

Additional file 3. Comparison of CCPT performance between probands with autism, unaffected siblings of autism probands, and typically-developing controls

| Group | Autism (n = 122) | US of autism (n = 122) | TD (n = 196) | F | P | Comparison# |
|------------------------------|----------------------------|----------------------------------|------------------------|-------|-------|-------------|
| Focused attention | | | | | | |
| Omission | 20.68±31.56 | 7.16±8.42 | 6.35±7.41 | 27.80 | <.001 | A>US,TD |
| RT SE | 15.71±12.55 | 9.59±5.72 | 8.63±5.50 | 33.05 | <.001 | A>US,TD |
| Variability | 29.84±25.92 | 18.22±15.70 | 16.89±16.54 | 17.96 | <.001 | A>US,TD |
| Perseveration | 16.89±19.19 | 6.73±10.34 | 7.02±14.31 | 15.56 | <.001 | A>US,TD |
| Detectability | 0.30±0.40 | 0.48±0.40 | 0.43±0.36 | 5.88 | 0.004 | A<US,TD |
| Cognitive impulsivity | | | | | | |
| Commission | 24.32±8.94 | 19.39±8.55 | 20.85±8.31 | 8.00 | <.001 | A>US,TD |
| Reaction time | 461.20±163.47 | 412.46±96.85 | 381.04±67.13 | 24.49 | <.001 | A>US,TD |
| Response style | 1.16±3.35 | 2.35±12.26 | 0.58±1.25 | 2.54 | 0.083 | - |

Sustained attention

Hit RT block
change 0.01±0.05 0.01±0.03 0.01±0.03 0.43 0.652 -

Hit SE block
change 0.07±0.12 0.07±0.10 0.04±0.09 3.39 0.037 -

Vigilance

Hit RT ISI
change 0.09±0.09 0.08±0.05 0.08±0.04 2.21 0.114 -

Hit SE ISI
change 0.12±0.19 0.11±0.16 0.10±0.16 0.23 0.793 -

Bonferroni correction $p < 0.05$

Abbreviation: ISI=inter-stimulus interval; RT=Reaction time; SE=Standard error; TD=typically-developing controls; US=unaffected siblings of autism probands