

Supplementary data 2: Modified Monetary Incentive Delay (MID) task

Note The response window was individually adjusted in order to balance hits and misses. After a hit, 20 msec was subtracted from the maximum response time and 10 msec was added after a miss. This procedure resulted in comparable hit rates (35% for no-reward and 40% in the reward condition)

fMRI acquisition and preprocessing

Imaging was conducted using a 1.5 Tesla scanner (Sonata Siemens, Munich, Germany). Whole brain functional imaging was performed using a gradient-echo echo-planar scanning sequence (35 axial slices, repetition time =2570 ms, echo time =35 ms, voxel size =3.5x3.5x3.0 mm, interslice gap= 0.5 mm, field of view=224 mm, flip angle= 90°). Before the acquisition of functional images, a high-resolution T1-weighted magnetization-prepared rapid acquisition gradient echo (MP-RAGE) anatomical scan was obtained (176 saggital slices, repetition time= 2730 ms, echo time= 2.95 ms, voxel size=1.0x1.0x1.0 mm, field of view= 256 mm).

Blood-oxygen-level dependence time-series data were preprocessed and analyzed using SPM5 (Wellcome Dept. of Cognitive Neurology, London). The first 5 volumes were discarded to allow for T1-equilibrium. The remaining images were spatially realigned to the first volume to correct for head movement during scanning. Subjects were excluded when they had moved more than 4 mm in x, y or z direction. The patient and comparison groups did not differ in terms of the average amount of movement [t(102)=1.09, p=.28]. After realignment the images were spatially normalized to a standard

echo-planar imaging (EPI) template centered in Talairach space (1), and spatially smoothed with a Gaussian kernel of 8 mm full-width-half-maximum.

1. Ashburner J, Friston K. Multimodal image coregistration and partitioning--a unified framework. Neuroimage. 1997;6(3):209-17.