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

“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

<table>
<thead>
<tr>
<th></th>
<th>Alcohol(^1)</th>
<th>Marijuana(^2)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Lifetime</td>
<td>Past 30 Days</td>
</tr>
<tr>
<td>8(^{th})</td>
<td>28%</td>
<td>8%</td>
</tr>
<tr>
<td>10(^{th})</td>
<td>48%</td>
<td>20%</td>
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<tr>
<td>12(^{th})</td>
<td>64%</td>
<td>32%</td>
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<tr>
<td>College(^3)</td>
<td>81.3%</td>
<td>63.2%</td>
</tr>
<tr>
<td>Young Adult(^3) (19-28)</td>
<td>85.9%</td>
<td>68.4%</td>
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</tbody>
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# 2016 WA State Prevalence

## Healthy Youth Survey

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<th>Alcohol¹</th>
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<tr>
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<td>48%</td>
<td>20%</td>
<td>28%</td>
<td>17%</td>
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<td>12th</td>
<td>64%</td>
<td>32%</td>
<td>45%</td>
<td>26%</td>
</tr>
<tr>
<td>College³</td>
<td>81.3%</td>
<td>63.2%</td>
<td>51.0%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Young Adult³ (19-28)</td>
<td>85.9%</td>
<td>68.4%</td>
<td>58.7%</td>
<td>21.6%</td>
</tr>
</tbody>
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SIMULTANEOUS ALCOHOL AND MJ USE (SAM)

• In 2011

- 23% of all HS seniors used MJ
- Among those using past year, 62% reported SAM
- 13% reported SAM use most or every time

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

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

“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.”
- Seth Meyers
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)

- Neither: 36.2%
- Alcohol Only: 21.9%
- MJ Only: 22.5%
- Alc + MJ but NO SAM: 7.0%
- SAM: 12.4%
EXAMINING ALL DRINKING DAYS

# of Drinks

(CR=1.18, p<.05)

Intoxication

(B=0.36, SE = 0.11, p<.05)

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

(\(B=0.52, SE = 0.15, p<.05\))
(\(CR=1.28, p<.05\))
(\(B=0.19, SE = 0.08, p<.05\))

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

Research teams of Project Transitions and Project SAM

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UM: Megan Patrick

NIAAA for supporting our research
Thank You

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