



UNIVERSITY *of* WASHINGTON

PSYCHIATRY & BEHAVIORAL SCIENCES

School of Medicine

SIMULTANEOUS ALCOHOL AND MARIJUANA USE AMONG YOUNG ADULTS

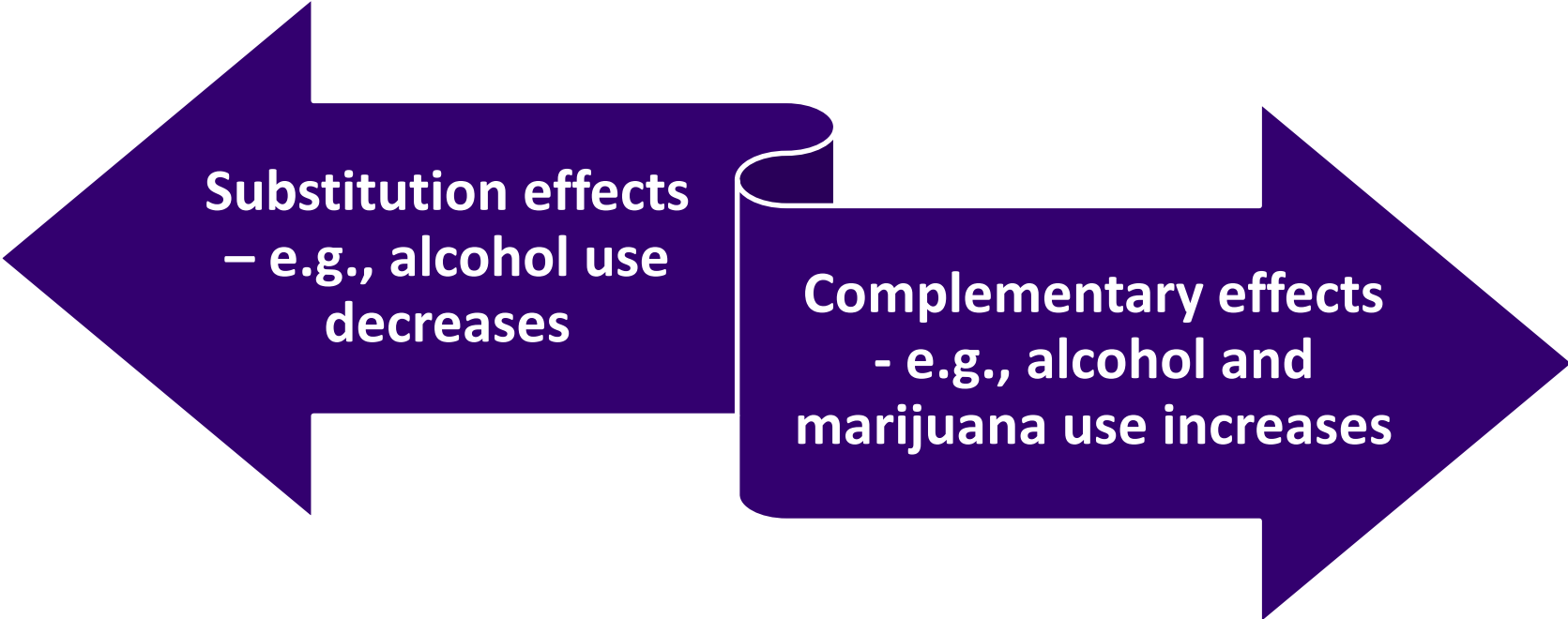
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POSSIBLE IMPACTS OF MARIJUANA LEGALIZATION



Substitution effects
– e.g., alcohol use
decreases

Complementary effects
- e.g., alcohol and
marijuana use increases

Guttmanova, K., Lee, C. M., Kilmer, J. R., Fleming, C. B., Rhew, I. C., Kosterman, R., & Larimer, M. E. (2016). Impacts of changing marijuana policies on alcohol use in the United States. *Alcoholism: Clinical and Experimental Research*, 40, 33-46.

