Adverse experiences that occur during adolescence are a major public health issue given risky behaviors that begin during this period continue into adulthood.<sup>1</sup> These risky behaviors can affect a person's life trajectory and negatively affect their overall quality of life. One of the major adverse experiences that can affect a person's well-being is experiencing sexual assault at a young age. Addressing sexual assault victimization during adolescence is essential due to associated short- and long-term health effects secondary to this exposure. Poor academic performance, mental health disorders, specifically anxiety and depression, and substance use are just some of the short-term effects of sexual assault victimization.<sup>2,3</sup> Long-term effects can include high rates of cardiovascular disease, post-traumatic stress disorder, and sexual revictimization.<sup>3-5</sup>

Several factors have been found to be associated with sexual assault victimization. Individual level factors such as a family history of violence, community level factors such as poverty, and societal factors such as social norms that support sexual violence are just a few examples of the risk factors found to be associated with risk of sexual assault victimization.<sup>6</sup> The societal support of hypersexualized race-based stereotypes may serve as a contributing factor that explains the increased risk of sexual assault victimization among American Indian/Alaskan Native (AIAN) and Black women. Throughout the history of the United States, racialization was used to create "minority" groups to differentiate white people from other races and justify white supremacist values. The creation of hypersexualized racist stereotypes is one example of racialization and has been linked to the justification of sexual assault.<sup>7</sup> Bond defines race-based sexual stereotypes as "implicit beliefs of sexual encounters and expectations from certain racial groups".<sup>8</sup> There are many examples of harmful sexualized stereotypes that affect American

Indian/Alaskan Native (AIAN) and Black women.

During the westward expansion, sexualizing, objectifying, and dehumanizing AIAN women were considered justifiable actions by colonizers because AIAN women were not considered “pure” bodies.<sup>9</sup> In the 1600s, Spanish Catholic missionaries began to use the Algonquin word “squaw”, meaning female, as a derogatory term, purporting that AIAN women were promiscuous.<sup>9</sup> This dehumanizing bias contributed to the justification of sexual assault of AIAN women during the wars between colonizers and Native Americans.<sup>9</sup>

Along with AIAN women, Black women were also victims of harmful sexual stereotypes throughout U.S. history. During slavery, Black women were sexually objectified with hypersexualized stereotypes such as “Jezebel” and “Thot”.<sup>8,10</sup> These stereotypes continued into the Jim Crow era, the period after slavery was abolished when racially motivated discrimination was legalized.<sup>11</sup> These hypersexualized stereotypes were so integrated within society that, during the Jim Crow era, the sexual assault of Black people by White men was not criminalized in a majority of states.<sup>12</sup>

These stereotypes are still prominent in today’s society. The hypersexualized connotation of squaw is still evident in the “sexy Indian” costumes made for women during Halloween and through the sexualized portrayal of models wearing traditional Native clothing in popular fashion shows and music videos.<sup>9</sup> In a study about how college students conceptualize sexual violence, one of the main themes that emerged was the stereotypes of hypersexualized Black women, specifically the “Jezebel” stereotype.<sup>13</sup> Although these stereotypes originated hundreds of years ago, they are still integrated into modern-day society.

While in some prior research race has been utilized to continue narratives of white supremacy, both culturally and biologically, this study used race as a proxy measure for having experienced structural racism.<sup>12</sup> As with all public health issues, it is imperative to understand who is most at risk and why when addressing the issue of risk of sexual assault victimization. The hypersexual stereotypes that are ingrained in society may be one of the reasons why AIAN and Black women are more likely to experience sexual assault compared to all other races.<sup>14</sup> Currently, we do not know if this increased risk of sexual assault victimization extends to AIAN and Black female youth.

