**SUPPLEMENTARY MATERIAL**

**Supplementary Table S1.** Comparison of characteristics for controls, siblings and patients\*

|  |  |  |
| --- | --- | --- |
|  | Group | Main effects |
| Variable / group | Controls(*N* = 499) | Siblings (*N* = 915) | Patients(*N* = 908) | All groupsF |
| AgeGender, % maleEducationa, Highest degree (Verhage) Special, %Ethnicity, % DutchIQ, estimatedbFunctional outcome, Residential independence, % Financially responsible, % Social benefit, %PASc, Overall scoreSIS-Rd Positive NegativeCAPEe Positive  Negative DepressionDiagnostic % Psychosis % Mood % OtherCognitive Performance CPT performancef CPT variance (ms)g Block Designh Digit Symboli  Arithmeticj  Informationk Immediate recalll Delayed recallm | 29 (10)\*48\*5.4 (1.8)391110 (15)677221.1 (0.6)0.3 (0.3)0.2 (0.2)0.2 (0.2)0.5 (0.3)0.6 (0.3)-71246 (55)73 (28)47 (14)84 (14)15 (4)19 (5)29 (5)10 (3) | 28 (8)455.1 (2.1)682103 (16)677261.1 (0.7)0.4 (0.4)0.3 (0.3)0.2 (0.2)0.6 (0.4)0.6 (0.4)  -111244 (58)76 (28)45 (15)79 (15)14 (5)17 (5)27 (6)9 (3) | 27 (7)774.0 (2.1)13-95 (16)4453532.0 (0.9)--0.7 (0.5)1.0 (0.5)1.0 (0.6)100--221 (62)92 (36)41 (17)65 (16)12 (5)17 (6)23 (6)8 (3) | 14\*xχ = 222\*y104\*xχ = 65\*xχ = 21\*175\*xχ = 134\*yχ = 89\*yχ = 435361\*y4735477\*y346\*x189\*y-χ = 6χ = .445\*y93\*y36\*x340\*x89\*x28\*z198\*x157\*x |

\*Table presents means (SD) or numbers (in %); aEducation (Verhage): range 0 (no education), 3-5 (school diploma) to 8 (university degree); bIQ: Wechsler Adult Intelligence Scale-III (WAIS-III), short form; cPAS: Premorbid Adjustment Scale; dSIS-R: Structured Inventory for Schizotypy – Revised; eCAPE: Community Assessment for Psychic Experiences; fCPT performance: Continuous Performance Test HQ, performance index, gCPT variance (ms): CPT-HQ variance in reaction time (ms); hBlock Design: WAIS-III Block Design; iDigit Symbol: WAIS-III Digit Symbol Substitution Test; jArithmetic: WAIS-III Arithmetic; kInformation: WAIS-III Information; lImmediate recall: Word Learning Task (WLT) immediate recall; mDelayed recall: WLT Delayed recall. For the PAS, higher scores reflect poorer premorbid adjustment. \*x Main effect significant, and patient<sibling<control, \*y Main effect significant, and sibling<patient, \*z Main effect significant, and sibling<control.

**Supplementary Table S2.** Correlations between cognitive measures (*β*) for the non-affected siblings (*N* = 654).

|  |  |
| --- | --- |
|  | Cognitive Variable |
| Cognitive Variable | CPT performance | CPT variance | Block Design  | Digit Symbol | Arith-metic | Information | Immediate Recall | Delayed Recall |
| CPT performance | - | .44\*\* | 0.03 | 0.17\*\* | 0.06 | 0.07 | 0.12\*\* | 0.09\* |
| CPT variance |  | - | 0.13\*\* | 0.24\*\* | 0.13\*\* | 0.08\* | 0.17\*\* | 0.16\*\* |
| Block Design |  |  | - | 0.36\*\* | 0.49\*\* | 0.41\*\* | 0.19\*\* | 0.21\*\* |
| Digit Symbol |  |  |  | - | 0.36\*\* | 0.34\*\* | 0.29\*\* | 0.27\*\* |
| Arithmetic |  |  |  |  | - | 0.60\*\* | 0.27\*\* | 0.24\*\* |
| Information |  |  |  |  |  | - | 0.31\*\* | 0.29\*\* |
| Immediate Recall |  |  |  |  |  |  | - | 0.77\*\* |
| Delayed Recall |  |  |  |  |  |  |  | - |

\*Correlation significant at the α < 0.05 level; \*\*Correlation significant at the α < 0.01 level

**Supplementary Table S3.** Correlations between non-affected siblings and their probands (*β*), by the sibling’s deduced cognitive subtype

|  |  |
| --- | --- |
|  | Cognitive Variable |
| Cognitive Subtypes | CPT performance | CPT variance | Block Design | Digit Symbol | Arith-metic | Information | Immediate Recall | Delayed Recall |
| Normal profile (Na = 192) | 0.17\* | 0.12 | 0.28\*\* | 0.27\*\* | 0.22\*\* | 0.44\*\* | 0.12 | 0.13 |
| Mixed profile (N = 228) | 0.14\* | 0.12 | 0.22\*\* | 0.10 | 0.15\* | 0.39\*\* | 0.13 | 0.02 |
| Impaired Profile (N = 234)  | -0.08 | 0.11 | 0.25\*\* | 0.18\*\* | 0.08 | 0.34\*\* | 0.13 | 0.24\*\* |
| Overall (N = 654) | 0.13\* | 0.16\*\* | 0.35\*\* | 0.25\*\* | 0.30\*\* | 0.47\*\* | 0.17\*\* | 0.18\*\* |

aN = Number of sibling pairs; \*Correlation significant at the α < 0.05 level; \*\*Correlation significant at the α < 0.01 level

**Supplementary Table S4**. Comparisons of clinical, functional, and cognitive differences among sibling’s profiles

|  |  |  |  |
| --- | --- | --- | --- |
|  | Siblings | Probands | Siblings versusProbands |
| Cognitive profile | Clinicala | Functionalb | Clinical | Functional | Effect Sizec |
| Normal | + | + | +- | +- | L |
| Mixed | + | + | +- | +- | M |
| Impaired | +- | +- | - | - | S |

aClinical measures: Structured Interview for Schizotypy – Revised (SIS-R); Positive And Negative Syndrome Scale (PANSS);

bFunctional: Sociodemographical Schedule, Comprehensive Assessment of Symptoms History (CASH); cEffect size: Effect size of the cognitive differences between siblings and their proband.

Abbreviations: + = Good; +- = Reasonable; - = Poor; S = Small (0.2-0.5); M = Moderate (0.5-0.8); L = Large (>0.8).