Perceived Harmfulness of Marijuana Relative to Alcohol

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1. Introduction
- Evidence shows that legalizing recreational marijuana will likely affect use of other substances, including alcohol.
- A recent review of the literature suggests that marijuana functions as a substitute for alcohol in some contexts and as a complement in others (1).
- Factors that may influence the relationship between marijuana and alcohol use are age, gender, education, and political affiliation.
- All of this, it is unclear whether legalization of marijuana for recreational use will increase or decrease the significant social costs associated with alcohol (4).

2. Purpose
- This study documents perceptions of the relative harmfulness of marijuana and alcohol to a person’s health, among adults in Oregon in September 2015, just before the first legal sales of marijuana for recreational use to adults age 21 and older.
- We examined overarching perceptions of relative harmfulness of marijuana and alcohol and differences in perceptions by demographic variables, including age, gender, education, and political affiliation.
- We also examined the effect of current marijuana and alcohol use on perceived relative harmfulness of the substances.

3. Study Methods
- We conducted a survey of 1,941 adults in Oregon in September 2015. Respondents were recruited using an address-based sampling (ABS) frame (n=1,314) and social media advertising (n=627). A mailing to ABS-sampled households included a paper survey and return envelope (n=1,000 households) or an invitation to complete an online survey (n=2,650 households).
- We measured perceived relative harmfulness of marijuana and alcohol by asking, “Which do you think is more harmful to a person's health, alcohol or marijuana?”
- We used descriptive statistics and logistic regression models to examine perceptions of the relative harmfulness of marijuana and alcohol by sample characteristics, including substance use.

4. Results
- In general, respondents who were younger, male, and not Republican were more likely than others to consider marijuana more harmful than alcohol.
- Respondents who were older, female, and Republican were more likely than others to consider marijuana and alcohol equally harmful.
- The overarching finding—that alcohol is considered more harmful than marijuana—holds true within all but two subgroups: Republicans and adults aged 65 or older.
- Among Republicans and those aged 65 or older, the most commonly endorsed belief was that marijuana and alcohol are equally harmful.
- The subgroup with the highest proportion of respondents reporting that marijuana is more harmful than alcohol was Republicans (15.1%).

Fig. 2. Perceived harmfulness of marijuana and alcohol use by substance use subgroup, controlling for age, gender, education, and political affiliation

Which do you think is more harmful to a person’s health, alcohol or marijuana?

<table>
<thead>
<tr>
<th>Substance</th>
<th>Total (n=1,941)</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Both</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>595 (31.1%)</td>
<td>292 (49.2%)</td>
<td>285 (47.8%)</td>
<td>18 (3.0%)</td>
<td>10 (1.7%)</td>
</tr>
<tr>
<td>Marijuana</td>
<td>208 (10.9%)</td>
<td>44 (21.4%)</td>
<td>120 (57.8%)</td>
<td>44 (21.4%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

5. Limitations
- Although the measure of perceived relative harmfulness of marijuana and alcohol is similar to a measure validated for other substances (6), this particular measure has not been validated.
- Marijuana was illegal at both the state and federal levels when these data were collected. This may have influenced reporting.

6. Discussion
- Research shows that marijuana functions as a substitute for alcohol in some contexts and as a complement in others, and that perceptions of harmfulness may play a role in this relationship.
- As state lawmakers develop policies to control and regulate marijuana, it may be helpful to consider the ways in which those policies may also affect use of alcohol and co-use of alcohol and marijuana.

References

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