## The WAGER, Vol. 1(24) - Platelet MAO activity among pathological gamblers

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Little is known about the biological correlates of pathological gambling. Pathological gambling is classified by the DSM-IV as an impulse control disorder (see The WAGER Volume 1, Issue 5). One biological phenomenon associated with impulse control disorders and risky behavior is low platelet monoamine oxidase (MAO) activity. MAO is an enzyme that breaks down and inactivates neurotransmitters. A study of 27 male pathological gamblers attempted to find a biological correlate for the impulsivity of compulsive gambling. The study matched the gamblers by age, gender & tobacco consumption; these variables also are associated, or believed to be associated, with lower platelet MAO activity. Pathological gamblers had significantly lower platelet MAO activity than the comparison group. The authors speculate that changes in platelet MAO activity may be a sign of serotonergic dysfunction. However, as is the case with many other studies, we cannot determine if these differences are a cause or consequence of pathological gambling.



**Source**: Adapted from Blanco, C., Orensanz-Muñoz, L., Blanco-Jerez, C., & Saiz-Ruiz, J. (1996). Pathological gambling and platelet MAO activity: A psychobiological study. American Journal of Psychiatry, 153, 119-121.

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