

# Gene Increases Susceptibility to Post-Traumatic Stress, Researchers Find

November 2 2009

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(PhysOrg.com) -- A gene variant makes people who experienced trauma as children or adults more susceptible to post-traumatic stress disorder (PTSD), Yale researchers have found.

The study, published in the November edition of the [Archives of General Psychiatry](#), sheds light on how environmental forces and [genes](#) interact to make some people more prone to psychiatric diseases.

“This study helps us understand how genetic factors can contribute to vulnerability in different people,” said Joel Gelernter, senior author of the study and professor of psychiatry, genetics and neurobiology at the Yale School of Medicine.

Between 40 to 70 percent of Americans have experienced a traumatic event, yet only 8 percent develop PTSD. The Yale team studied more than 1,200 people who had reported experiencing childhood adversity and/or traumatic events as adults. The type of childhood adversity included physical and sexual abuse or neglect. Traumatic events in adulthood included combat, sexual assault and natural disasters.

Researchers found the risk of PTSD significantly increased if adversity and trauma were experienced both as a child and an adult.

Previous studies of Vietnam veterans and other populations have shown that genetic factors account for about 30 percent of the risk for PTSD. The researchers looked at a particular variant, or allele, of the serotonin transporter [protein](#) gene, which was previously linked to an increased

risk for depression in individuals who had experienced adverse events. People with this allele were more likely to develop PTSD if they had experienced childhood adversity or adult trauma.

The research team was led by Pingxing Xie, a graduate student in Gelernter's lab. Scientists from the University of Connecticut, University of California-San Diego, Medical University of South Carolina-Charleston, Harvard University and Boston University also contributed to the study.

Provided by Yale University ([news](#) : [web](#))

Citation: Gene Increases Susceptibility to Post-Traumatic Stress, Researchers Find (2009, November 2) retrieved 19 April 2024 from <https://medicalxpress.com/news/2009-11-gene-susceptibility-post-traumatic-stress.html>

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