A recent Penn State study examined the use of two different scales that researchers could use with young adults to ask them how intoxicated they feel after drinking. The top figure shows the new four-anchored scale developed at Penn State that contains words commonly used by young adults, and the bottom figure shows a standard scale used by researchers. The four-anchored sliding scale puts the word "Drunk" in a context between "Tipsy/Happy" and "Wasted." The study found that the four-anchored sliding scale was effective in gauging how young adults feel when they have been drinking and predicting the associated negative consequences. Based on these findings, Ashley Linden-Carmichael, assistant research professor at the Edna Bennett Pierce Prevention Research Center recommends the use of the four-anchored sliding scale. Credit: Penn State

The words young adults use to describe how they feel when they have been drinking alcohol are a key to understanding whether they will engage in risky behaviors such as driving under the influence. A new scale for researchers developed at Penn State has been shown effective in gauging how young adults feel when they have been drinking and predicting the associated negative consequences.

"We wanted to understand which words young adults are using because they are at the highest risk for substance misuse," said Ashley Linden-Carmichael, assistant research professor of health and human development in the Edna Bennett Pierce Prevention Research Center and the study's principal investigator. "We need a consensus on how young adults talk about the effects of alcohol, so we can measure the effects correctly."

The standard way to measure how intoxicated people feel has been to ask, "How drunk do you feel?" on a zero-to-100 scale. "But different people interpret the word 'drunk' in a very different way," said Linden-Carmichael.

To compare the anchored and standard scales, the research team used data collected from 154 adults ages 18-25 who had reported at least one heavy drinking episode in the past two weeks and combining alcohol and cannabis use at least once in the past month. They analyzed how the two scales predicted daily-level alcohol consumption and negative consequences over the course of 14 days and found that the four-anchored sliding scale performed similarly well as the standard scale in predicting alcohol-use outcomes. The results are described in a paper by Linden-Carmichael and Brian Calhoun, research associate at the University of Washington, recently published in the journal Experimental and Clinical Psychopharmacology.
Until very recently, according to Linden-Carmichael, no similar scale has been used to measure the subjective effects of cannabis use. As co-director of the Addiction and Innovation Lab, she is collaborating on research with Prevention and Methodology Training Program post-doctoral fellow Renee Cloutier on a four-anchored scale to report the effects of cannabis that uses the words "relaxed," "calm/chill," "high," and "stoned/baked" as anchors. She is also working with Alyssa Abrams, doctoral candidate in school psychology, on a study investigating words young adults use to describe how they feel when they use both alcohol and cannabis.

Linden-Carmichael stressed the importance of using research to choose words for ad campaigns designed to prevent driving under the influence, noting that young adults may reject language that doesn't resonate with them.

"We have to constantly come up with new measures to keep up with how young adults describe the effects of alcohol and other substances," Linden-Carmichael suggested. "This was a quick survey with meaningful results, and we could easily do it again if we hear that they don't use words like 'wasted' anymore."

**More information:** Ashley N. Linden-Carmichael et al, Measuring subjective alcohol effects in daily life using contemporary young adult language.