LATE NIGHT WITH SETH MEYERS



“Scientists at the University of Washington are conducting a study to determine if marijuana smokers are more or less likely to drink alcohol. Here I will save them some time, they’re less likely to do anything.”
- Seth Meyers

2016 WA STATE PREVALENCE

HEALTHY YOUTH SURVEY

	Alcohol ¹		Marijuana ²	
	Lifetime	Past 30 Days	Lifetime	Past 30 Days
8 th	28%	8%	10%	6%
10 th	48%	20%	28%	17%
12 th	64%	32%	45%	26%
College ³	81.3%	63.2%	51.0%	22.2%
Young Adult ³ (19-28)	85.9%	68.4%	58.7%	21.6%

¹Healthy Youth Survey (2016). Alcohol Use for Washington State in 2016. <http://www.askhys.net/FactSheets>


²Healthy Youth Survey (2016). Marijuana Use for Washington State in 2016. <http://www.askhys.net/FactSheets>

³Miech et al. (2017). *Monitoring the Future national survey results on drug use, 1975–2016: Volume I, Secondary school students*. Ann Arbor: Institute for Social Research. The University of Michigan.


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58% used MJ



70% used Alcohol

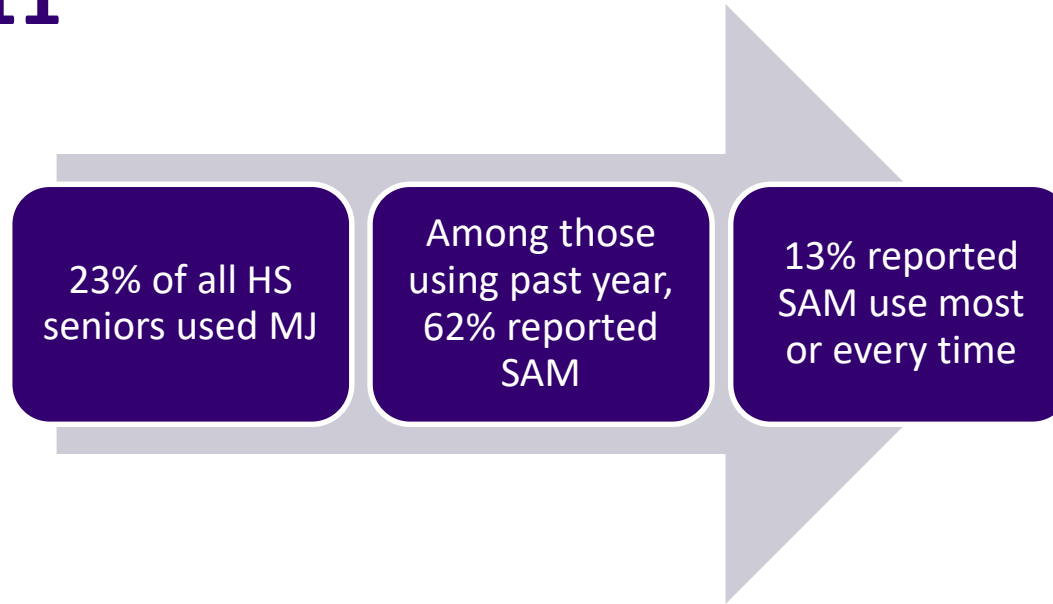
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SIMULTANEOUS ALCOHOL AND MJ USE (SAM)

