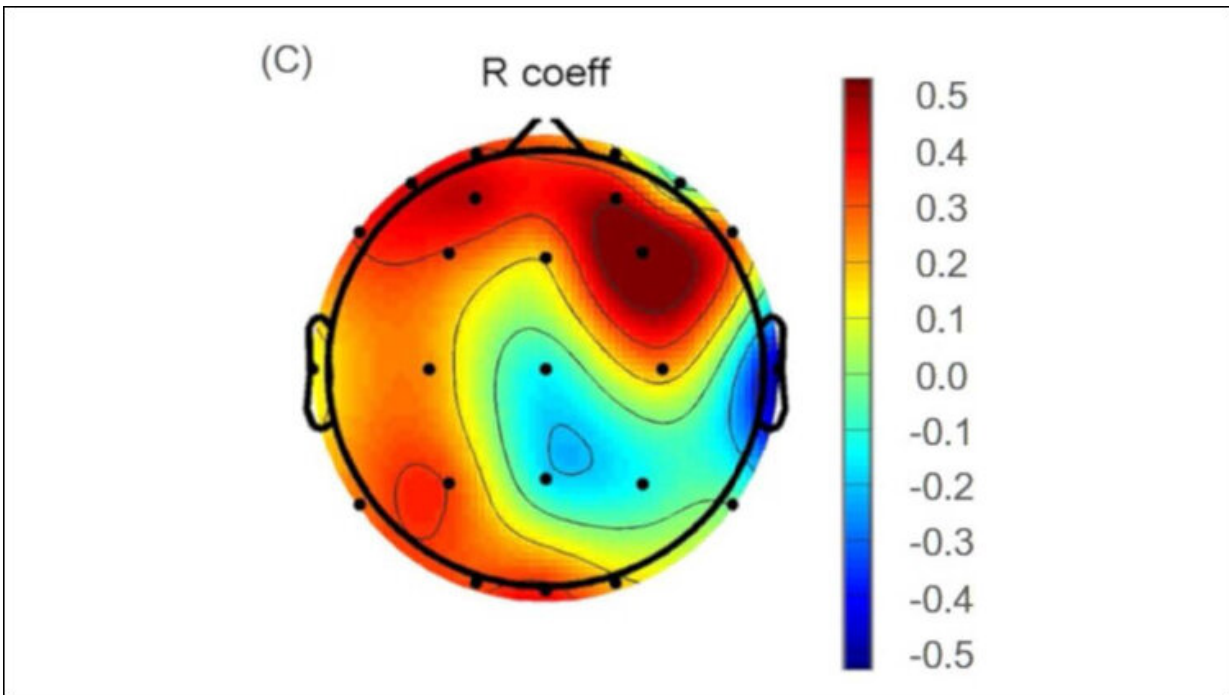


# Brain marker for angry dreams

April 15 2019



Dream Anger and its relationship to frontal alpha asymmetry. (C) Partial correlation coefficients between dream Anger and log-transformed alpha power over individual electrode sites, while controlling for the average whole-head alpha power. Credit: Sikka et al., *JNeurosci* (2019)

Researchers have identified a pattern of brain activity that predicts anger experienced during dreaming, according to a new study of healthy adults published in *JNeurosci*. The research could potentially inform efforts to understand the neural basis of the emotional content of nightmares, a

feature of various mental and sleep disorders.

Although emotions are experienced during both waking and dreaming, few studies have investigated the brain mechanisms underlying the affective component of dreams. Pilleriin Sikka and colleagues at University of Turku, University of Skövde, and University of Cambridge discovered a shared emotional mechanism between the two states of consciousness.

The researchers obtained electroencephalography recordings from participants during two separate nights in a sleep laboratory. After five-minute bouts of rapid eye movement (REM) sleep, participants were awoken and asked to describe their dream and rate the emotions they experienced in the [dream](#). Individuals who displayed greater alpha-band brain activity in the right, as compared to the left, [frontal cortex](#) during evening wakefulness and during REM sleep experienced more anger in dreams. This neural signature—called frontal alpha asymmetry (FAA) - has been linked to anger and self-regulation during wakefulness.

Together, these results suggest FAA may reflect a universal indicator of emotion regulation.

**More information:** EEG Frontal Alpha Asymmetry and Dream Affect: Alpha Oscillations Over the Right Frontal Cortex During REM Sleep and Pre-Sleep Wakefulness Predict Anger in REM Sleep Dreams, *JNeurosci* (2019). [DOI: 10.1523/JNEUROSCI.2884-18.2019](https://doi.org/10.1523/JNEUROSCI.2884-18.2019)

Provided by Society for Neuroscience

Citation: Brain marker for angry dreams (2019, April 15) retrieved 27 April 2024 from <https://medicalxpress.com/news/2019-04-brain-marker-angry.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.