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Drug-Abusers Have Difficulty to Recognize Negative Emotions as Wrath, Fear and Sadness, Study Finds

ScienceDaily (Feb. 3, 2011) — University of Granada scientists have analyzed the relation between drug abuse and recognition of basic emotions (happiness, surprise, wrath, fear, sadness and disgust) by drug-abusers. Thus, the study revealed that drug-abusers have difficulty to identify negative emotions by their facial expression: wrath, disgust, fear and sadness.

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Further, regular abuse of alcohol, cannabis and cocaine usually affects abusers' fluency and decision-making. Consuming cannabis and cocaine negatively affects work memory and reasoning. Similarly, cocaine abuse is associated to alterations in inhibition.

For the purpose of this study, researchers carried out a neuropsychological evaluation (with neurocognitive evaluation and emotional processing tests) out of a total of 123 polysubstance abusers and 67 no-drug users with similar social and demographical variables (age and schooling).

A Sample Including Polysubstance-Abusers

The target population were individuals who consumed drugs as cocaine, cannabis, heroin, alcohol, MDMA and methamphetamine, and who were enrolled in two rehabilitation projects *Proyecto Hombre* and *Cortijo Buenos Aires* in the province of Granada.

The main author of this research was María José Fernández Serrano -supervised by professors Miguel Pérez García and Antonio Javier Verdejo García- of the Department of Personality and Psychological Treatment and Evaluation, University of Granada.

The study revealed that 70% of drug abusers presented some type of neuropsychological deterioration, regardless the type of substance consumed. Deterioration was registered in major degree in the working memory, and in fluency, flexibility, planning, multitask ability and interference.

Fernández Serrano thinks that the results obtained "should be employed to develop political and social policies aimed at promoting adequate rehab programs adapted to the neuropsychological profile of drug-abusers."

The research conducted at the University of Granada has been the first to study the prevalence of psychological deterioration in drug-abusers enrolled in therapeutic communities. Further, although other studies have been conducted on emotional recognition by drug users, they were focused on recognition as a unit process. However, the scientists from Granada have analysed for the first time the relation between drug abuse and recognition of basic emotions (happiness, surprise, wrath, fear, sadness and disgust).

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