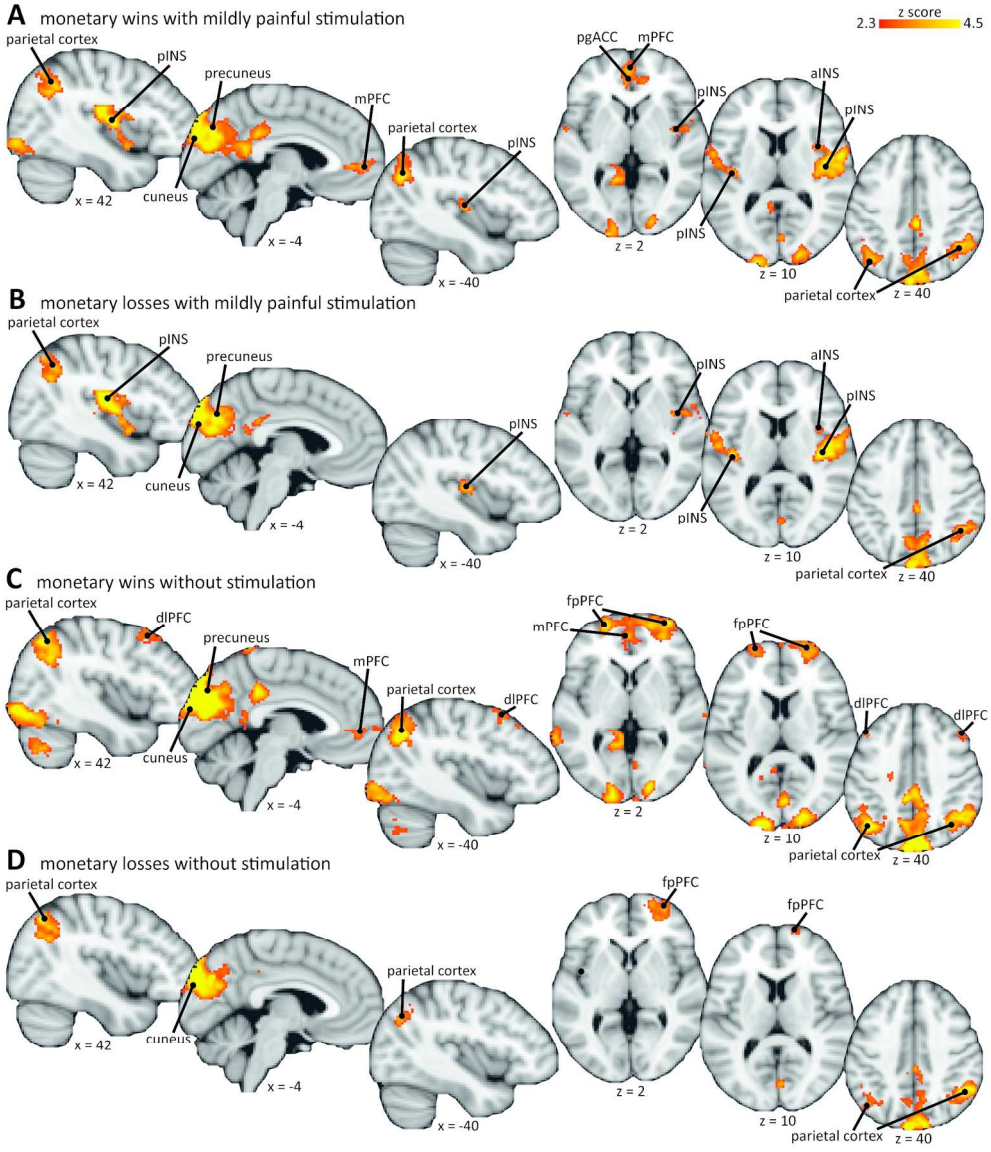

180x205mm (300 x 300 DPI)