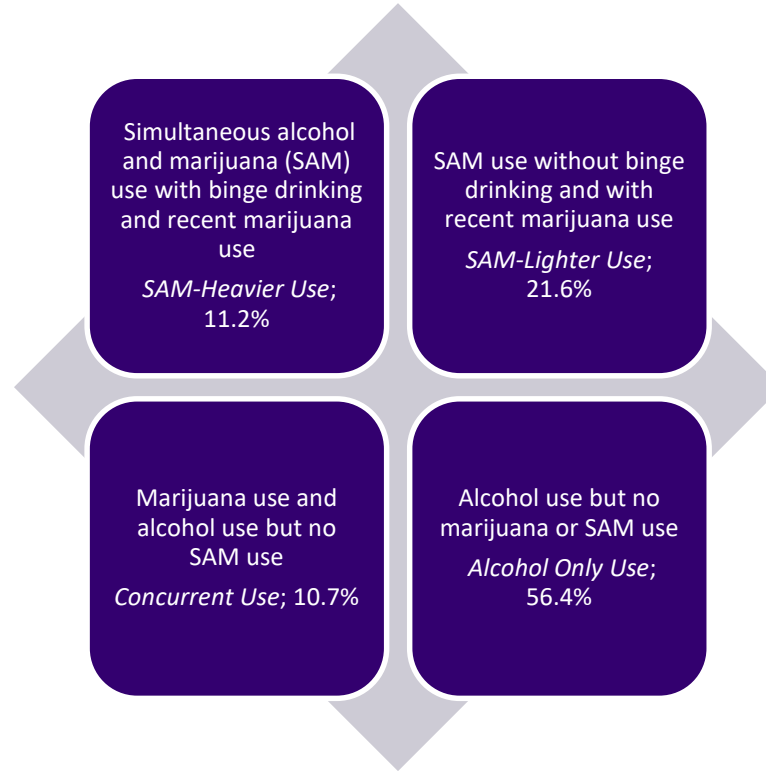
- In 2011



Terry-McElrath, O'Malley, & Johnston (2012). Simultaneous alcohol and marijuana use among US high school seniors from 1976-2011: Trends, reasons, and situations. *Drug and Alcohol Dependence*, 133, 71-79.

FOUR PATTERNS OF ALCOHOL AND MJ USE AMONG ADOLESCENTS

US-national samples of 12th graders ($N=84,805$, 48.4% female) from 1976 to 2016 in the Monitoring the Future



CONSEQUENCES/EFFECTS OF SAM USE

Substance-related legal, academic, interpersonal, and physical and mental health problems (Briere et al., 2011; Midanik et al., 2007; Pape et al., 2009).

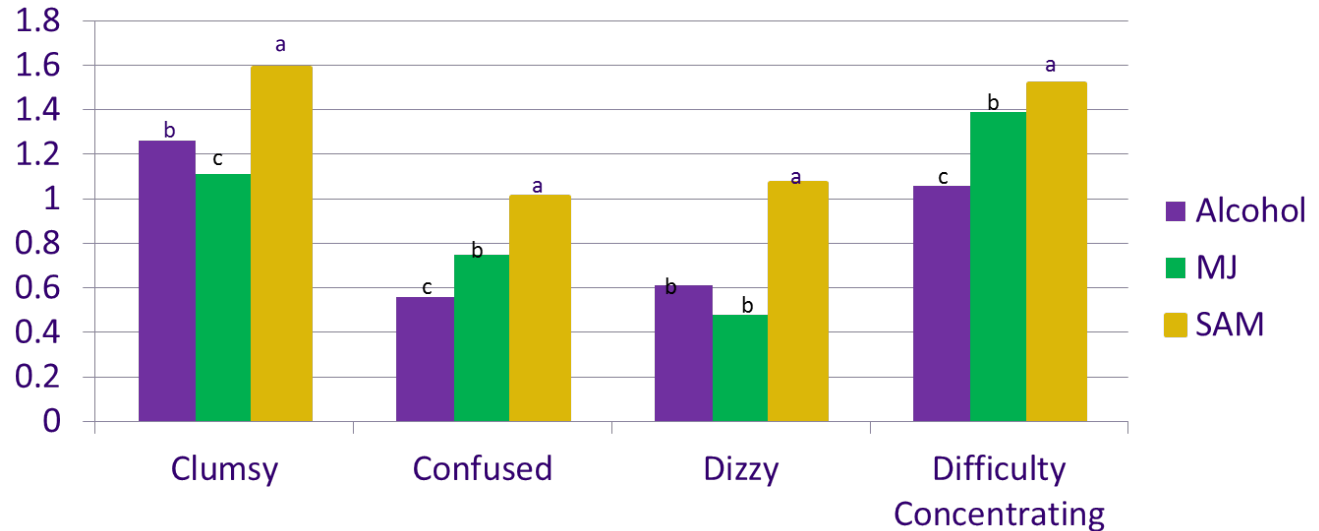
Incidence of traffic accidents is higher among those with SAM use (Ramaekers et al., 2004; Sewell et al., 2009; Terry-McElrath et al., 2014).

