

## Supplementary Material

### Effective amygdala-prefrontal connectivity predicts individual differences in successful emotion regulation

Carmen Morawetz. Stefan Bode. Juergen Baudewig. Hauke R. Heekeren

**Table S1:** Task-related PPI analysis for left amygdala seed

Side	Region	Cluster Peak				Voxels	t-value
		BA	x	y	z		
<b>Decrease&gt;Look Negative</b>							
RH	Precuneus*	31	24	-79	28	514	-5.18
RH	Precuneus	31	24	-79	28	229	-5.18
RH	Cuneus	30	24	-73	7	162	-3.49
RH	Middle Occipital Gyrus	19	39	-76	7	59	-3.35
RH	Middle Occipital Gyrus	18	24	-58	1	6	-3.30
RH	Fusiform Gyrus	37	48	-55	-14	17	-2.52
RH	Middle Temporal Gyrus	37	42	-61	-2	23	-2.42
LH	Supramarginal Gyrus*	40	-54	-49	25	593	-4.61
LH	Supramarginal Gyrus	40	-54	-49	25	123	-4.61
LH	Middle Temporal Gyrus	39	-30	-49	31	177	-3.64
LH	Cuneus	19	-27	-76	31	199	-3.59
LH	Precuneus	7	-21	-67	28	9	-3.44
LH	Inferior Parietal Lobule	40	-45	-49	40	9	-3.17
LH	Middle Temporal Gyrus	19	-33	-61	19	16	-3.06
LH	Precuneus	7	-18	-49	46	19	-2.84
LH	Precuneus	7	-24	-34	43	28	-2.69
LH	Caudate*		-18	26	4	259	-4.03
LH	Caudate		-18	26	4	74	-4.03
RH	Anterior Cingulate	24	9	32	10	86	-3.96
LH	Inferior Frontal Gyrus	47	-33	35	1	39	-3.37
RH	Inferior Frontal Gyrus	11	24	35	-17	41	-3.23
RH	Anterior Cingulate	10	18	41	-8	11	-3.08
LH	Anterior Cingulate		-9	35	1	8	-3.07
LH	Cuneus*	7	0	-64	31	104	-3.78
<b>Increase&gt;Look Negative</b>							
RH	Superior Temporal Gyrus*	38	45	2	-8	207	3.60
RH	Superior Temporal Gyrus	38	45	2	-8	162	3.60
RH	Superior Temporal Gyrus	21	57	-13	-2	38	3.17
RH	Middle Temporal Gyrus	21	66	-19	-8	7	2.62
LH	Parahippocampal Gyrus*	34	-30	5	-17	100	3.24
LH	Parahippocampal Gyrus	34	-30	5	-17	27	3.24
LH	Superior Temporal Gyrus	38	-39	14	-20	35	3.06
LH	Inferior Frontal Gyrus	47	-39	23	-8	33	2.92

FWE  $p < 0.05$ ,  $k=91$

maximum t-value. \*indicates cluster peak.

Peaks are identified with Talairach coordinates.