**Aim 1** of this study was to assess the association between race, as a proxy for having experienced structural racism, and having ever been forced to have sexual intercourse among female high school students in the U.S.. **Aim 2** was to examine whether grade level modifies the association between race and being forced to have sexual intercourse in this same cohort. Grade level was examined as a potential effect modifier because the effect of race on ever being forced to have sexual intercourse might be expected to differ based on the sexual maturation of the student and their peers (with grade serving as a proxy for maturation). **Aim 3** was to consider binge drinking, cannabis use, and hard drug use as mediators of the association between race and ever being forced to have sexual intercourse in this same cohort. Binge drinking, cannabis use, and hard drug use were considered as potential mediators of the association between racism and forced sexual assault because perpetrators of sexual assault are more likely to target people who are vulnerable<sup>15,16</sup> and because structural racism is associated with increased substance use and decreased availability of substance abuse treatment in geographic areas in which persons of color are more likely to reside.<sup>15,16</sup> **Aim 4** was to expand the study cohort to include male high school students and evaluate whether the association

between race, as a proxy for having experienced structural racism, and forced sexual intercourse differed based on sex.

Although past research has found associations between racism and sexual assault among adults, research examining this association among youth, to our knowledge, is lacking. This study filled a gap in the literature by examining the association between racism and sexual assault among youth. Given that female youth are 4 times more likely than the general population to be victims of sexual assault, understanding the risk and preventive factors among female youth is critical to effectively intervene and prevent sexual assault.<sup>17</sup> Due to the much lower rates of experiencing forced sexual intercourse among male youth, most research has focused on women and girls. However, this study presented a unique opportunity to examine the association between race and forced sexual assault among male youth as another aim to add to this research base.

## **Methods**

### *Study Design*

This cross-sectional study used data from the 2013, 2015, 2017, and 2019 National Youth Risk Behavior Surveys (YRBS) to examine the association between race, as a proxy for having experienced structural racism, and having ever experienced forced sexual intercourse among a nationally representative sample of U.S. high school students who identify as AIAN, Black or White.

### *Study Sample*

The YRBS was developed to monitor health behaviors that contribute to the leading causes of death, disability, and social problems among youth and young adults in the United States.<sup>1</sup> The survey uses a three-stage cluster sample design to produce a nationally representative sample of 9<sup>th</sup> through 12<sup>th</sup> grade students and is conducted

every two years. The target population consisted of all public, Catholic, and other private school students. The final, overall sampling weights were scaled so the weighted count of students equals the total sample size, and the weighted proportions of students in each grade matched population projections for each survey year. The YRBS methods have been described more thoroughly elsewhere.<sup>18</sup>

Students were considered eligible for Aims 1, 2, and 3 if they 1) were of self-reported female sex, 2) were enrolled in grades 9-12, 3) identified as American Indian/Alaskan Native, Black, or White, and 4) had complete data on sex, grade, and race.

### *Study Setting*

Data management and study analyses took place in Seattle, Washington, using the anonymized version of the nationally representative 2013, 2015, 2017, and 2019 YRBS data. The University of Washington Institutional Review Board declared this study did not require a formal IRB review or declaration of exemption.

### *Variables of Interest*

*Exposure of interest.* The exposure of interest for the current study was student race, which served as a proxy for structural racism. Students were asked: “What is your race? (Select one or more responses.)” Original response options were: American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, or White. Because White people do not experience structural racism, White students served as the unexposed group. AIAN and Black students served as the exposed groups. While students who identify as Native Hawaiian or Other Pacific Islander, Asian, and Mixed race also experience structural racism, this study focuses on

AIAN and Black students due to the disproportionate rates of experiencing forced sexual intercourse in these groups.<sup>14</sup>

*Outcome of interest.* The outcome being evaluated was ever having experienced forced sexual intercourse. This was measured by asking: “Have you ever been physically forced to have sexual intercourse when you did not want to?” Those who responded “yes” were considered positive for the outcome, whereas those who responded “no” were considered negative for the study outcome.

*Potential effect modification.* Grade level was examined as a potential effect modifier. The YRBS asked: “In what grade are you?” Response options were 9<sup>th</sup> grade, 10<sup>th</sup> grade, 11<sup>th</sup> grade, 12<sup>th</sup> grade, or Ungraded/Other grade. Students who responded “Ungraded/Other grade” were excluded from the analytic sample. Grade was then coded as a 4-level categorical variable. Aim 2 and 4 analyses examined grade level and sex, respectively, as potential effect modifiers. Sex was examined as a potential effect modifier given sexualized racial stereotypes have targeted females rather than males, therefore, risk would be expected to differ appreciably by sex. The YRBS asked: “What is your sex?” Response options were female and male. Students who did not respond to this question were excluded from the analytic sample. Due to the nature of the exposure (i.e., race), confounders were not included in this study.