PERCEIVED EFFECTS ON TYPICAL OCCASIONS

“The following words describe feelings that are sometimes produced by drinking alcohol. Please rate the extent to which you feel each of the following when you typically use alcohol.”

- “...marijuana”
- “...alcohol and marijuana at the same time – that is so their effects overlap”

N = 315 who reported SAM at least 1+ lifetime



LATE NIGHT WITH SETH MEYERS



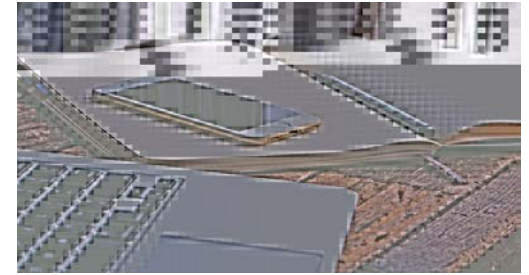
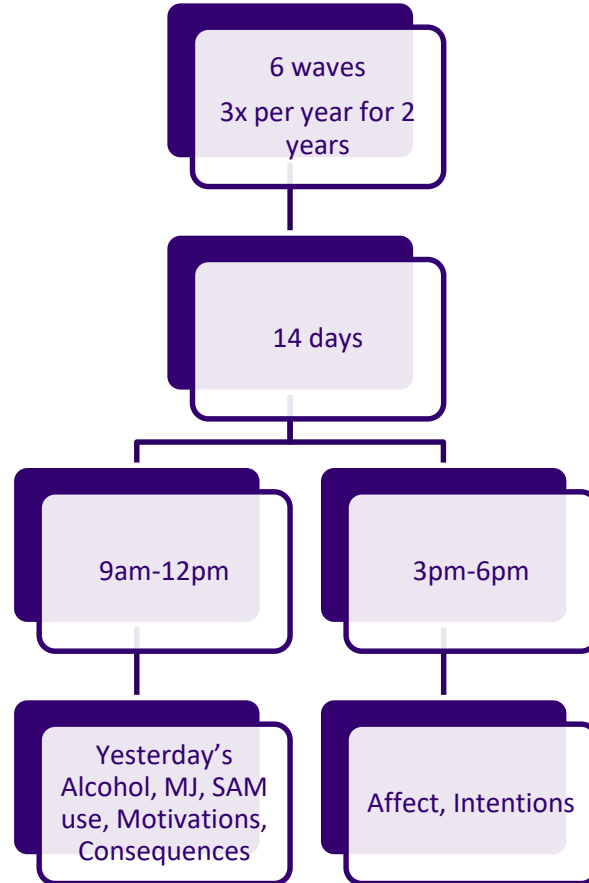
“Scientists at the University of Washington are conducting a study to determine if marijuana smokers are more or less likely to drink alcohol [on days they use marijuana at the same time]. Here I will save them some time, they’re less likely to do anything.”

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PROJECT SAM: SUBSTITUTION OR COMPLEMENTARY EFFECTS?



