Supplementary Tables

Table 1. Clinical characteristics of GTS patients and healthy adolescents.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Patients (n=27) | Controls (n=30) | P-value |
| Mean age (SD) | 13.7 (2.3) | 13 (2.2) | 0.307 |
| Sex (female/male) | 6/21 | 14/16 | - |
| Medication | n = 5  (1 x Sulpiride and Fluvoxamine;  1 x Tiapride and MPH; 1 x Risperidon and MPH; 2 x MPH) | n = 1 (MPH) | - |
| FBB-ADHS | 0.86 (0.6) ^ | 0.4 (0.3) | 0.002 |
| CY-BOCS | 7.6 (8.8) | 0.4 (1.6) | < 0.001 |
| CDRS-R | 24.6 (10.6) | 18.8 (2.5) | 0.01 |
| YGTSS/100 | 23.6 (13.1) | 0 | - |
| YGTSS/50 | 15.4 (7.4) | 0 | - |
| RF | 7 (2.5) \* | 0 | - |
| RI | 5.4 (1.8) \* | 0 | - |
| IP | 0.16 (0.3) \* | 0 | - |
| DCI | 39.3 (14.3) | 0 | - |
| PUTS | 20.6 (5.6) | NA | - |

Supplementary Table 1. Mean values are given with standard deviation (SD) in brackets. P-values indicate significance levels of unpaired comparisons between groups. GTS = Gilles de la Tourette syndrome; n = number of participants; MPH = Methylphenidate; FBB-ADHS = Attention-deficit hyperactivity disorder symptom checklist (Fremdbeurteilungsbogen für Aufmerksamkeits/ Hyperaktivitätsstörungen); CY-BOCS = Children’s Yale-Brown Obsessive Compulsive Scale; CDRS-R = Children’s Depression Rating Scale -Revised; YGTSS/100 = Yale Global Tic Severity Scale; YGTSS/50 = Total tic severity score of the Yale Global Tic Severity Scale; RF/RI = Modified Rush Video Protocol based scores during free ticcing/ and tic inhibition conditions respectively; IP = Tic inhibition potential; DCI = Diagnostic confidence index ; PUTS = Premonitory Urge for Tics Scale. \* = Results from 26 participants. One subject was not assessed, as he was not facing the camera during filming sessions. ^ = Results from 26 participants. One subject did not return the questionnaire. NA = Not available/Not performed.

Table 2. Prediction of intention (W judgements) in the GTS group

1. Correlation matrix for clinical and chronometric variables used in the multiple regression model

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | W | SD W | FBB-ADHD | RF | IP | PUTS |
| W | 1.0000 |  |  |  |  |  |
| SD W | -0.3751 | 1.0000 |  |  |  |  |
| FBB-ADHS | 0.3661 | 0.2199 | 1.0000 |  |  |  |
| RF | -0.1723 | 0.4742 | 0.0865 | 1.0000 |  |  |
| IP | -0.3503 | 0.2408 | 0.0952 | 0.6215 | 1.0000 |  |
| PUTS | 0.3821 | 0.1741 | 0.1709 | 0.5360 | 0.3064 | 1.0000 |

B. Partial regression coefficients and significance tests from the multiple regress model.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Predictor | beta | Rsquared | Standard error | t(19) | p |
| SD W | -0.4513 | 0.2793 | 0.1358 | 2.9419 | 0.0084 |
| FBB-ADHS | 0.4177 | 0.0838 | 32.2813 | 3.0703 | 0.0063 |
| RF | -0.0019 | 0.6134 | 12.7687 | 0.0090 | 0.9929 |
| IP | -0.4412 | 0.3954 | 83.5973 | 2.6346 | 0.0163 |
| PUTS | 0.5255 | 0.3198 | 4.3382 | 3.3282 | 0.0035 |

W = Mean estimated time of conscious intention, relative to keypress (ms);

SD W = Standard deviation of repeated estimates of conscious intention (ms)

FBB-ADHS = Attention-deficit hyperactivity disorder symptom checklist (Fremdbeurteilungsbogen für Aufmerksamkeits/Hyperaktivitätsstörungen);

RF = Tic severity during free ticcing from Modified Rush Video Protocol;

IP = Tic inhibition potential; PUTS = Premonitory Urge for Tics Scale

Table 3. Prediction of action awareness (M judgements) in the GTS group

1. Correlation matrix for clinical and chronometric variables used in the multiple regression model

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | M | SD M | FBB-ADHD | RF | IP | PUTS |
| M | 1.0000 |  |  |  |  |  |
| SD M | 0.2383 | 1.0000 |  |  |  |  |
| FBB-ADHS | 0.0747 | 0.2350 | 1.0000 |  |  |  |
| RF | 0.0927 | 0.1914 | 0.0865 | 1.0000 |  |  |
| IP | -0.0827 | 0.0672 | 0.0952 | 0.6215 | 1.0000 |  |
| PUTS | 0.3336 | 0.2175 | 0.1709 | 0.5360 | 0.3064 | 1.0000 |

B. Partial regression coefficients and significance tests from the multiple regress model.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Predictor | beta | Rsq | se | t(19) | p |
| SD M | 0.1770 | 0.1010 | 0.1494 | 0.8070 | 0.4296 |
| FBB-ADHS | -0.0093 | 0.0760 | 19.3429 | 0.0429 | 0.9662 |
| RF | -0.0129 | 0.5258 | 6.9375 | 0.0428 | 0.9663 |
| IP | -0.1972 | 0.3930 | 50.2024 | 0.7385 | 0.4692 |
| PUTS | 0.3640 | 0.3124 | 2.5964 | 1.4513 | 0.1630 |

W = Mean estimated time of action, relative to keypress (ms);

SD W = Standard deviation of repeated estimates of action (ms);

FBB-ADHS = Attention-deficit hyperactivity disorder symptom checklist (Fremdbeurteilungsbogen für Aufmerksamkeits/Hyperaktivitätsstörungen);

RF = Tic severity during free ticcing from Modified Rush Video Protocol;

IP = Tic inhibition potential; PUTS = Premonitory Urge for Tics Scale