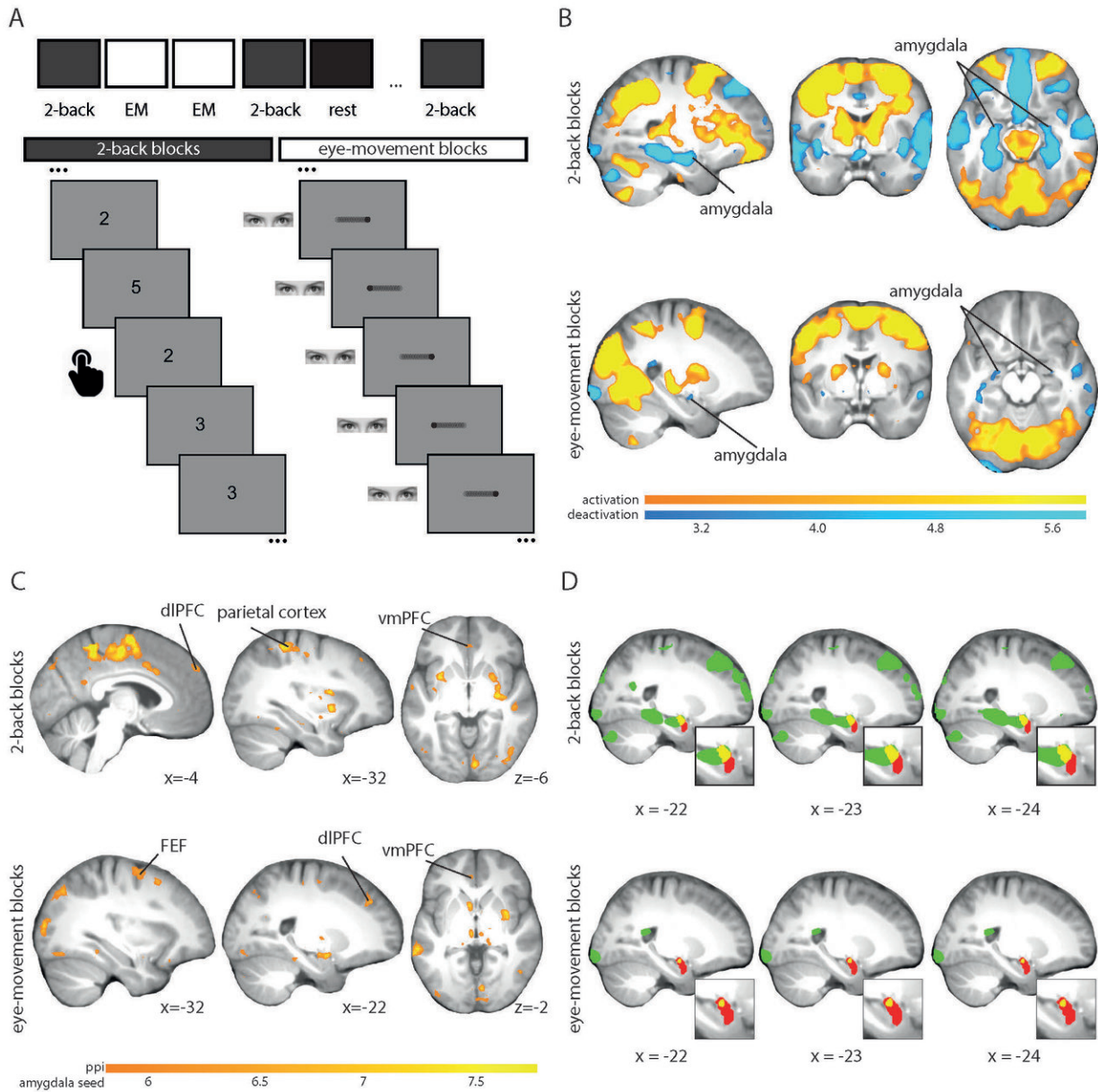


Eye movements take edge off traumatic memories

September 4 2018



Credit: de Voogd et al., *JNeurosci* (2018)

Two human experiments published in *JNeurosci* demonstrate that a widely used yet controversial psychotherapy technique suppresses fear-related amygdala activity during recall of a traumatic memory.

Despite being a common and evidence-based therapy, Eye Movement Desensitization and Reprocessing (EMDR)—discovered serendipitously in 1987 by a psychologist while walking in the woods—it is unclear whether the eye movements in this treatment provide any additional benefits to patients struggling with fear-related disorders that are not readily achieved through traditional exposure therapy. The promise of EMDR is its potential to recode the emotional content of the traumatic [memory](#) itself.

Investigating the [neurobiological mechanisms](#) underlying EMDR in healthy men and women, Lycia de Voogd and colleagues found that both side-to-side eye [movement](#) and a working memory task independently deactivated the amygdala—a brain region critical for fear learning. The researchers show in a second experiment that this deactivation enhanced extinction learning—a cognitive behavioral technique that reduces the association between a stimulus and a fear response. The reduced amygdala activity is thought to be a consequence of less available resources since they are dedicated to making [eye movements](#).

More information: Lycia D. de Voogd et al, Eye-movement intervention enhances extinction via amygdala deactivation, *The Journal of Neuroscience* (2018). [DOI: 10.1523/JNEUROSCI.0703-18.2018](https://doi.org/10.1523/JNEUROSCI.0703-18.2018)

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