

Teen delinquents show signs of prefrontal deficits

Male delinquents exhibit delayed development of some skills governed by the prefrontal cortex, a recent study reports.

R. D. Chretien and M. A. Persinger administered neuropsychological tests to 36 teenaged male delinquents and 19 matched controls with similar IQs. The researchers report that the delinquents displayed more impulsiveness, lower conceptual level, less conceptual flexibility, and poorer critical thinking. Chretien and Persinger were able to correctly classify 89 percent of the subjects using three variables-critical thinking, conceptual level, and number of errors committed during a conditioned spatial association task.

"The results," the researchers say, "[are] considered consistent with the hypothesis that delayed or different development of complex functions associated with the left and (particularly) the right prefrontal cortices and their limbic inputs may be responsible for antisocial behavior."

"Prefrontal deficits discriminate young offenders from age-matched cohorts: juvenile delinquency as an expected feature of the normal distribution of prefrontal cerebral development," R. D. Chretien and M. A. Persinger, *Psychological Reports*, Vol. 87, No. 3, December 2000, pp. 1196-1202. Address: R. D. Chretien, Laurentian University, Sudbury, Ontario, Canada P3E 2C6.