COVID-19-Anxiety and Using Substances to Cope: Differences Across Race and Gender in a New York State College Student Sample

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College students and ...

- **Substance Use**
  - High risk for initiation of substance use
  - 75% past year alcohol use
  - ~25% Heavy Episodic Drinking
    - Aka “Binge drinking”
    - 4+/5+ drinks female/male
  - 35% Past year marijuana use
  - Associated with academic, social, and physical consequences

- **Mental Health**
  - Heightened mental health concerns
    - 45% reporting moderate to serious psychological distress within the past month
    - 23% reporting suicidal behavior
    - 2% reporting a suicide attempt in the past year

(American College Health Association 2020; Center for Disease Control 2016; Lipari and Jean-Francois 2016; Oswalt et al. 2020; Palmer et al. 2012; SAMHSA 2020, 2021; White and Hingston 2013)
Substance Use and Mental Health

- Stress Coping Model
  - Cope with stress
  - Reduce negative affect

- Use of substances to cope is a **substantial risk factor** for future substance use disorder

- Early Intervention = Critical!
Impact of COVID-19

● Substance use
  ○ Marijuana Use
  ○ Alcohol Use
    ■ (social opportunity, accessibility)

● Consistent increase in stress and anxiety
  ○ College women significantly lower levels of well-being

● Racial disparities
  ○ Disproportionate infections and mortality
  ○ Increased risk: Stress, negative affect
Research Questions:

What were the prevalence rates of college student substance use during the pandemic?

Are there differences in COVID-Anxiety and Alcohol Coping Motives based on racial and gender identity, while controlling for psychological distress?

Are there differences in COVID-Anxiety and Marijuana Coping Motives based on racial and gender identity, while controlling for psychological distress?
Purpose of the Present Study

#1: Examine prevalence rates:
- Alcohol use
- Marijuana use
- Using substances to cope with COVID-stress

#2: Group Differences:
- COVID-Anxiety
- Alcohol/Marijuana Coping Motives
### Method: Participants

Anonymous Online Survey: October 2020 - December 2020

\[ N = 1,487 \]

<table>
<thead>
<tr>
<th>Race/Ethnic Background</th>
<th>Gender</th>
<th>Living Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8% Hispanic or LatinX</td>
<td>71.4% cis-women</td>
<td>66% NYS Capital Region</td>
</tr>
<tr>
<td>9.8% Biracial</td>
<td>28.6% cis-men</td>
<td></td>
</tr>
<tr>
<td>13.2% Black or African American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.9% Asian or Asian American</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.3% White</td>
<td></td>
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</tr>
</tbody>
</table>

**Age**

\[ M \text{ age} = 23.34 \]
Method: Measures

Alcohol and Marijuana Use: Individual Items + Daily Drinking Questionnaire (Collins et al., 1985)

Increased AOD: “Have you started using substances or increased substance use to cope with stress or emotions related to COVID-19?”

Drinking Coping Motives: Drinking Motives Questionnaire-Revised (DMQ-R; Cooper, 1994; α = .86)

Marijuana Coping Motives: Marijuana Motives Measure (MMM; Simons et al., 1998; α = .83)

COVID-Anxiety: Generalized Anxiety Disorder-7 (Spitzer et al., 2006; Keeter, 2020; α = .79)

Psychological Distress: Kessler Psychological Distress Scale (Kessler et al., 2003; α = .91)
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## Results: Descriptive Findings

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Last Month Alcohol</th>
<th>Heavy Episodic Drinking</th>
<th>Last Month MJ</th>
<th>Increased AOD</th>
<th>COVID-Anxiety</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Cis-men</td>
<td>426</td>
<td>46.2</td>
<td>34.7</td>
<td>20.4</td>
<td>13.8</td>
<td>5.51</td>
<td>4.26</td>
</tr>
<tr>
<td>Cis-women</td>
<td>1061</td>
<td>52.7</td>
<td>37.3</td>
<td>20.5</td>
<td>17.9</td>
<td>7.55</td>
<td>7.55</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>206</td>
<td>28.6</td>
<td>19.2</td>
<td>9.2</td>
<td>10</td>
<td>6.54</td>
<td>4.45</td>
</tr>
<tr>
<td>Black/African American</td>
<td>197</td>
<td>32.0</td>
<td>21.4</td>
<td>21.3</td>
<td>18.8</td>
<td>6.53</td>
<td>4.30</td>
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<tr>
<td>Hispanic/Latinx</td>
<td>131</td>
<td>41.2</td>
<td>57.1</td>
<td>25.2</td>
<td>14.2</td>
<td>6.14</td>
<td>3.97</td>
</tr>
<tr>
<td>White</td>
<td>807</td>
<td>62.6</td>
<td>38.6</td>
<td>21.6</td>
<td>16.9</td>
<td>7.18</td>
<td>4.44</td>
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<tr>
<td>Biracial</td>
<td>146</td>
<td>51.4</td>
<td>32</td>
<td>25.3</td>
<td>24.1</td>
<td>7.82</td>
<td>4.54</td>
</tr>
</tbody>
</table>
Research Questions:

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Are there differences in COVID-Anxiety and Marijuana Coping Motives based on racial and gender identity, while controlling for psychological distress?
COVID-Anxiety Scores by Race and Gender Identity

- Asian/Asian American
- Black/African American
- Hispanic/Latinx
- White
- Biracial
- Cis-men
- Cis-women

The graph shows the mean scores for each category. Cis-women have the highest anxiety scores, followed by Asian/Asian American, Black/African American, Hispanic/Latinx, White, Biracial, and Cis-men.
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Are there differences in COVID-Anxiety and Marijuana Coping Motives based on racial and gender identity, while controlling for psychological distress?
COVID-Anxiety Across Race and Gender

- Asian/Asian American
- Black/African American
- Hispanic/Latinx
- White
- Biracial
- Cis-men
- Cis-women

COVID-Anxiety (Means)
Key Takeaways

● Presence of gender and racial disparities in the impact of the pandemic

○ College Women
  ■ Past month alcohol use
  ■ Risky alcohol use
  ■ Psychological distress
  ■ COVID-anxiety
  ■ Increased substance use due to COVID-related stress
Key Takeaways

- Presence of gender and racial disparities in the impact of the pandemic

  - **Biracial Students**
    - Past month alcohol use
    - Risky alcohol use
    - Psychological distress
    - COVID-anxiety
    - Increased substance use due to COVID-related stress
Key Takeaways

<table>
<thead>
<tr>
<th>Alcohol Use</th>
<th>Drinking to Cope</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGHEST Frequency</td>
<td>White VS Black / African American</td>
</tr>
<tr>
<td>HIGHEST Quantity</td>
<td>Hispanic / LatinX VS Asian / Asian American</td>
</tr>
</tbody>
</table>
# Key Takeaways

<table>
<thead>
<tr>
<th>Marijuana Use</th>
<th>Using Marijuana to Cope</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGHEST Frequency</td>
<td>VS</td>
</tr>
<tr>
<td>- Hispanic / LatinX &amp; Biracial</td>
<td>- Hispanic / LatinX &amp; Biracial</td>
</tr>
<tr>
<td></td>
<td>- Black / African American</td>
</tr>
</tbody>
</table>
Q & A