*Potential mediating variables.* Binge drinking, cannabis use, and hard drug use were considered as potential mediators. These variables were adjusted for in one set of analyses to estimate the effect between race and forced sexual assault above and beyond the potential mediating effects of substance use (see Data Analyses section below for details). Frequency of binge drinking, cannabis use, and hard drug use variables are defined below.

*Binge drinking* was measured by: “During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row, that is, within a couple of hours (if you are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if you are male)?” Response options were 0 days, 1 day, 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, and 20 or more days. Based on preliminary frequency data, this variable was recoded by collapsing the response options into 3 groups: 0 days, 1-2 days, and 3+ days.

*Frequency of cannabis use* was measured by: “During your life, how many times did you use marijuana?” Response options were 0 times, 1 or 2 times, 3 to 9 times, 10 to 19 times, 20 to 39 times, 40 to 99 times, and 100 or more times. This variable was recoded by collapsing the response options into 3 categories: 0 times, 1 to 9 times, and 10+ times.

*Frequency of hard drug use* was captured in 4 separate questions. Use of cocaine, heroin, methamphetamines, and ecstasy were each assessed by asking: “During your life, how many times have you used [cocaine/heroin/methamphetamines/ecstasy]?” Response options were 0 times, 1 or 2 times, 3 to 9 times, 10 to 19 times, 20 to 39 times, and 40 or more times. A global variable for *any hard drug use* was created based on the highest frequency of use of any of these drugs. Response options were recoded into 3 categories: 0 times, 1 or 2 times, 3+ times.

### *Data Analyses*

Initial descriptive analyses were performed to provide summaries of the variables in study analyses and to identify any data anomalies prior to conducting analyses. Multivariable logistic regression served as the formal method of analysis with forced sexual intercourse as the outcome variable and race as the trichotomous exposure variable, with White students as the reference.

In analyses of effect modification, important effect modification was deemed present if the inclusion of the interaction term was significant at  $p < 0.05$  via a Wald test. Aim 4 analyses included both male and female students in the study sample and evaluated effect modification of association of interest by sex.

In order to assess binge drinking, cannabis, and hard drug use reported by study participants as mediators in Aim 3, we ran 2 separate logistic regression models: one without adjustment for these variables to examine the total effect of race, as a proxy for racism, and a second model that adjusted for alcohol and drug use to estimate the direct effect of race on forced sexual intercourse that is not mediated through substance use.

Aim 4 analyses, restricted to male youth, followed a similar approach to Aim 1 analyses.

### *Study Power*

Minimum detectable risk estimates were calculated for Aim 1 in advance of study analyses and based on the estimated sample size across the 4 years of YRBS data using 2019 YRBS data. It was estimated we would have 240 AIAN, 4,088 Black, and 13,580 White female students in the study sample, and that the proportion of White females who had ever experienced forced sexual intercourse was 11.1%. With an alpha = 0.05 and 80% power, and assuming an elevated risk among AIAN and Black female students, we estimated a minimal detectable OR = 1.60 in our comparison of AIAN to White females and a minimal detectable OR = 1.15 in our comparison of Black to White females.

## **Results**

### *Study Sample*

A total of 57,649 students participated in the YRBS during the study period. Among these 57,649 students, 57,200 (99.2%) were in grades 9-12, and of those, 28,657 (50.1%)

were female. Of the 28,657 female students, 216 were AIAN (0.8%), 4,427 were Black (15.4%), 11,797 were White (41.2%), and 12,217 (42.6%) were from other racial/ethnic backgrounds or did not respond. After excluding those from other racial/ethnic backgrounds and those who did not respond to race/ethnicity questions, 16,440 students remained and served as the analytic sample for Aims 1 and 3. Of the 28,253 male students in grades 9-12 who participated in the YRBS, 296 (1.0%) were AIAN, 4,347 (15.4%) were Black, 11,690 (41.4%) were White, and 11,920 (42.2%) were from other racial/ethnic backgrounds or did not respond, leaving 16,333 males in the Aim 4 analytic sample.

