Resilience considerably reduces risk for developing alcohol use disorders, according to a new study conducted by researchers at Virginia Commonwealth University and Lund University in Sweden.

Substantial literature from the past few decades has investigated personality traits that are influential in the development of alcohol use disorders, but little attention has been paid to protective traits that guard against it. "Studying protective factors rather than just what makes people at risk for something can inform prevention studies," said first author Elizabeth Long, a fourth-year Ph.D. student in the Psychiatric, Behavioral and Statistical Genetics Program at Virginia Commonwealth University School of Medicine's Virginia Institute for Psychiatric and Behavioral Genetics. "From these results, we can focus on how we improve resilience in children to prevent them from developing alcohol use disorder later in life."

The study, "Resilience and risk for alcohol use disorders: A Swedish twin study," was published in the journal Alcoholism: Clinical and Experimental Research on Dec. 5.

In the context of the study, resilience was defined as an individual's ability to thrive despite adversity. Resilience was assessed on a 9-point scale during personal interviews with 1,653,721 Swedish men aged 17-to-25 years.

"Our sample size was massive, which led to increased precision," Long said.

The 9-point scale rated individuals' functioning in experiences at school, work and home, and during leisure time. It also examined emotional stability, with higher values indicating better functioning. Alcohol use disorder was identified based on Swedish medical, legal and pharmacy registries.

Results of the study showed the five items that comprised the resilience assessment—social maturity, interest, psychological energy, home environment and emotional control—all reduced risk for subsequent alcohol use disorder, with social maturity showing the strongest effect. A one-point increase on the resilience scale was associated with a 29 percent decrease in odds of developing alcohol use disorder.

"This study puts on firm scientific footing the common clinical observation that individuals with mature and well-balanced personalities are much less likely to develop alcohol problems than individuals who are less stable and more stress-prone," said Kenneth S. Kendler, M.D., professor of psychiatry and human and molecular genetics in the Department of Psychiatry at VCU School of Medicine. Kendler is Long's faculty advisor and a co-author on the journal article. "This work is a wonderful example of cross-institutional collaboration," he added. "Key to its success has been the extraordinary registry resources assembled by our collaborators in Sweden."

While the study findings confirmed Long's hypothesis that resilience would negatively correlate with alcohol use disorder, she said she was surprised by how large of an effect it had. Further, the personality trait had a quadratic effect: "Once you reach a certain point on the resilience scale, the protective effect doesn't keep going down," Long said. "That indicates that you just have to function 'well enough' to experience the protective benefits of resilience against alcohol use disorder development."

The study also included 5,765 twin pairs. It found the relationship between resilience and alcohol use disorder to be largely attributable to overlapping genetic and shared environmental factors. The twin-based findings suggest the relationship between resilience and alcohol use disorders is not causal, but can be better explained by common genetic
and environmental influences on drinking behavior.

"If we understand that similar genes are involved in protecting against alcohol use disorder and having increased resilience, then we have a place to look for the shared genes," Long said. "That opens the door to further studies. Ultimately, the goal is to improve prevention efforts."


... Provided by Virginia Commonwealth University


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