Free won't : neurobiological bases of the development of intentional inhibition

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Propositions

Intentional and externally driven inhibition, which both result in the same outcome, namely no behavioral output, can be partly dissociated based on their underlying neural networks.

In the study of intentional inhibition, which has no behavioral output, it is important to use psychophysiological measures to gain insight in the processes underlying intentional inhibition.

Even though intentional inhibition shows an early developmental trajectory, the underlying network remains immature, making it sensitive to influences from the outside.

Getting a better understanding of the development of intentional inhibition will be important in gaining a better understanding of disorders of impulsivity in which problems with self-control are a key issue.

Studying self-control from the perspective of intentional inhibition is an important road for future research.

The next step in developmental cognitive neuroscience will be go get a better understanding of neural networks by examining the relation between network connectivity and activity.

Combining heart rate and neuroimaging measures in one experiment is an important step in gaining a better understanding of the central autonomic network for action control.

Individual differences in developmental trajectories should be seen as a target of investigation, and not as a source of noise.

When communicating findings of scientific research to the general public it is important to thoroughly explain what these findings mean and whether or not these finding should already be applied.