**Table S2:** Task-related PPI analysis for IFG seed region

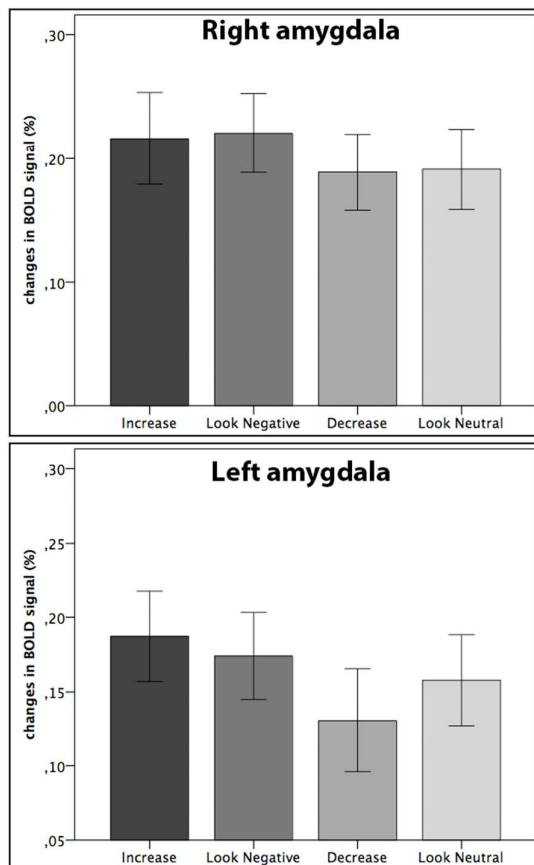
Side	Region	Coordinates			Voxels	t-value	
		BA	x	y			z
<b>Decrease&gt;Look Negative</b>							
RH	Superior Temporal Gyrus*	21	57	-13	-2	129	4.81
RH	Superior Temporal Gyrus	21	57	-13	-2	105	4.81
RH	Fusiform Gyrus	20	51	-4	-26	24	3.42
RH	Superior Frontal Gyrus*	10	9	65	-2	154	-3.71
RH	Superior Frontal Gyrus	10	9	65	-2	63	-3.71
LH	Superior Frontal Gyrus	10	-12	65	1	91	-3.44
<b>Increase&gt;Look Negative</b>							
RH	Thalamus*		3	-10	7	2232	4.88
RH	Thalamus		3	-10	7	271	4.88
LH	Middle Temporal Gyrus	21	-54	-16	-5	170	4.72
LH	Sub-Gyral	20	-39	-13	-20	465	4.33
LH	Thalamus		-3	-22	7	235	4.21
LH	Amygdala		-15	-10	-17	99	4.20
LH	Parahippocampal Gyrus	35	-21	-22	-23	24	3.98
RH	Parahippocampal Gyrus	36	33	-28	-20	153	3.90
LH	Cingulate Gyrus	24	-3	-4	25	40	3.87
RH	Middle Temporal Gyrus	22	54	-13	-5	288	3.87
RH	Fusiform Gyrus	20	57	-16	-23	72	3.72
RH	Parahippocampal Gyrus/Amygdala		30	-10	-14	147	3.71
LH	Inferior Frontal Gyrus	47	-30	8	-17	13	3.58
LH	Lingual Gyrus	18	-12	-58	7	31	3.50
RH	Sub-Gyral	21	45	-1	-14	5	3.28
RH	Superior Temporal Gyrus	38	24	11	-23	26	3.19
LH	Posterior Cingulate	29	-9	-46	7	10	3.13
RH	Anterior Cingulate	25	3	14	-2	10	3.11
RH	Inferior Temporal Gyrus	20	63	-28	-17	5	2.89
RH	MidbrainRed Nucleus		6	-22	-17	15	2.87
LH	Parahippocampal Gyrus	36	-27	-37	-8	6	2.76
RH	Caudate		39	-28	-2	9	2.64
RH	Superior Temporal Gyrus	38	45	11	-11	13	2.62
LH	Lentiform Nucleus		-33	-16	-2	7	2.62
LH	Middle Temporal Gyrus*	39	-45	-70	19	92	3.51
LH	Middle Temporal Gyrus	39	-45	-70	19	67	3.51
LH	Middle Occipital Gyrus	19	-39	-85	19	25	3.36
LH	Postcentral Gyrus*	7	-12	-58	70	108	3.44
LH	Postcentral Gyrus	7	-12	-58	70	62	3.44
LH	Postcentral Gyrus	5	-27	-46	67	25	2.82
RH	Superior Frontal Gyrus*	8	21	41	43	235	-4.69
RH	Superior Frontal Gyrus	8	21	41	43	93	-4.69
RH	Middle Frontal Gyrus	9	36	26	34	142	-3.52
LH	Anterior Cingulate*	32	-15	38	10	253	-3.98
LH	Anterior Cingulate	32	-15	38	10	97	-3.98
LH	Cingulate Gyrus	32	-15	26	22	28	-3.55

LH	Medial Frontal Gyrus	10	-12	65	4	67	-3.47
LH	Superior Frontal Gyrus	10	-24	53	7	13	-3.20
LH	Anterior Cingulate	32	-12	35	25	8	-3.12
LH	Middle Frontal Gyrus	46	-42	44	7	40	-3.10
LH	Medial Frontal Gyrus*	6	-6	17	46	115	-3.64
LH	Medial Frontal Gyrus	6	-6	17	46	69	-3.64
LH	Medial Frontal Gyrus	8	0	26	40	11	-2.96
RH	Cingulate Gyrus	32	15	20	40	20	-2.51
LH	Medial Frontal Gyrus	8	0	38	37	15	-2.44

FWE  $p < 0.05$ ,  $k = 91$

maximum t-value. \*indicates cluster peak.

Peaks are identified with Talairach coordinates.



**Figure S1:** Activation profiles in bilateral amygdala ROIs.