Psychosis: A Tale of Degradation

Psychosis is a serious mental health disorder characterized by a loss of contact with reality. These symptoms interfere with daily life, impacting social interactions and the ability to work and learn. The symptoms of psychosis are closely linked with physical changes in the brain structure. Texas A&M University’s Professor Jessica Bernard recently studied abnormal development of the brain area between the thalamus and hippocampus in participants who were at ultra-high risk for developing psychosis. Participants at high risk do not have psychosis, but show some concerning symptoms and are at greater risk. Dr. Bernard’s team followed them for 12 months to track changes in the brain and symptom progression. Dr. Bernard found that changes in white matter – bundles of nerves that connect different areas of the brain – are linked to worsening symptoms.

These findings provide some insight into the neurological basis of psychosis. Brain imaging technology could be used detect early signs of the onset of psychosis and track its progression. Detection of early symptoms could allow for intervention and treatment prior to full development of psychosis. This could improve quality of life, or prognosis for these at-risk individuals and those that show worsening symptoms.

For More Information Go To: http://www.nature.com/articles/npjschz20159

Professor Jessica Bernard
Texas A&M University

Stay tuned for more exciting discoveries in the Texas A&M Psychology Department. For more information, visit our website: www.psychology.tamu.edu.

Authors: Anna Clark & Erin Cloud
Anna and Erin are currently undergraduate psychology majors. They will be giving updates of the cutting-edge science occurring in the psychology department throughout the semester.

These images of the brain were used to track the progression of psychosis. As seen in these images, the white matter between the thalamus and the hippocampus began to degrade as psychosis progressed.