Supplementary material

Caption Figure S1

Brain activation associated with (A) monetary wins with simultaneous mildly painful stimulation, (B) monetary losses with simultaneous mildly painful stimulation, (C) monetary wins without simultaneous stimulation, and (D) monetary losses without simultaneous stimulation compared to rest; aINS, anterior insula; pINS, posterior insula; mPFC, medial prefrontal cortex; dlPFC, dorsolateral prefrontal cortex; fpPFC, frontopolar prefrontal cortex; pgACC, perigenual anterior cingulate cortex. Images are displayed in neurological convention, i.e. right side of the brain is on the right. Coordinates are given in MNI space. Statistical inference was based on a voxel-based threshold of $z = 2.3$, cluster corrected at $p < .05$ on a whole brain level. For details see Table S1.

Supplementary material

Table S1. Brain activation in response to monetary wins and losses with simultaneous mildly painful stimulation and without stimulation.

			MNI peak coordinates in mm		
brain region	**cluster size (mm^3)**	**z score peak**	**x**	**y**	**z**
monetary wins with mild pain vs. rest					
cluster spanning:	36744	5.27	4	-80	20
cuneus,		5.27	4	-80	20
precuneus		5.08	8	-72	28
cluster spanning:	10936	5.29	44	-18	18
central opercular cortex,		5.29	44	-18	18
SII,		4.53	56	-2	8
insula		3.51	40	2	-12
parietal cortex	7904	4.37	46	-60	48
parietal cortex	6512	4.48	-42	-66	34
cluster spanning:	3704	3.96	-62	8	22
premotor cortex,		3.96	-62	8	22
insula,		3.65	-40	-16	10
temporal cortex,		3.59	-56	-2	-16
SII		3.19	-54	-10	12
occipital cortex	3152	4.40	20	-94	6
occipital cortex	3128	4.55	-10	-106	10
cluster spanning:	3056	3.65	-2	52	2
medial prefrontal cortex,		3.65	-2	52	2
perigenual ACC		3.13	12	42	0
occipital cortex	2944	4.56	40	-84	-8
monetary losses with mild pain vs. rest					
cluster spanning:	25384	5.48	8	-82	26
cuneus,		5.48	8	-82	26
precuneus		4.90	-4	-74	32
cluster spanning:	11312	5.56	44	-16	16
central opercular cortex,		5.56	44	-16	16

SII, insula		4.17 3.94	54 38	-8 2	10 -14
parietal cortex	6064	3.87	48	-58	48
insula	3744	3.99	-42	-16	10
monetary wins without stimulation vs. rest					
cluster spanning:	62736	6.72	-6	-94	26
cuneus, precuneus		6.72 6.33	-6 -2	-94 -76	26 32
occipital cortex	18488	5.25	18	-94	6
cluster spanning:	15752	4.34	36	64	2
frontopolar prefrontal cortex, medial prefrontal cortex		4.34 3.77	36 2	64 50	2 -4
parietal cortex	12080	4.95	44	-62	46
parietal cortex	12000	4.99	-42	-68	34
temporal cortex	8216	4.54	-56	-54	-14
temporal cortex	4800	3.90	60	-6	-10
dorsolateral prefrontal cortex	3056	3.80	-26	22	58
dorsolateral prefrontal cortex	3048	3.38	30	24	58
monetary losses without stimulation vs. rest					
cuneus	21880	5.41	8	-82	26
parietal cortex	9000	4.78	48	-62	46
parietal cortex	3664	3.86	-42	-68	36
frontopolar prefrontal cortex	3128	3.46	26	50	2

Brain areas that were significantly activated when obtaining monetary wins or losses simultaneously with mild painful stimulation and without stimulation (significant on a whole brain-level, voxel-based threshold $z = 2.3$ and cluster-based threshold $p < 0.05$). Local maxima within the clusters are given for individual anatomical areas. SII, secondary somatosensory cortex; ACC, anterior cingulate cortex.