

Out-of-body experiences linked to neural instability and biases in body representation

July 11 2011

Although out-of-body experiences (OBEs) are typically associated with migraine, epilepsy and psychopathology, they are quite common in healthy and psychologically normal individuals as well. However, they are poorly understood. A new study, published in the July 2011 issue of Elsevier's *Cortex*, has linked these experiences to neural instabilities in the brain's temporal lobes and to errors in the body's sense of itself – even in non clinical populations.

Dr Jason Braithwaite from the Behavioural Brain Sciences Centre, School of Psychology, University of Birmingham, has been investigating the underlying factors associated with the propensity for normal healthy individuals to have an OBE. As well as informing the scientific theories for how such hallucinations can occur, studying these unusual phenomena can also help us to understand how normal "in-the-body" mental processes work and why, when they break down, they produce such striking experiences.

Dr Braithwaite tested a group of individuals, including some "OBEers", for their predisposition to unusual perceptual experiences, and found that the OBEers reported significantly more of a particular type of experience: those known to be associated with neuroelectrical anomalies in the temporal lobes of the brain, as well as those associated with distortions in the processing of body-based information. The OBEers were also less skilled at a task which required them to adopt the perspective of a figure shown on the computer screen. These findings suggest that, even in healthy people, striking hallucinations can and do

occur and that these may reflect anomalies in neuroelectrical activity of the [temporal lobes](#), as well as biases in "body representation" in the brain.

More information: www.sciencedirect.com/science/journal/00109452

Provided by Elsevier

Citation: Out-of-body experiences linked to neural instability and biases in body representation (2011, July 11) retrieved 27 April 2024 from <https://medicalxpress.com/news/2011-07-out-of-body-linked-neural-instability-biases.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.