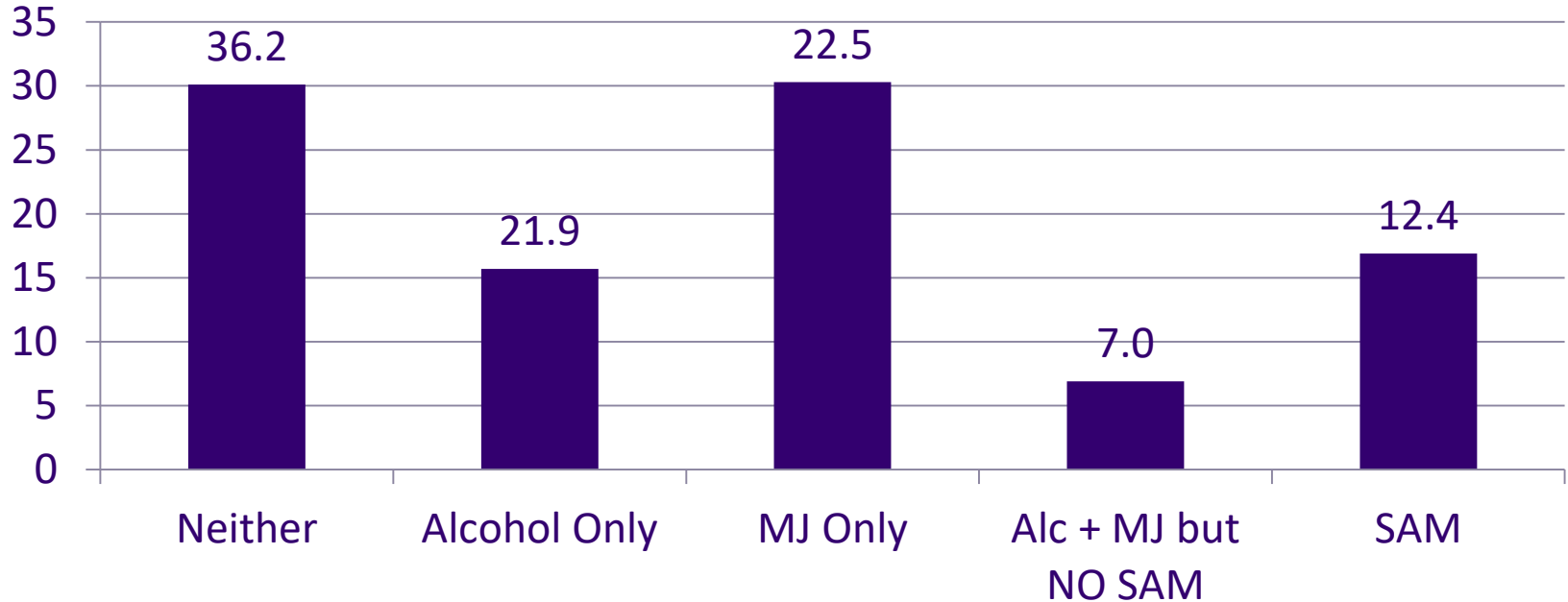
Recruiting 400 young adults (18-25) in local community who drink 3x/month and SAM at least 1/month.



