Motivations for Alcohol and Marijuana Use
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Abstract

Motives for alcohol and marijuana use (e.g. social, coping) are similar for both substances. This study examined differences in motives between participants who use both alcohol and marijuana and those who use only alcohol. 347 participants were recruited from Amazon Mechanical Turk and undergraduate classes. They completed the Drinking Motives Questionnaire, the Alcohol, Smoking, and Substance Involvement Screening Test, and demographic items. Differences in magnitude of motivation to use varied across motives and by substance. Results indicated that participants who use both substances reported higher motivations for use overall than those who use only alcohol. This study also investigated adding an additional motivational dimension: expansion. Motivation for expansion motives was low for alcohol use supporting the theory that expansion motives are more closely related to marijuana use. These findings expand on existing substance use literature and suggest implications for future research such as investigating the relationship between expansion motives and other substances.

Keywords: alcohol, marijuana, substance use, motivations, motives

Method

Commonly Used Substances
- Alcohol (AddictionCenter, 2019)

Motivational Model of Alcohol Use (Cooper, 1994)
- Type of reinforcement (positive, negative) and (internal, negative)
- Subjective (positive, external)
- Enhancement (positive, internal)
- Conformity (negative, external)
- Coping (negative, internal)

Drinking Motives Questionnaire-Revised (DMQ-R; Cooper, 1994)
- 20 item self-report measure
- Additional 5 questions to assess expansion motives (Newcomb et al., 1998; Simons et al., 1998)
- Taken twice: once for alcohol use, once for marijuana use
- Questions randomized within each version

Results

Alcohol Only Users vs. Alcohol and Marijuana Users
2x5 mixed factor ANOVA
- Between-subject factor of substance (use both alcohol and marijuana, use only alcohol)
- Within-subject factor of motive (coping, conformity, social, enhancement, expansion)
- Main Effect of Substance F(1, 231) = 36.44, p < .001, η² = .14
- Participants who use both substances reported higher motivations for use (M = 11.54, SD = 4.42) than those who use only alcohol (M = 8.86, SD = 4.94)
- Main Effect of Motive F(2.42, 715.82) = 158.13, p < .001, η² = .41
- Social (M = 13.94, SD = 5.14), Enhancement motives (M = 12.36, SD = 4.94), and Coping motives (M = 9.32, SD = 4.76) differed from each other and from the other two motives (all p’s < .001)
- Conformity (M = 7.71, SD = 3.85) and expansion (M = 7.76, SD = 3.72) motives were lowest and did not differ from each other (p < .89)
- Interaction Between Motive and Substance F(3.24, 715.82) = 9.64, p < .001, η² = .042
- See Figure 1

Discussion

Support for Previous Findings
Social motives are common for both alcohol and marijuana use (Bentea, 2014; Bonn-Miller et al., 2007; Simons et al., 2011)
- Highest motivation for alcohol use was reported for social motives
- For participants who use both alcohol and marijuana
- For participants who use both substances, social motives for marijuana use received the second highest reported motivation for use (tied with coping motives)

Support for Expansion as a Fifth Dimensional Motive
Support adding expansion motives as a fifth motivational motive when investigating marijuana use (Newcomb et al., 1998; Simmons et al., 1993)
- Higher motivation for expansion motives for marijuana use than alcohol use among participants who use both substances

Future Research
- Investigate correlation between problematic use and motives
- Investigate correlation between life experiences/predictors of use and motives
- Investigate expansion motives for other substances

References

World Health Organization. (2002). The Alcohol, Smoking, and Substance Involvement Screening Test. This project has been funded by an A.J. Palumbo Student Research Grant