

eTable 1 The number and percentage in the Chronic fatigue group and CFS (CDC) subgroup performing more than 1 SD poorer than the Healthy Control group or Normative data.

| Neurocognitive measure | Chronic fatigue group (N=120) | | CFS (CDC) subgroup (N=88) | |
|---------------------------------------|-------------------------------|----------------|---------------------------|----------------|
| | HC | Normative data | HC | Normative data |
| Processing speed ¹ (%) | 37 (31) | 46 (38) | 27 (31) | 36 (41) |
| Working memory ² (%) | 48 (40) | 71 (60) | 37 (42) | 55 (63) |
| Cognitive inhibition ¹ (%) | 33 (28) | 35 (29) | 26 (30) | 26 (30) |
| Total recall ³ (%) | 36 (30) | 37 (31) | 29 (33) | 29 (33) |
| BRIEF GEC ⁴ (%) | 77 (65) | 103 (87) | 60 (68) | 77 (88) |

Normative data references:

¹ Delis D, Kaplan E,& Kramer, J.(2001) Delis-Kaplan Executive Function System (D-KEFS) (Norwegian version). Stockholm, Sweden: Pearson System.

² Wechsler, D. (2004). Wechsler Intelligence Scale for Children – Fourth edition (Norwegian version). Stockholm, Sweden: The Psychological Corporation.

³Holmèn A, Juuhl-Langseth M, Thormodsen R, et al. Neuropsychological Profile in Early-Onset Schizophrenia-Spectrum Disorders: Measured With the MATRIVS Battery. SchizophrBull2010;36(4):852-59.

⁴Hovik KJ, Egeland J, Isquith PK, et al. Distinct Patterns of Everyday Executive Function Problems Distinguish Children With Tourette Syndrome From Children With ADHD or Autism Spectrum Disorders. J Att Dis Published Online First 2014;DOI 10.1177/1087054714550336.

eTable 2 Multivariate analyses of the relations between cognitive measures as dependent variables and group allocation (CFS (CDC) subgroup vs. Healthy Controls), depression symptoms (MFQ), anxiety traits (STAI-T) and sleep index (KSQ) as independent variables.

| Dependent variable | Regression | Independent variables | B (CI) | Beta | p-value | R ² |
|---------------------------|----------------|-----------------------|-------------------|--------|---------|----------------|
| Processing speed | Multivariate I | Group | 2.8 (0.1, 5.5) | 0.206 | 0.043 | 0.08 |
| | | MFQ | -0.06 (-0.2, 0.5) | -0.108 | | |
| | | Group | 2.7 (-0.07, 5.5) | 0.198 | 0.056 | 0.08 |
| | Multivariate 2 | STAI-T | -0.07 (-0.2, 0.1) | 0.116 | 0.262 | |
| | | Group | 4.0 (1.0, 7.1) | 0.295 | 0.010 | 0.07 |
| | | KSQ | -0.3 (-1.5, 0.9) | -0.055 | 0.630 | |
| | Multivariate I | Group | -2.2 (-3.7, -0.7) | -0.287 | 0.004 | 0.14 |
| | | MFQ | 0.05 (-0.02, 0.1) | 0.144 | 0.140 | |
| | | Group | -2.3 (-3.9, -0.8) | -0.301 | 0.003 | 0.14 |
| Working memory | Multivariate 2 | STAI-T | 0.04 (-0.3, 0.1) | 0.109 | 0.275 | |
| | | Group | -2.0 (-3.7, -0.3) | -0.256 | 0.020 | 0.14 |
| | | KSQ | -0.5 (-1.2, 0.2) | -0.161 | 0.140 | |
| CWIT Cognitive Inhibition | Multivariate I | Group | 5.9 (-1.0, 12.7) | 0.174 | 0.093 | 0.04 |
| | | MFQ | -0.07(-0.4, 0.2) | -0.048 | 0.641 | |
| | | Group | 5.2(-1.8, 12.2) | 0.154 | 0.144 | 0.04 |
| | Multivariate 2 | STAI-T | -0.1(-0.5, 0.2) | -0.082 | 0.433 | |
| | | Group | 5.8 (-1.9, 13.4) | 0.172 | 0.136 | 0.04 |
| | | KSQ | 0.6 (-2.5, 3.6) | 0.041 | 0.723 | |
| | Multivariate I | Group | -1.8(-3.5, -0.07) | -0.212 | 0.041 | 0.04 |
| | | MFQ | -0.01(-0.1, 0.06) | -0.029 | 0.779 | |
| | | Group | -1.8(-3.5, -0.05) | -0.214 | 0.043 | 0.04 |
| HVLT-R Total Recall | Multivariate 2 | STAI-T | -0.1(-0.09, 0.07) | -0.031 | 0.769 | |
| | | Group | -2.3(-4.2, 0.4) | -0.271 | 0.019 | 0.05 |
| | | KSQ | 0.4(-0.4, 1.2) | 0.117 | 0.310 | |
| | Multivariate I | Group | 10.1(5.9, 14.3) | 0.437 | <0.001 | 0.26 |
| | | MFQ | -0.1(-0.3, 0.05) | -0.131 | 0.157 | |
| | | Group | 8.8(4.5, 13.0) | 0.380 | <0.001 | 0.29 |
| | Multivariate 2 | STAI-T | -0.2(-0.4, -0.05) | -0.230 | 0.014 | |
| | | Group | 8.5(3.8, 13.2) | 0.367 | <0.001 | 0.28 |
| | | KSQ | 2.0(0.1, 3.9) | 0.213 | 0.039 | |