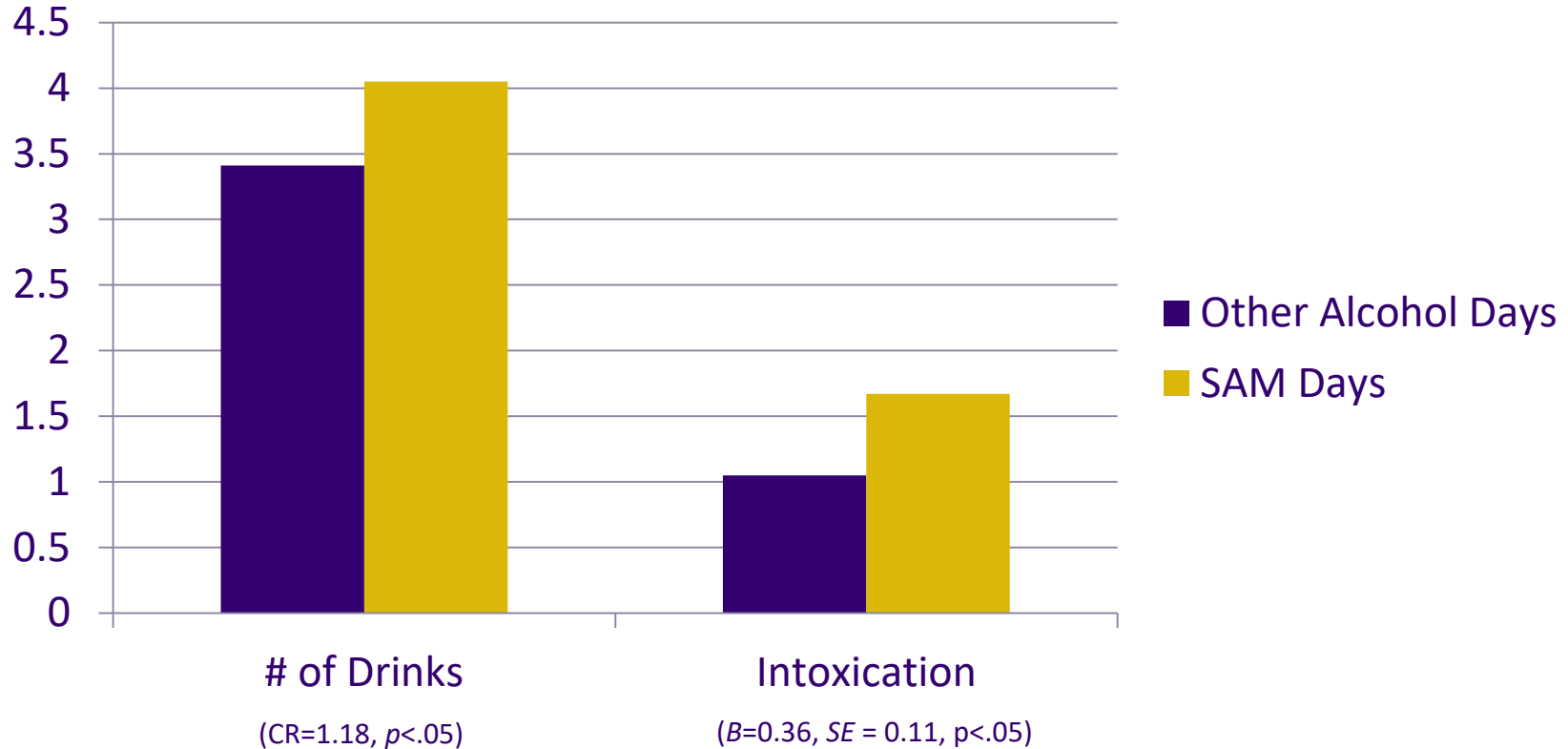
SAM use: “Yesterday, did you use alcohol and marijuana at the same time – that is, so that their effects overlapped?”

PRELIMINARY RESULTS FROM PROJECT SAM (N=134)

Percentage of Days (n=1723 reported days)

