

# New explanation for cognitive problems of Parkinson's patients

28 November 2012, by Bill Hathaway

Provided by Yale University



The hallmark of Parkinson's Disease is the uncertain gait and movement caused by the destructions of neurons producing the neurotransmitter dopamine.

However, Parkinson's patients also display cognitive problems such as difficulty assessing an interval of time—for instance, differentiating between an eight-second span and one of 20 seconds.

A new Yale University study shows that a depletion of a class of dopamine-producing neurons is also the cause of this deficit and it occurs in the [prefrontal cortex](#) associated with higher cognitive functions—not just as areas of the brain associated with movement.

The findings published in the journal [Proceedings of the National Academy of Sciences](#) may help explain other cognitive problems associated in late stage Parkinson's.

**More information:**

[www.pnas.org/content/early/2012/11/27/1211258109.abstract](http://www.pnas.org/content/early/2012/11/27/1211258109.abstract)

APA citation: New explanation for cognitive problems of Parkinson's patients (2012, November 28) retrieved 16 October 2021 from <https://medicalxpress.com/news/2012-11-explanation-cognitive-problems-parkinson-patients.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*