Cooperative Learning Aids in Preventing Alcohol Use in Rural Middle Schools

Adolescents’ use of alcohol is a risk factor for educational problems, diminished work capacity, disease, and later substance abuse and dependence. Many alcohol-prevention programs exist, but research has generally found their efficacy to be limited and these programs generally require schools to give up instructional time, which can negatively affect student achievement. A new study looked at the role played by peer groups in preventing alcohol use among students in rural middle schools. It found that cooperative learning can reduce the growth in alcohol use that normally occurs during the middle school years.

The study was done by researchers at the Oregon Research Institute and Michigan State University. It is published in the journal Child Development.

“We tested a new approach to preventing alcohol use that addresses the role of deviant peer groups,” explains Mark J. Van Ryzin, research scientist at Oregon Research Institute, who led the study. “Escalating alcohol use in adolescence has been linked to the influence of peer groups that promote antisocial or deviant behaviors. In this study, we attempted to increase students’ contacts with prosocial youths who were at low risk of abusing alcohol through collaborative, group-based learning activities in school—what we call cooperative learning.” The goal, Van Ryzin says, was to interrupt the tendency for socially marginalized students to cluster into groups of deviant peers, giving youths the opportunity to cultivate new friendships with peers who were less likely to use alcohol and thereby reducing alcohol use in middle school.

Cooperative learning is an instructional approach that includes reciprocal teaching, peer tutoring, and other group activities in which peers work together to maximize each other’s learning. “We found that cooperative learning significantly reduced deviant peer contacts in middle schoolers, as well as students’ actual alcohol use,” Van Ryzin says. “Since cooperative learning has also been found to enhance academic engagement and achievement, we see this approach as a low-risk, high-reward way to prevent alcohol use among middle school students while simultaneously promoting academic achievement.” Early adolescents are particularly vulnerable to peer influence, and alcohol use at this age can serve as an entry point into a peer culture where alcohol use is encouraged, increasing the risk of later alcohol abuse or dependence.

Researchers trained teachers at seven randomly assigned middle schools in cooperative learning, while teachers at eight other schools (the control group) did not receive the training. In all, 1,460 seventh-grade students participated in the study. The students were primarily White and from rural schools across Oregon. The study collected data on youths’ willingness to use alcohol, their affiliation with deviant peers, and their actual use of alcohol at the start and toward the end of seventh grade.
Cooperative learning significantly reduced students’ association with deviant peers (as reported by the students), suggesting that the group-based activities gave at-risk youths access to a broader cross-section of the social network at school, the researchers theorize. Cooperative learning also reduced growth in alcohol use from the start to the end of the study, and reduced the strength of the link between students’ willingness to use alcohol at the start and their actual alcohol use at the end.

“Our findings suggest that cooperative learning can address some of the peer processes that can contribute to escalations in alcohol use and related behavioral problems,” notes Cary J. Roseth, associate professor of educational psychology at Michigan State University, the study’s coauthor. “Training teachers to incorporate cooperative learning into the curriculum can be seen as a form of professional development for teachers as well as a prevention program aimed at behavioral problems. The techniques learned can be used with existing curricula, shared among staff members, and used in any subject.”

The study was funded by the National Institute on Alcohol Abuse and Alcoholism.

###

Summarized from Child Development, Enlisting Peer Cooperation in the Service of Alcohol Use Prevention in Middle School by Van Ryzin, MJ (Oregon Research Institute), and Roseth, CJ (Michigan State University). Copyright 2017 The Society for Research in Child Development, Inc. All rights reserved.