# Scientists discover that psychopaths have larger brain area



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An interesting discovery made on psychopathic subjects is described in a new study by researchers from various universities and published in the *Journal of Psychiatric Research*.

According to the researchers, psychopathic individuals are characterized by a greater probability of having a more extensive part of the brain, called striatum.

- Psychopathy
- The study involved 120 participants
- The striatum area in the brain
- Antisociality cannot be traced back to environmental influences alone
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## **Psychopathy**

Psychopaths can be considered people with a very limited sense of remorse, a characteristic that usually leads to having antisocial attitudes or being self-centered. In

general, psychopaths denote a lack of empathy towards others and, in some cases, even criminal tendencies.

### The study involved 120 participants

The researchers used the magnetic resonance technique on 120 participants from the United States. They also subjected the subjects to interviews based on specific psychological assessment tools for assessing psychopathic traits. The researchers found that in psychopathic individuals one region of the forebrain, the striatum, was on average 10% larger than in control subjects who had low or no psychopathic traits.

#### The striatum area in the brain

As reported by the statement from the Nanyang Technological University, there have already been studies that have shown that the striatum, an area of the pro-brain located in the subcortical area of the brain, is more active in psychopathic subjects. It should be noted that this area is one of those responsible for coordinating various aspects related to cognition including motor planning and action planning as well as decision making and motivation. [1]

### Antisociality cannot be traced back to environmental influences alone

According to Olivia Choy, a researcher at the NTU School of Social Sciences, as well as a neurocriminologist and one of the authors of the study, these findings could improve what we know about one of the best-known factors for antisocial behavior like psychopathy. Furthermore, these results confirm that antisociality cannot be traced only to environmental influences: there also appear to be differences in biology, particularly of brain structures, between antisocial and non-antisocial individuals. [1]

# Notes and insights

- Psychopathic individuals more likely to have larger striatum region in the brain: Study | NTU Singapore
- 2. Larger striatal volume is associated with increased adult psychopathy ScienceDirect (DOI: 10.1016 / j.jpsychires.2022.03.006)

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