

How brain of gambling addicts work

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Washington: Researchers at University of Granada have tried to study similarities and differences in psychological profile and brain function when comparing cocaine addicts and gambling addicts.

The study reveals that gambling addicts present brain function abnormalities affecting their decision-making capacity.

In two articles, they confirm that cocaine has cumulative prejudicial effects on the functioning of areas of the brain (anterior cingulate and part of the prefrontal cortex) necessary for correct control of impulses. This has been proven through laboratory tasks and techniques that identify abnormal brain function through electroencephalography (EEG).

However, these negative effects on correct control of impulses were not present in the gamblers, as their addiction does not involve the use of toxic substances.

The research-conducted at the University of Granada-shows that individuals addicted to gambling do present other brain function abnormalities in areas of the prefrontal cortex.

These are related to the severity of their affliction and affect their capacity to take decisions.

Principle authors lecturer Jose Cesar Perales and researcher Ana Torres-of the University of Granada Department of Experimental Psychology-explain that "these bad decisions affect the individuals' ability to recognise and evaluate loss, even when this is not financial loss".

Moreover, among the volunteers who took part in the research they also found that the tendency to take bad decisions increased significantly when they experienced negative emotions such as anxiety or sadness.

The study is published in the journal Frontiers in Neuroscience.

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