

Learning from Errors and Feedback

Learning from errors and feedback is an important prerequisite for appropriate behavior in everyday life. For this, the medial frontal cortex and the dopaminergic system of the midbrain play a crucial role. Both are subject to pronounced developmental and age-related changes, which leads to differences in learning from errors and feedback.

Selected publications:

Ferdinand, N. K., & Kray, J. (2014). Developmental changes in performance monitoring: How electrophysiological data can enhance our understanding of error and feedback processing in childhood and adolescence. *Behavioral Brain Research*, *263*, 122—132.

Ferdinand, N. K., Mecklinger, A., Kray, J., & Gehring, W. J. (2012). The processing of unexpected positive response outcomes in the mediofrontal cortex. *The Journal of Neuroscience*, *32*, 12087—12092.

Eppinger, B., Mock, B., & Kray, J. (2009). Developmental differences in learning and error processing: Evidence from ERPs. *Psychophysiology*, *46*, 1043—1053.