### *Study Sample Characteristics*

Table 1A presents characteristics of the female study sample by race. As seen in Table 1A, AIAN females were more likely, and Black females less likely, to report alcohol binge drinking compared to White females (20.0% and 6.6% vs. 11.6%, respectively). Use of cannabis was more prevalent among both AIAN and Black females relative to White females (31.4% and 21.7% vs. 18.2%, respectively), whereas hard drug use was more prevalent among AIAN females compared to Black and White females (6.7% vs 1.7% and 2.5%, respectively). AIAN and Black females were more likely to report missing days of school due to fear of safety than White females (15.3% and 7.0% vs. 6.1%, respectively). AIAN females were more likely to report having been forced to do sexual things with a dating partner compared to Black and White female students (14.2% vs 5.1% and 7.9%, respectively). Table 1B presents characteristics of the male and female study sample by race which follows a similar pattern to the female-only study sample apart from AIAN and Black students being somewhat younger and in earlier grades, on average, compared to White students in the combined male and female cohort.

### Female Cohort

Of the 16,440 eligible female students, 1,780 (10.8%) reported ever having experienced forced sexual intercourse. By race, 32 (14.8%) AIAN female students, 479 (10.8%) Black female students, and 1,269 (10.6%) White female students reported ever having experienced forced sexual intercourse.

*AIM 1: Unadjusted Analyses:* In the crude analysis, AIAN female students were almost 2 times more likely to report ever having experienced forced sexual intercourse relative to White female students (Odds Ratio (OR) = 1.89; 95% CI: 1.19, 3.01). The odds of forced sexual intercourse in Black female students was comparable to White female students (OR = 1.05; 95% CI: 0.88, 1.25).

*AIM 2: Interaction by Grade Level:* The interaction term between student race and grade level was not statistically significant ( $p=0.42$ ); therefore, stratified point estimates were not presented for the female student cohort.

*AIM 3: Mediator-Adjusted Analyses:* In the analysis adjusted for binge drinking, cannabis use, and hard drug use as potential mediators, there was no longer any statistically significant association for comparisons of the outcomes across study groups (OR = 1.11; 95% CI: 0.59, 2.09 for AIAN female students and OR: 1.02; 95% CI: 0.84, 1.24 for Black female students).

*AIM 4: Male and Female Student Cohort Analyses:* The final aim of this study was to assess effect modification by sex. Of the 32,773 eligible male and female students, 2,395 (7.3%) reported ever having experienced forced sexual intercourse. By race, 32 (10.8%) AIAN male students, 215 (4.9%) Black male students, and 368 (3.1%) White male students reported ever having experienced forced sexual intercourse.

The interaction term between student race and sex was statistically significant ( $p=0.002$ ). Therefore, we further estimated associations parallel to those in Aims 1 and 3 for male youth in the study cohort.

*Unadjusted Analysis:* Prevalence of forced sexual intercourse among AIAN male students was almost 5 times that of White male students (OR = 4.75; 95% CI: 2.65, 8.51), and Black male students were almost 60% more likely to report ever having experienced forced sexual intercourse relative to White male students (OR = 1.59; 95% CI: 1.23, 2.06) (Table 3A).

*Mediator-Adjusted Analysis:* In the analysis adjusted for binge drinking, cannabis use, and hard drug use, AIAN males were still almost 2.4 times more likely to report ever having experienced forced sexual intercourse compared to their White male counterparts (OR: 2.37; 95% CI: 1.21, 4.64). The odds of forced sexual intercourse in Black male students compared to their White male counterparts remained elevated after adjusting for mediating factors, but was no longer statistically significant (OR: 1.28; 95% CI: 0.94, 1.74).

## **Discussion**

In this study, we found an association between race, as a proxy for experiences of structural racism, and prevalence of forced sexual intercourse among youth. In particular, the prevalence of forced sexual intercourse was higher among AIAN youth compared to White youth and in Black male youth compared to White male youth; however, no significant differences were observed between Black female youth and White female youth. AIAN female students were 89% more likely to report ever having experienced forced sexual intercourse compared to White female students and AIAN male students were almost 5 times as likely to report these experiences than White male students.