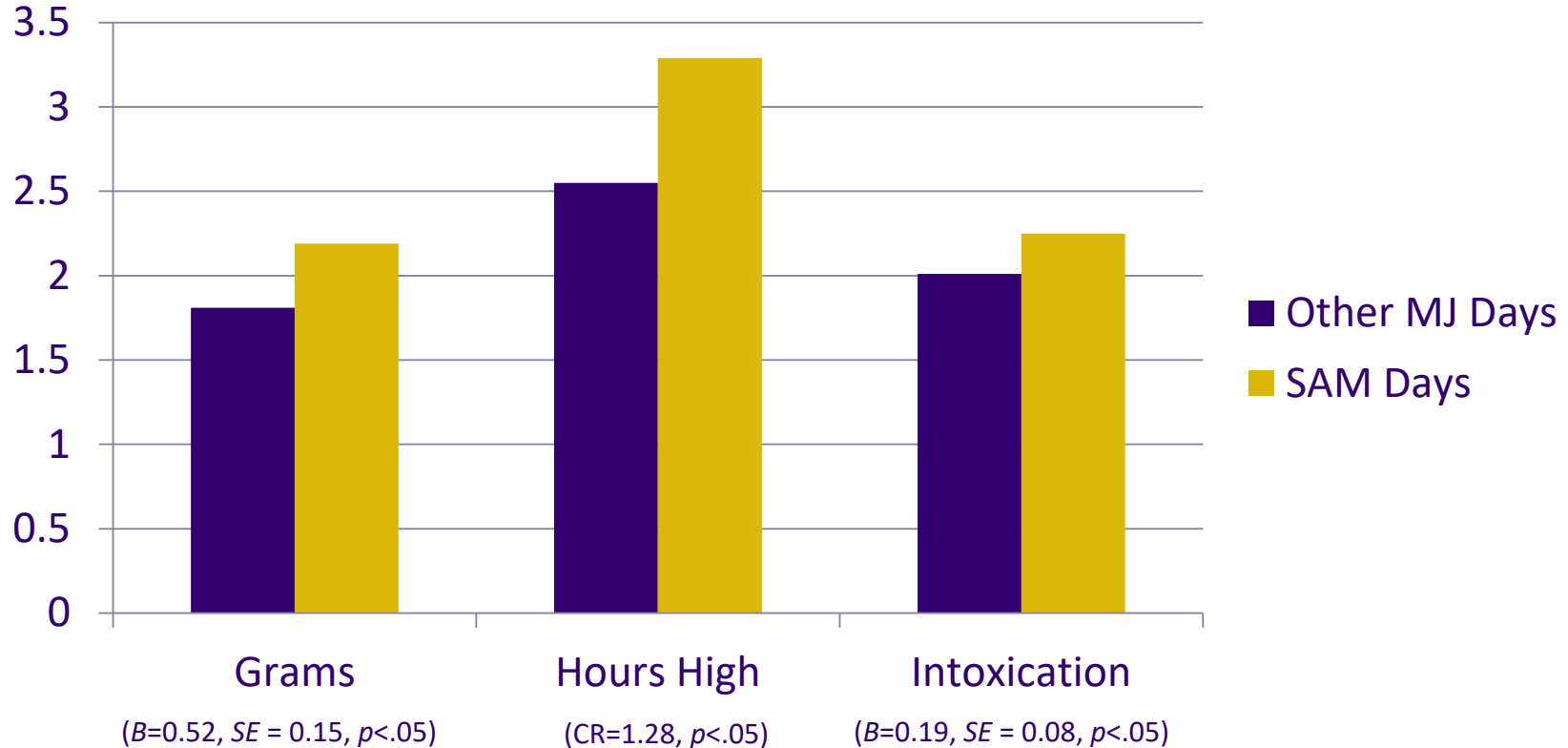


EXAMINING ALL DRINKING DAYS



* MLMs controlled for sex, age, proportion of SAM days at L2, and weekend at L1

EXAMINING ALL MARIJUANA DAYS



* MLMs controlled for sex, age, proportion of SAM days at L2, and weekend at L1

WHY THIS MATTERS – IMPLICATIONS FOR PUBLIC HEALTH

Preliminary evidence of complementary effects

- Greater alcohol and MJ use when both are used simultaneously
- Across people, more frequent SAM users have increased likelihood of negative alcohol-related consequences

Most using MJ also drink alcohol

- SAM users aren't just heavy users
- SAM-lighter class – possible greater risk on SAM occasions?

MOVING FORWARD

Longer-term impact of SAM use including behavioral and driving consequences and sexual-risk taking

How are substance use patterns changing among teens and YAs?

Prevention targets: Specific SAM motivations

THANK YOU





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Thank You

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