

## **Association Between Neuroticism And Risk For Depression May Be Genetic**

Genetic factors may be at play when it comes to the link between the personality trait of neuroticism and vulnerability for depression, according to a new study by Virginia Commonwealth University researchers.

In the October issue of the journal *Archives of General Psychiatry*, researchers reported the results from both longitudinal and genetic analyses that showed that neuroticism is a strong predictor for major depression. Using twin modeling, the researchers determined that a substantial proportion of the genetic vulnerability to depression is shared with neuroticism.

"The personality trait of neuroticism - perhaps better understood as "negative emotionality" is a strong risk factor of major depression. Our study shows that this occurs largely because levels of neuroticism are an index of the genetic liability to depression," said Kenneth S. Kendler, M.D., a professor of psychiatry and human genetics in VCU's School of Medicine and lead author on the study.

VCU researchers, together with researchers from the Karolinska Institute in Sweden evaluated lifetime major depression of approximately 21,000 same-sex twin pairs born between 1926 and 1958 from the Swedish National Twin Registry. In 1972 and 1973, participants completed a questionnaire containing 18 items selected from a personality test called the Eysenck Personality Inventory that assessed the personality traits of neuroticism and extroversion.

More than 25 years later, participants were interviewed in person to determine if they developed depression during their lifetime. The study sought to clarify the magnitude and nature of the association between neuroticism, extroversion and risk for major depression.

Kendler and his team found a weak relationship between extroversion and major depression. They concluded that this major dimension of personality has little to do with risk for depression.

Previous studies in literature have reported that neuroticism or neuroticism-like traits have consistently predicted future depressive episodes.

These results suggest that efforts to identify specific genes that have an impact on risk for depression might be considered also using neuroticism as a target trait.

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Kendler collaborated with Charles O. Gardener, Ph.D., from VCU; and Margaret Gatz, Ph.D., and Nancy L. Pedersen, Ph.D., who are affiliated with the University of Southern California and the Karolinska Institute in Stockholm, Sweden.