The results of this study, that AIAN male and female youth and Black male youth were more likely to experience forced sexual intercourse than their White counterparts, are consistent with previous studies conducted among adults.<sup>20,21</sup> In particular, AIAN female adults are two times more likely to have experienced forced sexual intercourse compared to females of other race groups.<sup>8,10,19</sup> Although the YRBS uses weighted measures to ensure that the sample population is reflective of the national population, low sampling of Black female youth may contribute to the results being non-significant. Observed results may also be impacted by selection bias due to the sensitive topics included in this study. Individuals who have experienced structural racism may be less likely to complete a survey in school, just as individuals who experienced forced sexual intercourse may be less likely to answer questions about forced sexual intercourse.

The association between experiencing structural racism and experiencing forced sexual intercourse may be attributed to the racialization of people of color in the U.S. From the 16<sup>th</sup> century to present day, racialization has negatively affected AIAN women through hypersexualized stereotypes. During colonial times, colonizers considered AIAN women as impure and ascribed them as promiscuous and in present day are fetishized in pornography as “Poca-Hotties” and “Rez Girl”.<sup>22</sup> These hypersexualized stereotypes were used to justify the sexual assault of AIAN and Black women.<sup>9</sup>

These hypersexualized stereotypes also play into rape myths, false beliefs that put the blame on victims instead of perpetrators, that are accepted in our current society.<sup>23</sup> Studies have shown that high rape myth acceptance is associated with perpetration of sexual assault and that higher levels of racism are associated with high rape myth acceptance.<sup>23–25</sup> For AIAN and Black women, rape myths portray them to be “susceptible” to rape, while for AIAN and Black men, they are portrayed as perpetrators more than

victims.<sup>20,26</sup> This rape myth is particularly harmful to AIAN and Black men because it depicts them as “unrapable”, disregarding the historic sexual victimization that AIAN and Black men have endured during colonization, slavery, and the Jim Crow era.<sup>20,22</sup>

After adjusting for the potential mediators, the odds ratio of forced sexual intercourse was attenuated for both AIAN female students and Black female students compared to White female students. These results suggest that part of the effect of race, as a proxy for structural racism, on forced sexual intercourse operated through binge drinking, cannabis use, and hard drug use. This was also true for Black male students (OR: 1.28; 95% CI: 0.94, 1.74). AIAN male students, on the other hand, were the only group that remained statistically significant and more likely to report having experienced forced sexual intercourse, compared to White males, after accounting for these potential mediators. Thus, for male AIAN students, the effect of race, as a proxy for structural racism, operated through pathways beyond the variables that were accounted for in mediation analyses. These results align with previous literature in that substance use is associated with a higher risk of exposure to sexual assault and there is a difference in prevalence of substance use by race due to experiencing racism.<sup>15,16</sup>

### *Limitations*

One of the key challenges in this study was the lack of data on experiencing structural racism. Other national and state surveys, such as the Pregnancy Risk Assessment Monitoring System and the California Health Interview Survey, explicitly ask about perceived racism, whereas this study uses race as a proxy for experiencing structural racism.<sup>27,28</sup> Using race as a proxy assumes that the experience of racism is homogenous within the group, which discounts the diversity of people and experiences within a racial group.

Another issue is the lack of data available on other potential risk factors of experiencing forced sexual intercourse that could explain associations. This study includes binge drinking, cannabis use, and hard drug use as mediators because these are the most common behaviors associated with experiencing forced sexual intercourse.<sup>29</sup> To be clear, this study is not putting the blame on victims by looking at these covariates but acknowledges that these behaviors can make a victim more vulnerable and that perpetrators prey on vulnerable people. Important risk factors such as poverty, family structure, parental mental health history, and prior victimization that should serve as other potential mediators are not measured in the YRBS and, therefore, not included in this study.<sup>6</sup>

The selection criteria for the sample population are also limiting. Aims 1-3 include only students assigned female at birth. This eligibility requirement excludes groups of people such as transgender girls and non-binary youth. These groups of people may also be victims of hypersexualized stereotypes and experience forced sexual intercourse. Unfortunately, the study was not able to consider gender identity in the analyses due to the lack of data on gender identity in the YRBS. Results from this study may not be fully representative of all youth in the U.S.

