Supporting Information

De Martino et al. 10.1073/pnas.0910230107

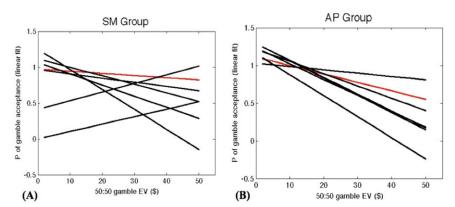


Fig. S1. These graphs summarize the result of the risk control task in which participants were asked to choose between accepting a sure amount S or flipping a coin for a "double or nothing" outcome, in which outcomes 0 and 2S are equally likely. Each graph represents the linear regression of the probability (P) of gamble acceptance for different levels of EV of 50:50 gambles (i.e., EV = $(0 + 2S) \times 0.5$). Note that because these gambles did not include potential losses, we were able to confirm that the susceptibility to overall risk was unaffected by amygdala lesion. The lesion participants are represented by red lines and their respective controls by black lines in each of the panels (note that due to the linear fit the value of P may sometimes exceed the range 0–1). The negative slopes of these linear fits for both lesion participants (as well as for the majority of the control participants) show an overall risk-averse behavior in both groups. Critically, neither lesion patient differed significantly from the respective control group, in striking contrast to the loss-aversion component of the study.

Table S1. Lambda (λ) estimates for each amygdala lesion participant and for each matched control

Lambda (λ) estimates S.M. group	Lambda (λ) estimates A.P. group
S.M. $\lambda = 0.76$	A.P. λ = 1.06
C1 $\lambda = 1.00$	C1 $\lambda = 1.29$
C2 $\lambda = 1.10$	$C2 \lambda = 1.96$
C3 $\lambda = 2.13$	C3 $\lambda = 1.67$
C4 $\lambda = 1.67$	C4 $\lambda = 1.63$
C5 $\lambda = 0.99$	C5 $\lambda = 2.09$
C6 $\lambda = 1.74$	$C6 \lambda = 1.92$
C (mean) 1.52	C (mean) 1.76
C (SE) 0.19	C (SE) 0.12

The value of λ is calculated such that gambles with adjusted expected utilities of $(0.5G+0.5\lambda\times L)$ are estimated (from a logistic regression) to be chosen half the time (see *Methods* for more details). This parameter gives an indication of how heavily participants appear to weight losses compared to gains, inferred from the choices they made.