

Misperceiving Marijuana Use Among Peers and Personal Use Frequency Among U.S. Students



Jessica M. Perkins¹, Jordan Jurinsky¹, H. Wesley Perkins², David W. Craig²
¹Vanderbilt University; ²Hobart and William Smith Colleges



HOBART & WILLIAM SMITH COLLEGES

Background

Adolescent marijuana use may negatively impact brain development, resting functional capacity, intelligence, and cognitive function. Decades of social norms research has found people are motivated by what they believe most other peers do. However, few studies have assessed the extent to which adolescents overestimate marijuana consumption among different peer groups, such as the typical same grade-cohort student, males and females in the same grade, student-athletes, and high school juniors and seniors.

Study Design & Measures

- Anonymous online survey completed once between 1999 and 2017 by 174 grade cohorts of same-school same-grade students from 6th to 12 grade using a population-based study design. 79% response rate.
- 24,730 students across 49 diverse middle and high schools (with an average response rate of 76%) located in 10 states (AZ, CO, ID, IN, IA, MA, ME, NY, NJ, WA)
- Students were asked: How often do you typically use marijuana? How often do you think students in your grade, student-athletes, and juniors and seniors typically use marijuana? Seven response options ranged from Never to Daily.
- The actual marijuana use norm among same-grade peers in the same school was calculated as the median frequency of use based on the grade cohort aggregate of personal use.

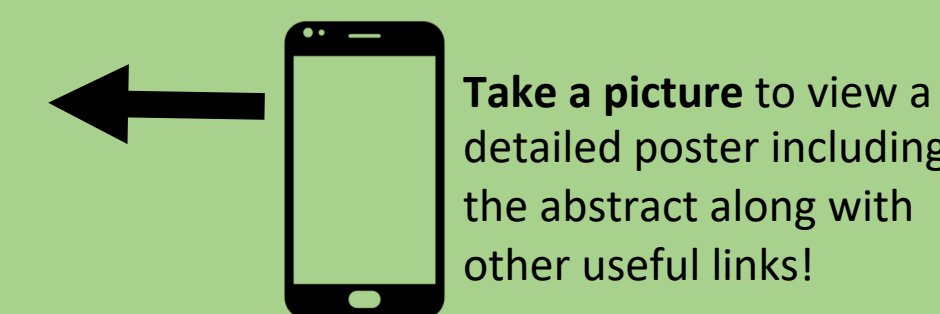
Conclusions and Implications

Norm misperception was pervasive indicating that a population-based social norms marketing intervention may be an appropriate method for reducing marijuana use among adolescents who do use marijuana, for preventing initiation among students who as of yet do not use, but who misperceive peers to use, and for creating a school-wide culture that supports marijuana use abstinence.

Interventions providing clear messages about the commonness of abstinence across all kinds of student groups via school-based media or personalized normative feedback may help to correct marijuana use norm misperceptions and reduce marijuana use among youth.

