

New Research From Psychological Science

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Read about the latest research published in *Psychological Science*.

[Sleep Consolidation of Interfering Auditory Memories in Starlings](#)

Timothy P. Brawn, Howard C. Nusbaum, and Daniel Margoliash

In this study, the authors examined the effect of sleep on the consolidation of starlings' memories. Starlings were trained and tested on two similar classification tasks (Task A and Task B). After training on Task B, they were given a final test on Task A. Training and testing on Task B and the final test on Task A occurred before or after a period of sleep. The starlings showed increases in performance on all conditions that included a period of sleep before final testing, suggesting that sleep consolidation enhances their retention of interfering experiences.

[Dopamine-D2-Receptor Blockade Reverses the Association Between Trait Approach Motivation and Frontal Asymmetry in an Approach-Motivation Context](#)

Jan Wacker, Erik M. Mueller, Diego A. Pizzagalli, Jürgen Hennig, and Gerhard Stemmler

Although research has hinted at a link between frontal alpha asymmetry and dopamine, few researchers have examined this relationship. Male participants were given sulpiride (a dopamine receptor antagonist). Female experimenters then recorded participants' resting baseline EEG. Participants were also genotyped for the COMT Val158Met polymorphism (a polymorphism that influences the rate of dopamine degradation in the prefrontal cortex). Frontal alpha asymmetry was linked to participants' trait behavioral approach system (BAS) activity and their COMT polymorphism genotype, but only when they were tested by the female experimenters that they judged to be the most attractive. This suggests that associations between frontal alpha asymmetry, dopamine, and trait BAS activity are detectable only in approach-motivation contexts.

[When Anger Leads to Rumination: Induction of Relative Right Frontal Cortical Activity With Transcranial Direct Current Stimulation Increases Anger-Related Rumination](#)

Nicholas J. Kelley, Ruud Hortensius, and Eddie Harmon-Jones

Past research has shown that greater left frontal cortical activity is associated with aggression, whereas greater right frontal cortical activity is associated with inhibited anger responses and anxiety. Participants were asked to write an essay on a topic of their choice and were told that other participants would evaluate it. Participants then received transcranial direct current stimulation (tDCS) to increase right or left frontal cortical activity while they read negative feedback from the essay evaluation. Individuals whose right frontal cortical activity was increased reported having more ruminative thoughts

about the negative feedback. This finding demonstrates a causal relationship between right frontal cortical activity and rumination after an interpersonal insult.

Come listen to Eddie Harmon-Jones speak at the “[Biological Bases of Social Behavior](#)” theme program at the 25th APS Annual Convention!