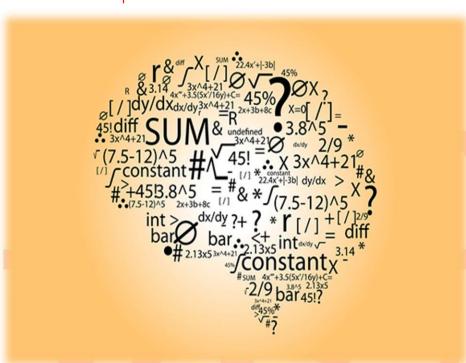
## LACK OF MATH EDUCATION NEGATIVELY AFFECTS ADOLESCENT BRAIN AND COGNITIVE DEVELOPMENT

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There has been a new research which came into light that suggests, in their post teen ages ie, after 16 years, if at all they do not have mathematical education. it is а great disadvantage to the young brain. It is so because, the teens who stopped studying math showed a reduction in a brain chemical critical to brain development. This reduction in brain chemical was found in a key brain area that supports mathematics, memory, learning, reasoning and problem solving and this amount of brain

chemical successfully predicted cognitive performance 19 months later, researchers publish in the journal 'Proceedings of the National Academy of Sciences'. Given that many students around the world have limited or no access to education during the COVID-19 pandemic, understanding the importance of math education in brain and cognitive development is especially pressing. An experiment was conducted by researchers from the Department of Experimental Psychology at the University of Oxford in which a total of 133 students between the ages of 14 and 18 participated. Through this experiment they studied whether this precise lack of mathematics education in students from a related background could affect brain development and cognition. The study found that students who had not studied mathematics had less of a chemical crucial for brain plasticity (gamma-aminobutyric acid) in a key brain region that is involved in many important cognitive functions. Also researchers were able to distinguish between adolescents who studied or did not study maths on the amount of brain chemical found, independent of their cognitive abilities. Researchers said that Math skills are related with a range of benefits, containing employment, socioeconomic position, and mental and physical health. Youth is an important period in life that is linked with important brain and cognitive changes. They also mentioned that this experiment takes them to the next stage of biological understanding of the impact of education on the developing brain and the mutual effect between biology and education. This study provides significant understanding of how an absence of a single component in education, maths, can influence the brain and behaviour.