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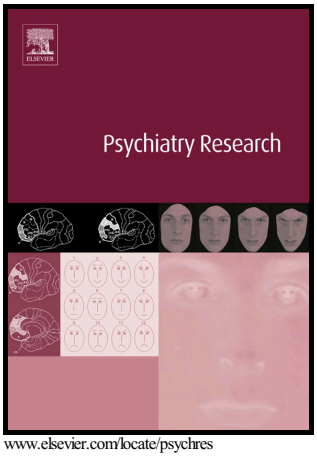

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Abstract

Low platelet monoamine oxidase B (MAO-B) activity, proxy of low central serotonergic functions, has been shown to correlate with criminal behavior in adolescents that come from an unfavorable psychosocial environment but not in adolescents from good conditions, indicating a link between environment, MAO-B activity and aggressive behavior. The purpose of this study was to examine the association between MAO-B activity and lifetime interpersonal violence in suicide attempters. The study included a total of 28 suicide attempters (18 men and 10 women). Assessments of childhood exposure to and expressed interpersonal violence during childhood and as an adult were carried out with the Karolinska Interpersonal Violence Scale (KIVS). Platelet MAO-B activity was measured with 2-phenylethylamine (b-PEA) as substrate. Broken down by gender, the correlations between platelet MAO-B activity and both exposure scores to interpersonal violence as a child and expressed lifetime interpersonal violence were significant in male suicide attempters (r = -0.61, p = 0.035; r = -0.84, p = 0.0005), but not in women. Our finding of significant associations between interpersonal violence and low MAO-B activity need to be replicated in other cohorts of suicide attempters.

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