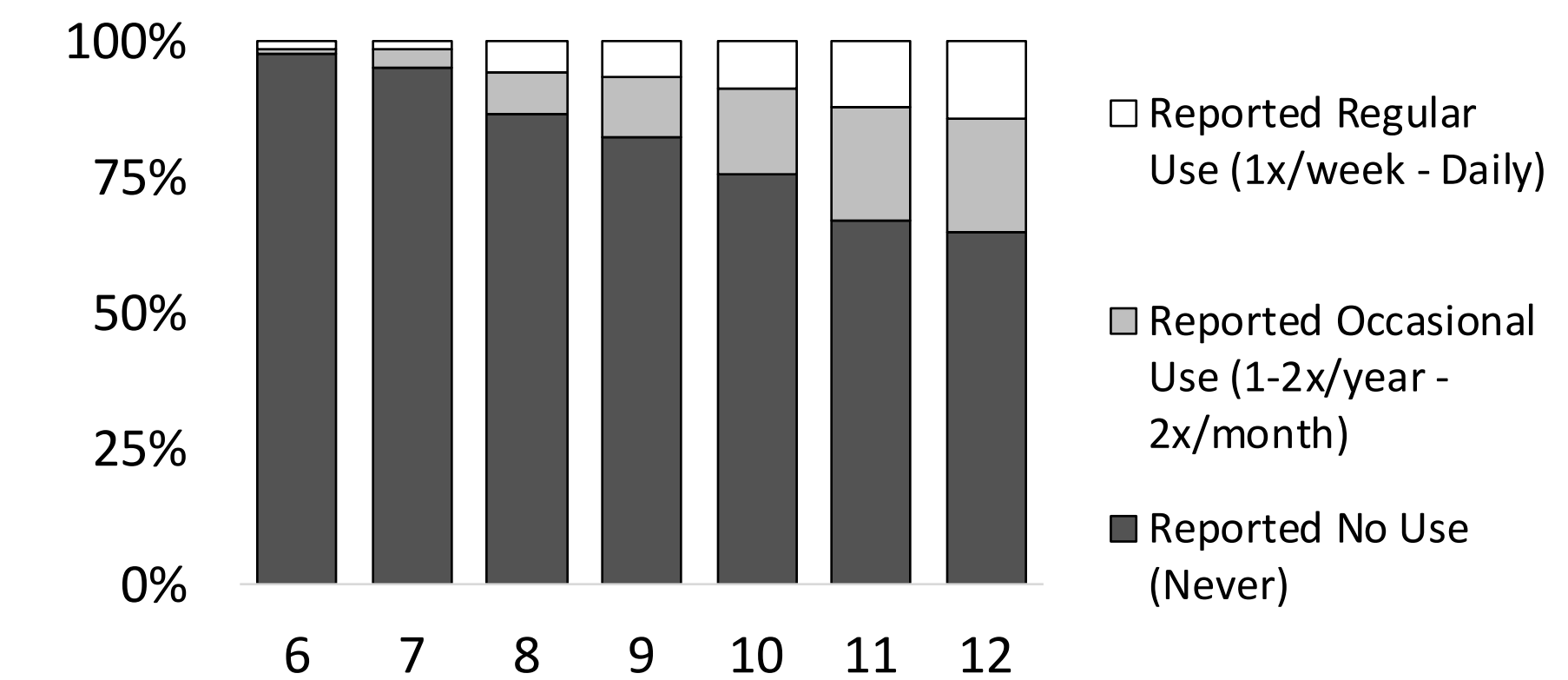
Marijuana abstinence was the actual norm among middle school and high school students. However, the median misperceived frequency of same-grade peer marijuana use was 1-2x per month.

Moreover, 90% thought that juniors/seniors in their school typically use marijuana 2x/month or more, 63% thought that athletes in their school typically use marijuana 1x/month or more, and 40% thought that friends in their school typically use marijuana 2x/month or more.

