

Cohen's Effect Sizes [d] in Peak Voxels of Interest

Voxel of interest	Descriptiveness of social behavior [SOC]			Meaning Relatedness [SOC]			SOC > ANI		
	Effect size	T – value	P – value	Effect size	T – value	P – value	Effect size	T – value	P – value
Sup aTL	0.74	3.77	0.001** [‡]	0.48	2.45	0.022* ⁺	0.72	3.65	0.001** [‡]
OFC	0.37	1.86	0.074	0.59	3.03	0.006* ⁺	0.92	4.71	0.00008** [‡]
med PFC	0.28	1.42	0.168	0.25	1.26	0.218	0.80	4.09	0.0004** [‡]
Sup aTL – OFC	0.51	2.60	0.016*	0.31	1.58	0.127	0.30	1.53	0.139
Sup aTL – med PFC	0.63	3.23	0.003* [‡]	0.42	2.13	0.043*	0.49	2.48	0.020*

Effect sizes are Cohen's d (11) calculated conservatively using GPOWER software (12): for effect differences (paired samples t-test): $(\text{mean1} - \text{mean2}) / \text{square root}(\text{sd}_1^2 + \text{sd}_2^2 - 2 \times \text{correlation coefficient } r_{12} \times \text{sd}_1 \times \text{sd}_2)$; for simple parametric effects (one sample t-test): mean / sd . Effect size definitions from Cohen (11): 0.20 = small, 0.50 = medium, 0.80 = large (**medium & large effect sizes are marked in bold**). Significance at P = 0.001 marked with **, at P = 0.05 marked with *. Group means (N = 26) and standard deviations (sd) are derived from individual subject parameter estimates (regression coefficients) for the contrast of interest at the group peak voxel for that region (sum of betas from the general linear model per subject multiplied with a contrast vector as given by SPM5 contrast images). Voxels and contrasts of interest are the same as in Fig. 2d (Sup a TL = right anterior superior temporal lobe, OFC = right orbitofrontal cortex, med PFC = medial prefrontal cortex; for further details see Supporting Methods). Paired sample t-tests (N = 26, differences for effects in 2 regions, 2-tailed) and one sample t-tests (N = 26, testing whether effect is different from 0, 2 - tailed) were computed using SPSS11 (<http://www.spss.com/>). Effects that were reproducible at P < 0.05 in two independent subgroups (random split subgroup 1: N = 13, 7 female; subgroup 2: N = 13, 6 female) by rank ordering generated random numbers to assign males and females randomly to two groups are marked with ‡. Effects within one region: clusters with small volume corrected P < 0.05 using a 12 mm sphere around the peak voxel of interest in the whole brain analysis are marked with ⁺.