



## Research on Alcohol

Research on alcohol finds that it is dangerous for adolescents to use alcohol. Here are some of the most interesting recent studies.

### Long Term Poor Decision-Making

Adolescent rats that consume large amounts of alcohol were more likely to make poor decisions as adults. This suggests that youthful drinking could set the stage for additional bad decision-making later in life, according to researchers. Scientists believe that decision-making regions of the brain are slow to develop and development extends past typical adolescence. Research on alcohol performed with rats are important to humans because rat and human brains have similar structures. Rats are also able to live in very controlled environments which helps researchers pinpoint correlations.

### Advertising Impacts Youth Use

There are many myths about underage alcohol consumption. One pervasive belief was that it was not possible to survey youth about their brand preferences. This study found that it was not only possible to survey youth about brand specific alcohol consumption, but also that they tend to drink brands that are advertised through television programs and magazines that are geared toward young people. Youth brand preferences are unrelated to adult preferences or price.

Alcohol brands often advertise on social media, including more than 1,000 company-sponsored

alcohol brand sites on Facebook. While there are age-affirmation tools on these sites, entering a birthdate might not be an adequate way to keep youth from accessing the sites. Future research could examine ways to keep youth from accessing alcohol (or other inappropriate) sites.

Youth have expanded beyond beer in their drinking preferences. They consume many types of alcoholic beverages, including beer, spirits, flavored alcoholic beverages, and novelty drinks. Different groups of youth (by gender and race/ethnicity) also show different preferences for brands, which may point to some of the impacts of advertising.

## Preventing Alcohol Use

Researchers in Taiwan used data from the CABLE longitudinal survey to explore the effects of mothers and fathers on attitudes towards underage alcohol use. The study found that mothers' drinking and attitudes towards drinking impacted female children more. At the same time, fathers' drinking and attitudes towards drinking impacted male children more. This research on alcohol was conducted outside of the United States, but it suggests that prevention of underage drinking should be gender-specific. Additional research conducted in the United States could further examine this phenomenon.

## Social Group Impacts Drinking

Does the size of your social group impact the amount you drink? Researchers asked 183 young adults to complete cellphone-based assessments hourly from 8 PM—midnight on Thursday, Friday, and Saturday evenings. The questionnaire focused on how many drinks had been consumed and how many friends were present with the subject. Researchers found that the number of friends present is associated with a higher hourly drinking rate. Participants tended to drink more if they had a larger group of friends with them. This impact was stronger for men than for women.

## Predicting Binge Drinking

In a study of 692 white European adolescents, researchers were able to generate models of current and predictive alcohol misuse. The models incorporated brain structure and function, individual personality and cognitive differences, environmental factors (including prenatal), life experiences, as well as candidate genes. Researchers were able to predict, with about 70% accuracy, which teens are likely to become binge drinkers based on these factors.

Ultimately, researchers hope to be able to warn and help people who are most at risk for this behavior. Personality (those who were thrill seekers and those who lacked conscientiousness) and brain structure were the biggest determining factors. The research on alcohol use suggests that

binge drinkers' brains process fear and rewards differently than their non-using peers. Previous research found that it is possible to predict risky drinking behavior to some extent. This study reinforces those results. Future research may explore the development of possible predictive tools. Researchers also hope to work with data from other ethnic groups.