

Gene clusters responsible for schizophrenia and patients' unique disease profiles

Schizophrenia is not a single disease caused by one gene, but rather a group of eight distinct genetic disorders — each with its own set of symptoms, according to a study released Monday.

The new findings, published in [The American Journal of Psychiatry](#), could help doctors diagnose and [treat](#) the often-debilitating symptoms associated with the [mental illness](#). While schizophrenia affects people in different ways, some of the most common manifestations include hallucinations or delusions, disorganized speech and behavior, and a disassociation of thoughts and emotions.

Previous research had already led scientists to believe that around 80 percent of the risk of schizophrenia was genetic, but until now they could not determine where it originated. The study's findings suggest that distinct clusters of gene variations — not a single gene — causes the disease.

“Genes don’t operate by themselves,” C. Robert Cloninger, one of the study’s senior researchers, [explained](#). “They function in concert much like an orchestra, and to understand how they’re working, you have to know not just who the members of the orchestra are, but how they interact.”

They found that those specific genetic variations worked together to produce different severities of the mental illness. People who had distinct gene clusters — 42 of which were identified in the study — were between 70 and 100 percent likely to develop schizophrenia, according to the report.

Of those clusters, researchers were able to identify eight qualitatively unique disorders within what they now see as the “umbrella disease” of schizophrenia — each with its own symptoms and level of severity.

Read the full, original story: [Schizophrenia is ‘umbrella disease’ of eight gene disorders, study finds](#)