

Instructions

In the next phase of the task, the symbols you see may change in some cases. Imagine they are received via a TV aerial. Sometimes, reception will be noisy, very much like TV when the aerial is not well adjusted. In each symbol, there are four pieces. When reception is noisy, those pieces might flip randomly at a rate of 20% for each piece. Most of the time, none or only one piece will be changed. Less frequently, however, two, three, or even four pieces will be changed. Noisy reception will be signalled by a grey background. When transmission is noiseless, the original symbols will appear, and noiseless reception will be signalled by a white background. After noisy reception, the original signal will be shown together with the shock/no-shock sign. Sometimes, symbols will appear that you have not seen before, while the light blue symbols will never change. On the next screens, you will see examples of each type of reception.

Supplementary Table 1

Blood oxygen level dependent (BOLD) responses to the CS+ onset (risk condition) as opposed to the CS- onset, and to linearly increasing probability of negative outcome in the CS+. All clusters are reported at a voxel-level significance threshold of $p < .001$. Small volume correction was conducted with a sphere of 15 mm diameter around peak coordinates reported previously for phasic amygdala responses in fear conditioning (Morris and Dolan, 2004), and for the representation of outcome probability, respectively (Tobler et al., 2007). Results are reported cluster-level corrected with $p < .05$ for family-wise error (*FWE*) outside regions of interest (marked *).

Brain regions	Brodmann area of local maxima	Hemi-sphere	Voxel number	Voxel <i>t</i> score	Montreal Neurological Institute brain template coordinates of local maxima
<i>CS+ > CS-</i>					
Amygdala		left	17	4.45	-30, -8, -18
<i>CS+: effect of outcome probability</i>					
Ventral striatum		right	22	3.69	8, 4, -2

Supplementary Table 2

Blood oxygen level dependent (BOLD) responses to risky cues as opposed to ignorance cues. All clusters are reported at a voxel-level significance threshold of $p < .001$, and cluster-level corrected with $p < .05$ for family-wise error (*FWE*) outside regions of interest (marked *).

Brain regions	Brodmann area of local maxima	Hemi-sphere	Voxel number	Voxel <i>t</i> score	Montreal Neurological Institute brain template coordinates of local maxima
Occipital cortex*	17	bilateral	436	6.18	8, -86, 2; -10, -94, 2