The design of this survey-based analysis also presents limitations to the interpretation of our findings. As a cross-sectional study, there is no data to establish temporality between our outcome (experiencing forced sexual intercourse) and our mediators (binge drinking, cannabis use, and hard drug use). As a self-administered survey, data from the YRBS are also subject to recall bias and social desirability bias if YRBS participants do not answer truthfully or cannot accurately remember the behaviors that are being measured.

## *Implications*

Although the effects of racism on people of color have been prevalent since before colonial times, racism was only recently declared a public health threat by the Centers for Disease Control and Prevention in 2021.<sup>30</sup> Despite racism being a public health issue and youth being a high-risk group, proper interventions and adequate prevention strategies have not yet been implemented. Interventions must be culturally appropriate to address the disproportionate rates at which AIAN and Black youth are experiencing forced sexual intercourse. According to the YRBS, within the past 10 years of the survey administration, the prevalence of experiencing forced sexual intercourse among youth has not changed.<sup>31</sup> Moving forward, creating public health interventions requires more research specific to this public health crisis and target population.

In conclusion, students who identify as AIAN and male students who identify as Black were significantly more likely to report forced sexual intercourse than their White counterparts. While social determinant risk factors, such as poverty, family history of violence, and revictimization, play an integral part in the sexual victimization of youth, social factors such as hypersexualized stereotypes and rape myths may also play a role. Further research is needed to properly understand the association and implement culturally appropriate interventions to approach this public health crisis.

**Table 1A:** Characteristics by Race of Aims 1,2, & 3 Sample Population (Female High School Students)

<b>Characteristics</b>	<b>White n = 11,797 %</b>	<b>AIAN n = 216 %</b>	<b>Black n = 4,427 %</b>	<b>p value</b>
<b>Age</b>				
12-14 years old	11.1	13.0	12.3	0.90
15 years old	24.8	21.9	24.2	
16 years old	25.8	26.2	25.4	
17 years old	24.7	26.4	24.7	
18+ years old	13.6	12.6	13.4	
<i>Missing (n)**</i>	4	0	3	
<b>Grade Level</b>				0.18
9 <sup>th</sup> Grade	25.5	29.9	27.7	
10 <sup>th</sup> Grade	25.9	25.0	25.6	
11 <sup>th</sup> Grade	24.1	25.5	23.8	
12 <sup>th</sup> Grade	24.5	19.7	22.9	
<b>Alcohol Binge Drinking</b>				<0.0001
0 Days	81.7	77.0	91.0	
1-2 Days	11.6	20.0	6.6	
3+ Days	6.7	3.0	2.4	
<i>Missing (n)**</i>	682	23	278	
<b>Cannabis Use (Lifetime)</b>				<0.0001
0 times	65.6	53.5	56.9	
1-9 times	16.3	15.1	21.4	
10+ times	18.2	31.4	21.7	
<i>Missing (n)**</i>	481	18	347	
<b>Hard Drug Use (Lifetime)</b>				<0.0001
0 Times	94.5	83.1	96.9	
1-2 Times	3.0	10.3	1.4	
3+ Times	2.5	6.7	1.7	
<i>Missing (n)**</i>	709	16	261	
<b>Days Absent Due to Fear of Safety (30 days)</b>				<0.0001
0 days	93.3	83.0	91.7	
1-3 days	6.1	15.3	7.0	
4+ days	0.6	1.7	1.3	
<i>Missing (n)**</i>	593	12	369	
<b>Forced to do Sexual Things with Dating Partner (12 Months)</b>				<0.0001
0 times	90.1	82.6	93.7	
1-3 times	7.9	14.2	5.1	
4+ times	2.1	3.2	1.2	
<i>Missing (n)**</i>	652	20	217	

