

Community Violence Predicting Opioid Use Among Justice-Involved Adolescents

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Introduction

- Opioid misuse has risen significantly among adolescents, where unintentional overdose deaths have nearly tripled from 1999 to 2015 (Curtin, 2017).
- A correlation exists between increased community violence and overall drug use (Yassa and Badaea, 2019). Community violence may be a risk factor for opioid misuse among justice-involved adolescents (**JIA**).
- Adolescents are more likely to report prescribed opioid misuse in “socially disorganized” neighborhoods (based on the amount of crime, drug solicitation, street fights, etc.) and less likely to report prescribed opioid misuse in “high capital” neighborhoods (people helping one another, etc.) (Ford, Sacra, and Yohros, 2017).
- JIA are an understudied population that are at increased risk of using and relapsing from opioids (Vroom et. Al., 2019).
- This study assessed the impact of community violence on rates of opioid misuse among JIAs.
 - **Hypothesis:** JIAs exposed to community violence will report higher rates of opioid misuse.

Methods

- This study analyzed data from 79,960 JIA collected by the Florida Department of Juvenile Justice (**FLDJJ**). JIA were interviewed using the Residential Positive Achievement Change Tool (**R-PACT**).
 - 78.1% male (n = 62,463)
 - 38.3% White (n = 30,591); 45.6% Black (n=36,443); 15.7% Latinx (n = 12,536)
- STATA 17 SE software used for data analyses
 - Chi-square test of independence
 - Logistic regression (Odds ratios estimated)
- Variables
 - IV: History of witnessing violence in the community (0 = No, 1 = Yes)
 - DV: Opioid use (measured by urine analysis & self-report) (0 = No, 1 = Yes)
 - Controls: Race, gender, and household income

Results

Table 1. Sample Statistics

	n	%
Opioid Use		
No	77,823	97.33
Yes	2,137	2.67
History of Witnessing Violence		
No	23,456	29.33
Yes	56,504	70.67
Gender		
Male	62,463	78.12
Female	17,497	21.88
Race		
White	30,591	38.26
Black	36,443	45.58
Latinx	12,536	15.68
other	390	0.49
Household Income		
< \$15,000	20,715	25.91
\$15,000-\$34,999	41,883	52.38
\$35,000-\$49,999	11,842	14.81
\$50,000≥	5,520	6.9

Figure 1. Logistic Regression: Violence



Figure 1 displays the adjusted odds ratio results across the variables. JIA who have experienced violence have a 2.27 higher odds ($p<0.01$) of using opioids compared to those who have not experienced violence.

Figure 2 displays similar trends with females when compared to their base group, males (AOR= 1.61, $p<0.01$).

