

Alcohol use from adolescence to adulthood follows different, complex pathways

January 22 2013

Adolescence is often a time of novelty seeking and risk taking, including the initiation of drinking. While heavy drinking that begins in adolescence can lead to problematic alcohol use later in life, other risk factors are also involved in trajectories of alcohol use that may develop. A study of factors predicting alcohol use and patterns of use over time has identified six distinct trajectories that concern level of alcohol use, rate of increase in use during early adolescence, and persistence of use into adulthood.

Results will be published in the March 2013 issue of *Alcoholism: Clinical & Experimental Research* and are currently available at Early View.

"Increased levels of exploration and risk taking seem to mark the transition from adolescence to adulthood," said Marieke Wichers, associate professor at Maastricht University Medical Centre as well as corresponding author for the study. "From an evolutionary point of view, this boost of explorative behaviour may be advantageous to adolescents in order to get to know the world around them and become independent. Thus, we see that that all over the world – on average – adolescents have higher levels of novelty seeking and are more risk taking than other age groups."

"Some teens begin adult behaviors ranging from sexual behavior to driving to taking their first job very early while others delay initiating these behaviors," added Victor Hesselbrock, professor of psychiatry at the University of Connecticut School of Medicine. "Novelty seeking is

likely one of several personality factors that may influence the timing of the initiation of [drinking](#) behaviors. Many do consider teenage drinking a 'rite of passage,' given the ubiquity of the behavior across different environments and cultures."

"We tried to identify whether subgroups exist that follow similar changes in [alcohol](#) use over time," said Wichers. "This is important in order to differentiate adolescents in terms of their future course of alcohol use and identify the characteristics that may predict which course [adolescents](#) will follow."

"Most current studies of alcohol and other substance use in adolescence now use some variant of the 'developmental trajectories' approach," noted Hesselbrock. "This study is somewhat unique in that the sample size is fairly large and contains both girls and boys. Importantly, it assesses a number of relevant psychological traits and environmental factors considered either risk or protective for onset of drinking behavior. The sample also covers the age range of 15 to 36 years of age. This is important as it captures the typical age of initiation of drinking but also other drinking milestones such as first intoxication, onset of regular drinking, appearance of early drinking problems, as well as the period of time in early adulthood when drinking behaviors further diverge into different patterns."

Wichers and her colleagues obtained retrospective data from 1,560 adult male twins concerning their average monthly alcohol use, as well as risk and protective factors in their lives, through interviews and questionnaires. The age span addressed was from 15 to 36 years of age. Risk factors included parental alcohol use, poor school performance, and specific personality traits. Protective factors included religiosity, parental monitoring, and social activities.

"We found six different subgroups of individuals that could be clustered

together in terms of their trajectories of alcohol use," said Wichers.

"Alcohol use in these six trajectories differed in terms of, one, overall level of use, in that some subgroups used more alcohol than others, two, peak of alcohol use, in that some subgroups had a more pronounced early peak of use in early adolescence than other subgroups, and three, [persistence](#) of use, in that two subgroups were both characterized by a sharp increase in use during adolescence and high levels of use."

"Again, the sample of 15-36 years of age is important as it captures the typical age of initiation of drinking to the time of maximum consumption, typically ages 18-22," said Hesselbrock. "However, it also captures other drinking milestones into [adulthood](#) when drinking patterns further diverge, typically showing either significant decreases in alcohol consumption or a trajectory towards chronic alcoholism."

"After identifying these different subgroups, a second aim of this study was to find personal characteristics that might predict to what subgroup individuals may belong," said Wichers. "We found that a number of risks that predicted average alcohol consumption did not always predict the pattern of alcohol use over time. For instance, sensation seeking and low school performance were associated with a higher average level, but not with an early peak pattern, of alcohol use. On the other hand, peer deviance, ADHD symptoms, and genetic risk of externalizing disorders impacted on the timing of alcohol use in early adolescence. Among the most striking findings was that genetic risk for externalizing problem behavior and peer deviance was the strongest predictor of belonging to subclasses with initial high average consumption and an early peak in alcohol consumption during adolescence. In summary, this study showed that these predictors do not all influence alcohol use in the same manner: some predict increased level of use while others predict pattern of use in early adolescence or persistence of high-level alcohol use. Thus, indeed there seems to be a varied influence of certain factors at different stages in one's life."

Hesselbrock agreed. "This study clearly shows that 'one size' or one risk factor does not fit all," he said. "The importance of different vulnerability varies from latent class to latent class, with different [risk factors](#) affecting consumption levels and consumption patterns over time. Similarly, so does the importance of different well-known protective factors such as church attendance, parental attitudes, and parental monitoring."

Both Wichers and Hesselbrock said that future research is a necessity.

"Before a clinician can use these findings to construct an effective intervention, other research needs to examine whether these identified predictors are causal," said Wichers. "Then clinicians may use this knowledge to construct intervention strategies and identify individuals at risk."

"We need to determine whether behavioral, pharmacological, or both types of treatments targeted for specific classes will be more effective," said Hesselbrock. "We need to identify more specific genetic determinants that can be addressed either pharmacologically or by a behavioral intervention. It will also be interesting to see how these findings relate to quantity and patterns of use of other substances such as tobacco and marijuana, given that teens typically use a variety of substances, not just [alcohol](#) alone. Treatment providers should keep these different trajectories in mind and adjust their treatment plans as necessary as they follow their patients forward. Remember that this study is observational; the question remains whether these different class memberships and drinking trajectories can be changed with treatment."

Provided by Alcoholism: Clinical & Experimental Research

Citation: Alcohol use from adolescence to adulthood follows different, complex pathways (2013,

January 22) retrieved 23 April 2024 from <https://medicalxpress.com/news/2013-01-alcohol-adolescence-adulthood-complex-pathways.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.