No "nice" brains finish last, study suggests

By Gareth Cook

How "nice" brains are more prone to depression, study suggests

A new study by Dr. Haruno and co-workers at the University of California, San Francisco, and the University of Tokyo, Japan, has revealed that individuals who exhibit a prosocial pattern of brain activity are more likely to develop depression than those who are more individualistic.

The study involved 95 participants, aged 18 to 25 years, who were scanned using functional magnetic resonance imaging (fMRI) while they were exposed to an economic situation in which unequal distributions of money were created. Participants were asked to redistribute the money, and their brain activity was measured.

The researchers found that participants who had a prosocial pattern of brain activity, characterized by high amygdala activity when exposed to economic inequity, were more likely to experience increased amygdala activity, suggesting automatic feelings of stress or guilt. This was true for both the participants who received more money than their peers and those who received less money.

In contrast, the individualists, who are primarily concerned with maximizing their own resources, had strong amygdala activation when they received more money than their peers, but not when they received less money. This suggests that the individualists were able to keep their emotions in check to fight depression.

Overall, the new findings are slightly disheartening for the prosocials, but there is hope. Through psychotherapy, one can likely have it all: a core happiness that is less prone to depression. By training higher-level brain processes like the pre-frontal cortex, prosocials can learn to control these emotions and fight depression. Through psychotherapy, one can likely have it all: a core happiness that is less prone to depression.

It is also important to note that participants in this study were between the ages of 18 and 25. Future research by Dr. Haruno is exploring if these findings apply to older adults.

Additional resources:

- Dr. Mauricio Delgado, a neuroscientist, says. Both he and the authors of the study point out that prosocials can take advantage of psychotherapy, including cognitive behavioral therapy, to write about their emotions and develop strategies to keep these emotions in check.
- The prosocials may develop pre-frontal cortices that are more developed, which could protect older adults from inequity-driven depression. However, more fully developed prefrontal cortices are more likely to be associated with more depression. This was also true when they followed up with the participants two months later.

The hope is that more fully developed prefrontal cortices can protect older adults from inequity-driven depression. But by training higher-level brain processes like the pre-frontal cortex, the prosocials may be able to control their emotions and fight depression. Through psychotherapy, one can likely have it all: a core happiness that is less prone to depression.