Neuron, Volume *57*

Supplemental Data

Self Responses along Cingulate Cortex Reveal Quantitative Neural Phenotype for High-Functioning Autism

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Figure S1. ASD and Control Groups Do Not Differ in Cingulate "Other" Response Pattern
Projection coefficients of the cingulate "other" response did not differentiate between the ASD and the age- and IQ- matched control group, demonstrating that in the "other" phase of trust game, ASD cingulate response is normal. The coefficients of ASD and controls on the first three eigenvectors of the cingulate "other" basis are illustrated (ASD vs controls, p = .43, .79, and .24 on principal components 1, 2, and 3, respectively. For all other comparisons between the ASD and control group on the remaining PCs in the "other" basis, p > 0.1.)

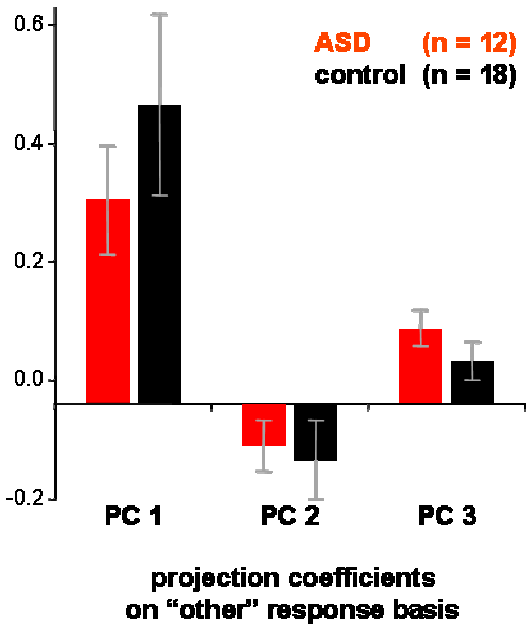

Figure S2. Development of the Self Eigenmode across the "Self" Phase of the Multiround Trust Game

Cingulate hemodynamic response patterns at each TR (TR = 2 s) relative to the maximum mean BOLD self response are projected onto the basis comprised of the first three eigenvectors (accounting for 92% of the variance) of the self phase. The projections at the time of peak self response and 3 and 6 TRs relative to this time are plotted here. As illustrated here in two control groups, the contribution of the self eigenmode is near zero during the beginning of the "self" phase, gradually appears, is maximally positive subsequent to the "self" decision, and disappears again at the ending time points of the "self" phase. In the ASD group, the contribution of the self eigenmode is near zero during the entire "self" phase.