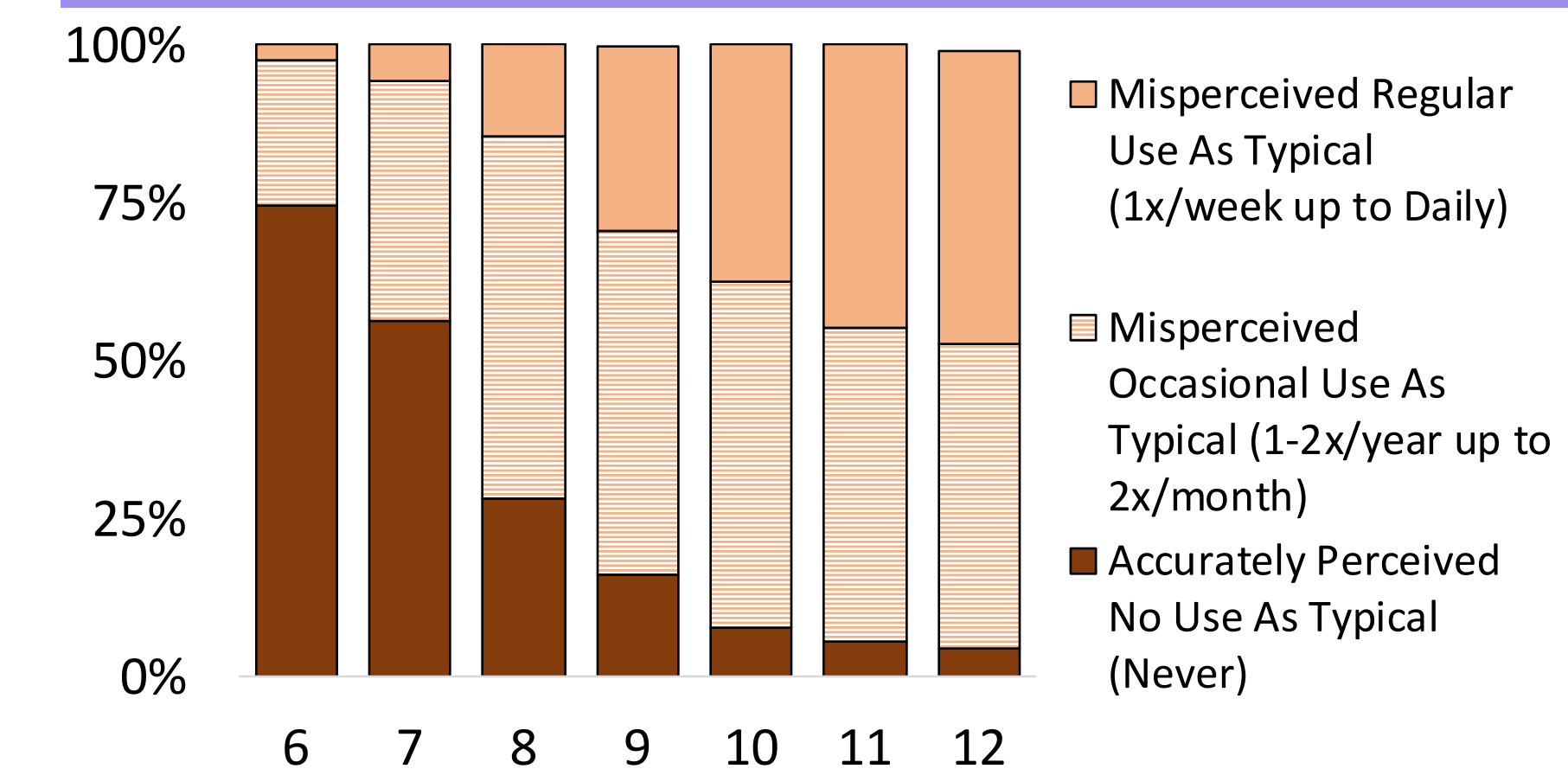


Misperceiving peers as using marijuana occasionally or regularly was pervasive across states, race/ethnicities, different school-based activities, and gender.

Although Most Students in Grades 6 to 12 Reported Never Using Marijuana in 97% of Grade Cohorts....



...26% to 95% of Students Erroneously Believed That Most Same-Grade Peers Use Marijuana Occasionally or Regularly



Perceived Peer Marijuana Use Norm Strongly Predicts Personal Marijuana Use

	Males		Females	
	AOR	(95% CI)	AOR	(95% CI)
Perceived peers to occasionally use (vs. never)	5.7	(4.4, 7.4)	5.3	(3.6, 7.9)
Perceived peers to regularly use (vs. never)	13.6	(10.4, 17.6)	14.2	(9.6, 20.9)
Actual prevalence of occasional or regular use among same-grade same-school peers:				
50-59% (vs. 0-9%)	7.0	(4.7, 10.5)	7.1	(4.6, 10.8)
40-49% (vs. 0-9%)	4.4	(3.1, 6.2)	5.1	(3.5, 7.4)
30-39% (vs. 0-9%)	3.2	(2.4, 4.3)	4.1	(3.0, 5.7)
20-29% (vs. 0-9%)	2.6	(2.0, 3.4)	2.7	(2.0, 3.7)
10-19% (vs. 0-9%)	1.9	(1.5, 2.4)	2.1	(1.6, 2.8)

Multilevel model adjusted for sociodemographic factors and accounted for clustering of students within schools.