Figure 2. Logistic Regression: Gender

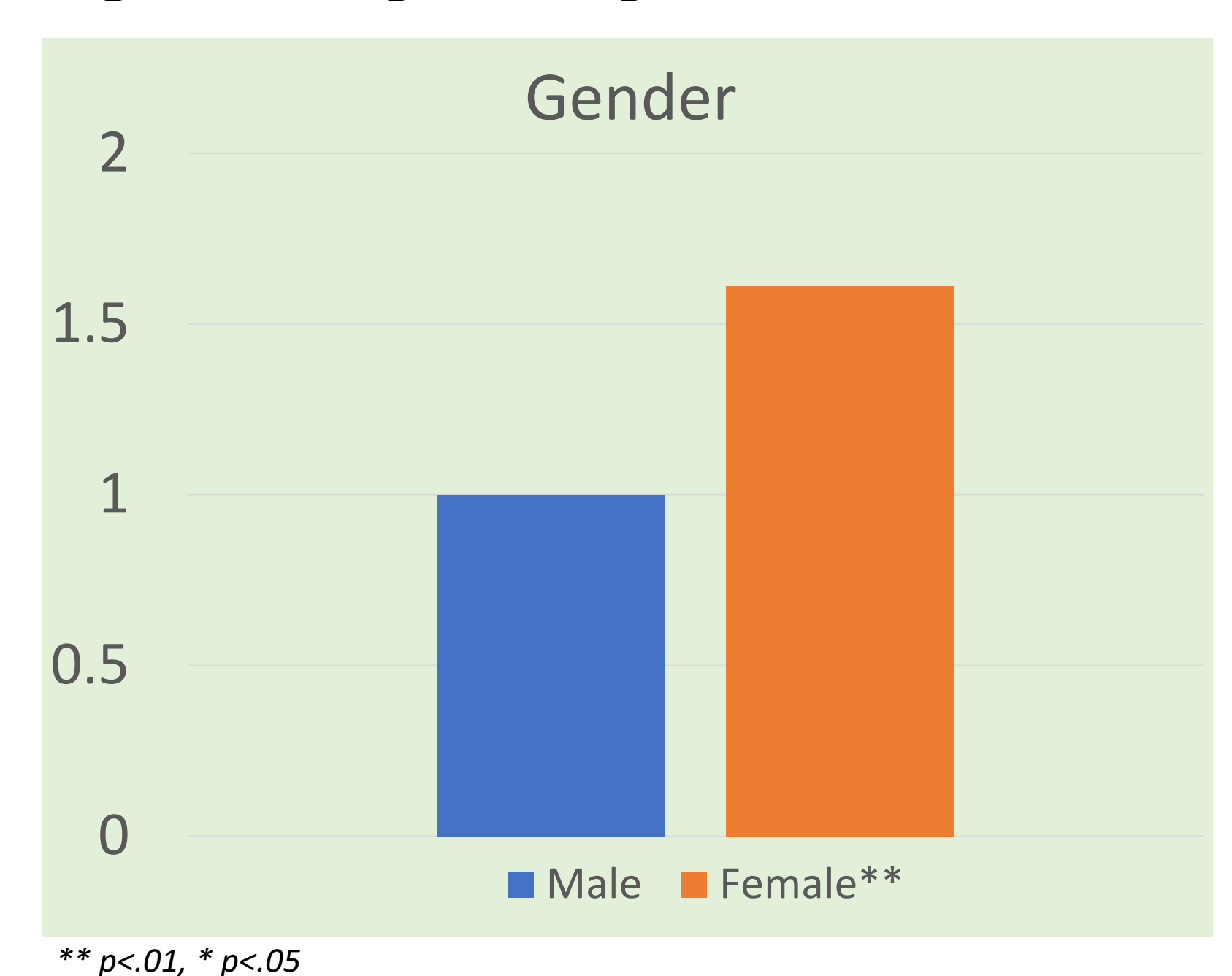


Figure 3. Logistic Regression: Race

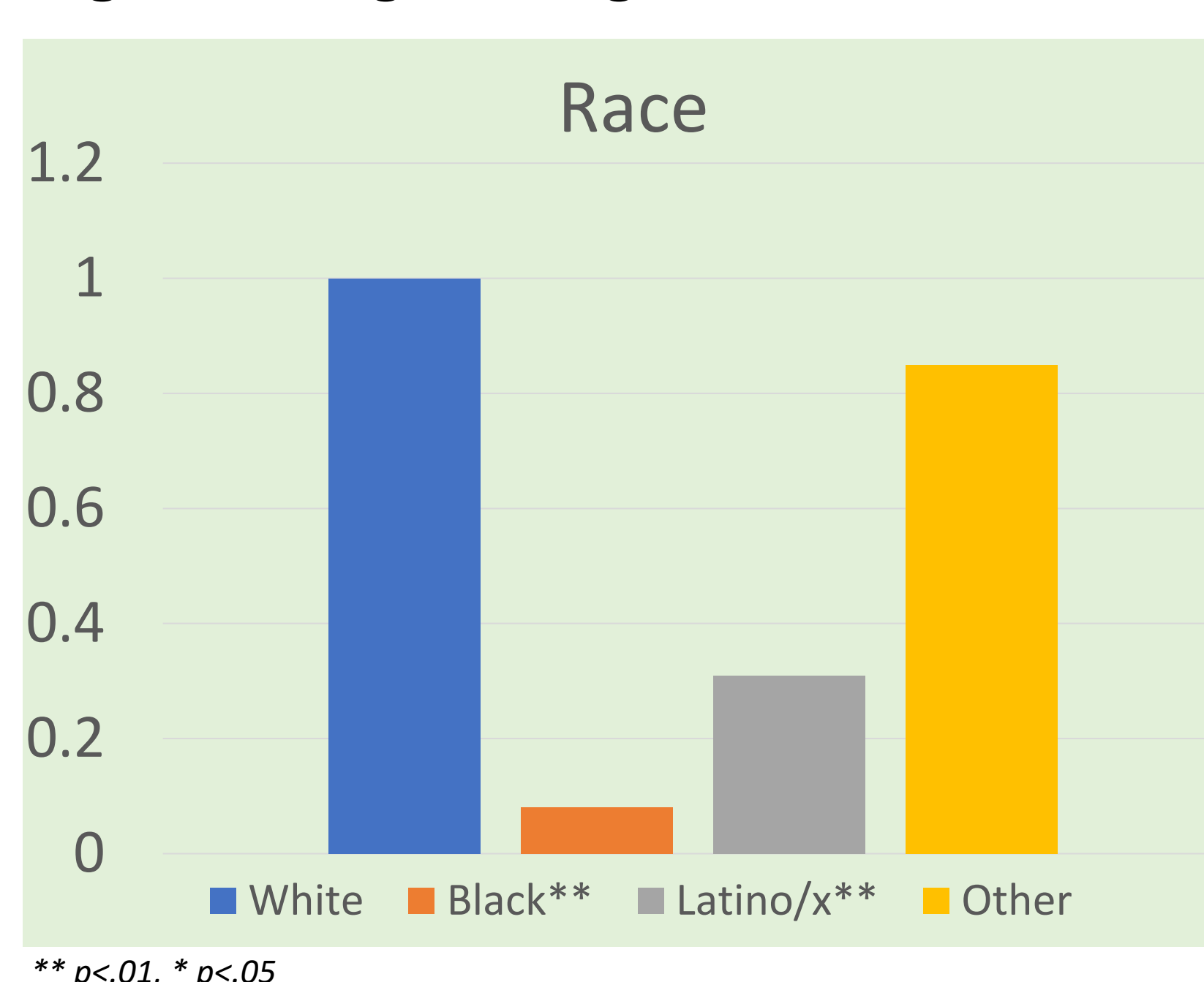


Figure 3 displays Black and Latino/x JIA all have a lower odds of using opioids compared to White JIA (AOR's= .08, .31, $p<0.01$). Other JIA also had a lower odds of using opioids but have found no significance (AOR= .85, $p=.2$).

Discussion & Implications

- Witnessing community violence is associated with higher rates of opioid misuse for JIA compared to those who have not witnessed community violence, emphasizing the impact of environmental risk factors on adolescent opioid use.
- Previous research suggests that despair is associated with opioid use and that depressive episodes mediate social capital (Sacra, Ford & Yohros, 2017) and opioid use among adolescents (Jesmin & Amin, 2020). Factors such as the mental health of the JIA may explain the association between community violence and opioid use since mental health disorders often increase due to community violence.
- Future directions should investigate one or more mediating variables that contribute to community violence and opioid use.

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