Genetic factors strongly shape how peers are chosen

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As we develop, the company we keep may be increasingly influenced by our genes, according to a new study led by Virginia Commonwealth University researchers.

Researchers report that as individuals develop, genes become increasingly important in influencing how they choose their peer groups. The findings offer insight into which individuals may be at risk for future substance use or other externalizing behaviors such as conduct and antisocial personality disorder.

“As we grow and move out of our own home environment, our genetically influenced temperament becomes more and more important in influencing the kinds of friends we like to hang out with,” 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. “The study shows how genetic and family environmental factors influence the ways in which we create our own social environment as we grow.”

In the August issue of the Archives of General Psychiatry, a journal of the American Medical Association, researchers reported for the first time the degree to which genetic factors impact how people choose their social environment.

From a developmental perspective, Kendler and his colleagues examined peer group deviance among approximately 1,800 male twin pairs from mid-childhood to early adulthood, between 1998 and 2004. The twin pairs that participated in this study were from the Virginia Twin Registry. The Virginia Twin Registry, now part of the VCU Mid-Atlantic Twin Registry (MATR), contains a population-based record of twins from Virginia, North Carolina and South Carolina.

Through a series of interviews, researchers found that genetic factors increasingly impact how male twins make choices as they mature and develop their own social groups.

“The road from genes to externalizing behaviors like drug use and antisocial behaviors is not entirely direct or biological,” Kendler said. “An important part of this pathway involves our genetics influencing our own social environment, which in turn impacts on our risk for a whole host of deviant behaviors.”

“Our results demonstrate clearly that a complete understanding of the pathway from genes to antisocial behaviors, including drug abuse, has to take into account self-selection into deviant versus benign environments,” he said. “The effects of peers in adolescence can be quite powerful, either encouraging or discouraging deviant behaviors. Peers also provide access to substances of abuse.”

Source: Virginia Commonwealth University