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## 100 words

### 100 words on positive reward prediction error

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Reward prediction errors are involved in the most basic form of error-driven reinforcement learning that is based on reward outcome. Reward prediction errors occur when there is a difference between predicted and received rewards. In positive prediction error, the received reward exceeds the anticipated reward, whereas in negative prediction error, the received reward is less than the predicted reward. Positive prediction errors are signalled by a phasic increase in dopamine activity in the midbrain neurons that is suggested to code the economic utility of the rewards. The striatum, amygdala and frontal cortex are also involved in mediating positive prediction errors.

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