\*Not all characteristics add to 100% due to rounding error

\*% distributions are calculated without including missing data

**Table 1B:** Characteristics by Race of Aim 4 Sample Population (Male & Female High School Students)

<b>Characteristics</b>	<b>White n = 23,487 %</b>	<b>AIAN n = 512 %</b>	<b>Black n = 8,774 %</b>	<b>p-values</b>
<b>Age</b>				
12-14 years old	9.9	11.4	11.9	0.05
15 years old	25.0	23.7	24.1	
16 years old	25.3	24.2	25.7	
17 years old	24.7	27.2	23.9	
18+ years old	15.1	13.5	14.5	
<i>Missing (n)**</i>	61	0	12	
<b>Grade Level</b>				0.001
9 <sup>th</sup> Grade	25.8	32.3	28.7	
10 <sup>th</sup> Grade	25.6	20.9	25.9	
11 <sup>th</sup> Grade	24.3	24.1	23.4	
12 <sup>th</sup> Grade	24.3	22.8	22.1	
<b>Alcohol Binge Drinking</b>				<0.0001
0 Days	81.0	76.8	90.8	
1-2 Days	11.5	16.1	6.3	
3+ Days	7.5	7.2	2.9	
<i>Missing (n)**</i>	1,484	51	623	
<b>Cannabis Use (Lifetime)</b>				<0.0001
0 times	64.7	52.3	56.2	
1-9 times	14.9	11.9	18.4	
10+ times	20.4	35.8	25.4	
<i>Missing (n)**</i>	1,080	53	768	
<b>Hard Drug Use (Lifetime)</b>				<0.0001
0 Times	93.4	80.8	94.7	
1-2 Times	3.2	8.6	2.1	
3+ Times	3.5	10.6	3.2	
<i>Missing (n)**</i>	1,475	37	561	
<b>Days Absent Due to Fear of Safety (30 days)</b>				
0 days	94.8	85.3	91.8	<0.0001
1-3 days	4.5	10.4	6.4	
4+ days	0.7	4.2	1.7	
<i>Missing (n)**</i>	1,125	31	710	
<b>Forced to do Sexual Things with Dating Partner (12 Months)</b>				0.003
0 times	93.9	87.6	94.7	
1-3 times	4.6	8.5	3.8	
4+ times	1.5	3.9	1.5	
<i>Missing (n)**</i>	1,193	49	465	

\*Not all characteristics add to 100% due to rounding error

\*% distributions are calculated without including missing data

**Table 2A:** Odds Ratio of forced sexual intercourse by race:  
Female Student Cohort

Race/Ethnicity	Experienced Forced Sexual Intercourse	
	OR	95% CI
<b>AIAN</b>	1.89	1.19, 3.01
<b>Black</b>	1.05	0.88, 1.25
<b>White</b>	1.00	[REF]

**Table 2B:** Odds Ratio of forced sexual intercourse by race:  
Female Student Cohort

Race/Ethnicity	Experienced Forced Sexual Intercourse	
	OR	95% CI
<b>AIAN</b>	1.11	0.59, 2.09
<b>Black</b>	1.02	0.84, 1.24
<b>White</b>	1.00	[REF]

\*Adjusted for binge drinking, cannabis use, and hard drug use

**Table 3A:** Odds Ratio of forced sexual intercourse by race, stratified by sex:  
Female and Male Student Cohort

Race/Ethnicity	Experienced Forced Sexual Intercourse	
	OR	95% CI
<b>Female</b>		
AIAN	1.89	1.19, 3.01
Black	1.05	0.88, 1.25
White	1.00	[REF]
<b>Male</b>		
AIAN	4.75	2.65, 8.51
Black	1.59	1.23, 2.06
White	1.00	[REF]

**Table 3B:** Odds Ratio of forced sexual intercourse by race, stratified by sex:  
Female and Male Cohort

Race/Ethnicity	Experienced Forced Sexual Intercourse	
	OR	95% CI
<b>Female</b>		
AIAN	1.11	0.58, 2.13
Black	1.07	0.88, 1.29
White	1.00	[REF]
<b>Male</b>		
AIAN	2.37	1.21, 4.64
Black	1.28	0.94, 1.74
White	1.00	[REF]

\*Adjusted for binge drinking, cannabis use, and hard drug use

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