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Dangers of simultaneous alcohol and marijuana use
Young adults who have low levels of reward from their environments are at greater risk for alcohol severity, researchers have found in a study of 393 college students. These individuals may benefit from brief interventions that focus on increasing rewards (that are not related to substances) for individuals who have inadequate rewards in their lives.

The study was based on behavioral economic theory, which predicts that low access to reward is a risk factor for alcohol use disorder (AUD).

Using a behavioral economic supplement to brief alcohol interventions may benefit these individuals, the researchers showed. The college students in the study reported at least two heavy-drinking episodes in the past month. They were randomly assigned to 1) a standard alcohol-focused brief motivational intervention plus relaxation training session (BMI + RT), 2) BMI plus Substance-Free Activity Session (BMI + SFAS), or 3) an assessment-only control condition (AO).

In a secondary analysis, researchers used person-centered statistical techniques to describe trajectories of alcohol severity and environmental reward over a 16-month follow-up and whether environmental reward levels moderated the effectiveness of the interventions.

Reward availability was low for 120 of the participants and high or stable for 273.

Depressive symptoms, cannabis use, sensation seeking, alcohol severity, and low life satisfaction were associated with a greater probability of low reward. For students in the LR trajectory, at 1, 6, and 12 months, BMI + SFAS led to greater increases in reward availability and reduced levels of alcohol severity compared with the BMI + RT and AO conditions and at 16 months compared with AO.

Murphy JG, Campbell KW, Joyner KJ, et al. Trajectories of reward availability moderate the impact of brief alcohol interventions on alcohol severity in heavy-drinking young adults. Alcohol Clin Exp Res. 2021 Aug 2; doi: 10.1111/acer.14681; online ahead of print.

Screen time and lack of sleep in young children linked to psychopathologies within 5 years
An unhealthy lifestyle during adolescence is associated with a two-fold increase in the likelihood of multiple psychopathologies over five years, researchers in China have found. These pathologies included alcohol use, depressive symptoms, suicidal ideation, and non-suicidal self-harm for all except the healthiest young people.

Because of rapid changes in socioeconomic conditions, China is an ideal laboratory for how these changes, which include screen time, lack of sleep, and drinking sodas, affect adolescent mental health. These lifestyle changes can, of course, be modified to lead to more healthy trajectories, the researchers write.

Puberty
Pubertal transition and its associations with psychopathological outcomes were the main focus of this study. For the study, 1,974 children aged 7–9 years were recruited during March 2013. Lifestyle behaviors — screen time, physical activity, sleep duration, and beverage intake — and depressive symptoms were assessed from Wave 1 to Wave 4. By 2018 (Wave 4) suicide ideation, non-suicidal self-harm, and alcohol use were also assessed via self-report.

The researchers identified four lifestyle trajectories: persistent healthy (39.9%), suboptimal healthy (25.3%), unhealthy mitigation (17.2%), and persistent unhealthy (17.7%). Compared with the persistent healthy group, the odds ratios were 2.86 for suicide ideation, 2.16 for depressive symptoms, 2.53 for alcohol use, and 1.35 for non-suicidal self-harm.

Zhang A, Fang J, Wan Y, et al. Joint trajectories of lifestyle indicators and their links to psychopathological outcomes in the adolescence. BMC Psychiatry 2021 Aug 17; 21(1):407. doi: 10.1186/s12888-021-03403-y.

Pandemic sees steady alcohol and marijuana use in youth
Despite seeing a historic decline in youths’ perceived availability of alcohol and marijuana during last year’s peak of COVID-19 restrictions, use of these substances did not show a corresponding drop, newly released data indicates. The study’s lead author told CPU that the findings were so surprising to him that he had to set them aside for a time to try to process what he was seeing.

Social Distancing
“We thought that the social distancing and schools closing down would lead to dramatic reductions in use,” said Richard Miech, Ph.D., principal investigator for the Monitoring the Future survey at the University of Michigan’s Institute for Social Research. “We thought that if you took out school, peer pressure would be gone. There would be fewer connections to friends and less access to drugs.”

Instead, the follow-up findings from a subsample of adolescents who had participated in the Monitoring the Future survey before it was prematurely halted in 2020 showed stable levels of past-month marijuana use and recent binge drinking during the pandemic.

In the face of the largest documented declines in the availability of these substances in the survey’s 45-year history, these results call into question the potential effectiveness of youth prevention strategies that rely too heavily on efforts to restrict the supply of drugs.

Vaping
Where researchers did see results that were more in line with expectations based on historic patterns occurred with nicotine vaping, where declines in both availability and youth use were reported.

Theories abound on why the results for vaping diverged from those for marijuana and alcohol, including the possibility that they reflect a broader turning away from vaping that was suggested in earlier surveys and might continue.

Miech R, et al. Adolescent drug use before and during U.S. national COVID-19 social distancing policies. Drug and Alcohol Dependence 2021; 24:226; doi: 10.1016/j.drugalcdep.2021.108822. Online ahead of print.