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| **Supplementary Table S4.** *Results of neuroimaging studies using neuroeconomic designs* | | | | | | | | | |
|  | **Study** | **Behavioural results** | **N, Age,**  **Sample, IQ** | **Task**  **Analysis** | **Contrast** | **Brain activation** | **Coordinates**  **MNI** | | |
| **SZ** | Gromann et al. | First investments SZ < HC | SZ = 20 | Trust game as SZ/CON investor | Real cooperative repayment > | **SC < HC** | 12 | 11 | -1 |
|  | 2013 | Cooperative investments SZ < HC | HC = 20 | with pre-programmed cooperative | control repayment | R Caudate Nucleus |  |  |  |
|  |  | Caudate signal during cooperative | Mean age | and deceptive trustee (participants |  | **SC > HC:** none |  |  |  |
|  |  | repayment correlates with SZ | SZ: 33.7 (7.8) | were told they were playing real | Real cooperative & deceptive | **SC < HC** |  |  |  |
|  |  | paranoia scores (r = -0.56) | HC: 32.2 (9.1) | humans) | control repayment | R Superior Temporal Gyrus (TPJ) | 57 | -53 | 30 |
|  |  | Signal change in caudate was | IQ: No difference | ROI | Real cooperative repayment > | **SC > HC:** none |  |  |  |
|  |  | significantly correlated with first |  | Whole brain | control repayment | **SC < HC** |  |  |  |
|  |  | investment in HC (r = 0.52) but not |  |  |  | R Inferior Parietal Lobule | 49 | -60 | 54 |
|  |  | SZ |  |  |  | R Middle Temporal Gyrus (Medial Frontal) | 67 | -44 | -2 |
|  |  |  |  |  |  | **SC > HC:** none |  |  |  |
|  |  |  |  |  | Real deceptive repayment > | **SC < HC** |  |  |  |
|  |  |  |  |  | control repayment | R Inferior Parietal Lobule | 44 | -51 | 42 |
|  |  |  |  |  |  | **SC > HC:** none |  |  |  |
| **ASD** | Chiu et al. 2008 | HC showed middle cingulate activation after their own decision that resembled cingulate “self-response” patterns in other trust game studies. This “self-response” pattern was absent in ASD. The response pattern in ASD resembled the pattern of HC in absence of a social partner. | ASD = 12  HC = 18  Mean age  ASD: 16.5 (3.3)  HC: 14.9 (2.2)  IQ: no difference | Trust game with HC as investor and ASD/HC as trustee.  ROI | Self phase (decision)  Other phase (outcome) | **ASD < HC**  Cingulate  **ASD > HC: none**  **ASD = HC** |  |  |  |
|  |  | Reduction in cingulate response in “self-phase ”was correlated with ASD |  |  |  |  |  |  |  |
|  |  | Symptoms, ASD = HC in “other phase” (oucome/repayment) |  |  |  |  |  |  |  |
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