

The Effects of Structured Activity Involvement on Opioid Misuse in Justice-Involved Adolescents

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INTRODUCTION

- Adolescents who participate in extracurricular activities are less susceptible to misusing opioids.
- The relationship between different types of structured activities (i.e., supervised, non-academic, prosocial community activities) and their protective effect against opioid misuse (**OM**) among justice-involved adolescents () has yet to be tested.

We hypothesize that:

- **H₁**: JIAs involved in any type of structured activity will have lower odds of opioid misuse.
- **H₂**: As the number of structured activities JIAs are involved in increases, the odds of opioid misuse will decrease.

METHODS

- Multivariate logistic regression using STATA 18 SE was conducted on a statewide dataset of 79,960 JIAs from the Florida Department of Juvenile Justice.
- The Positive Achievement Change Tool intake assessment collected information on JIAs demographics, structured activity involvement, and past 30-day opioid misuse via self-report.

Variables:

- **Controls**: sex, age at first offense, family income
- **Independent**: adolescents' current structured activity involvement in religious/church groups, community/cultural groups, hobby groups/clubs, athletics, or volunteer organizations
- **Dependent**: opioid misuse in the past 30 days

RESULTS

Controls

TABLE 1. JIAs by Reported OM in Controls

	No Opioid Use		Opioid Misuse		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sex						
Male	61,006	78.4	1,457	68.2	62,463	78.1
Female	16,817	21.6	680	31.8	17,497	21.9
Total	77,823	100	2,137	100	79,960	100
Age at First Offense	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
12 & under	19,145	24.6	407	19.1	19,552	24.5
13 to 14	28,240	36.3	822	38.5	29,062	36.4
15	13,916	17.9	439	20.5	14,355	18.0
16	10,458	13.4	308	14.4	10,766	13.5
Over 16	6,064	7.79	161	7.53	6,225	7.79
Total	77,823	100	2,137	100	79,960	100

TABLE 3. Logistic Regression Estimating OM in Controls

	aOR	CI
Sex (reference=male)	-	-
Female	1.67***	[1.51,1.82]
Age at First Offense (reference=12 & under)	-	-
13 to 14	1.27***	[1.12,1.43]
15	1.33***	[1.16,1.52]
16	1.20*	[1.03,1.39]
Over 16	1.04	[0.87,1.25]
95% confidence intervals (CI)	* <i>p</i> < 0.05, *** <i>p</i> < 0.001	

- Female JIAs had 1.67 higher odds of meeting the criteria for past 30-day opioid misuse than male JIA.
- JIAs between the ages of 13 and 16 at their first offense had higher odds of meeting the past 30-day opioid misuse criteria than those 12 and younger.
- JIAs at age 15 had the highest odds for OM.

Structured Activities

TABLE 2. JIAs by Reported OM in Structured Activities

Structured Activity	No Opioid Use		Opioid Misuse		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
No structured activity	45,062	57.9	1,417	66.3	46,479	58.1
Community/cultural group	2,675	3.4	59	2.8	2,734	3.4
Hobby group/club	2,448	3.1	65	3	2,513	3.1
Athletics	7,087	9.1	119	5.6	7,206	9.0
Religious/church group	7,891	10.1	205	9.6	8,096	10.1
Volunteer organization	781	1.0	23	1.1	804	1.0
2 structured activities	8,686	11.2	184	8.6	8,870	11.1
3 structured activities	3,193	4.1	65	3	3,258	4.1
Total	77,823	100	2,137	100	79,960	100

TABLE 4. Logistic Regression Estimating OM in Structured Activities

	aOR	CI
No structured activity involvement	-	-
Community/cultural group	0.68**	[0.53,0.90]
Hobby group/club	0.77*	[0.60,0.99]
Athletics	0.56***	[0.46,0.67]
Religious/church group	0.80**	[0.69,0.93]
Volunteer organization	0.85	[0.56,1.29]
Two structured activities	0.66***	[0.57,0.77]
Three structured activities	0.63***	[0.49,0.81]
95% confidence intervals (CI)	* <i>p</i> < 0.05, ** <i>p</i> < 0.01, *** <i>p</i> < 0.001	

- JIAs involved in one of any structured activities were statistically significantly less likely to have past 30-day opioid misuse than those who had not been involved in any activities, except for those involved in volunteer organizations.
- JIAs involved in two or three structured activities had lower odds.

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DISCUSSION & CONCLUSIONS

- JIAs involvement in a single structured activity has a protective effect against opioid misuse, dependent on the activity.
- Furthermore, involvement in more than one of the structured activities is protective against opioid misuse.
- Community intervention efforts should work towards involving adolescents in at least one of these structured activities to help reduce the risk of opioid misuse.

