Supplementary Table S2

Performance profiles per diagnostic group (medians) and comparison of sub-groups scoring at different percentile ranges (Kruskal-Wallis tests)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | NTBV domains (z-scores) |  |  |  |  |  |  |
|  | %iles | n | % | AT | LG | EF | M | MMSE | WST | Age | Educat. | BDI | B-ADL |
| CG |  | 211 |  | 0.24 | 0.33 | 0.11 | 0.52 | 29 | 107 | 66 | 11 | 4 | 1.36 |
|  | < 25 | 53 | 25 | 0.33 | 0.51 | 0.11 | 0.83 | 29 | 110 | 64 | 11 | 7 | 1.44 |
|  | 25–75 | 106 | 50 | 0.24 | 0.37 | 0.11 | 0.55 | 29 | 110 | 65 | 12 | 4 | 1.36 |
|  | > 75 | 52 | 25 | 0.23 | -0.04 | 0.04 | -0.21 | 28 | 104 | 68 | 11 | 4 | 1.20 |
|  | *Χ2* |  |  | 4.78 | **12.00** | 3.85 | **58.97** | **13.53** | **7.47** | 2.82 | 5.41 | **10.05** | **6.52** |
|  | *p* |  |  | .092 | **.002** | .146 | **.000** | **.001** | **.024** | .244 | .067 | **.007** | **.038** |
| SCD |  | 280 |  | 0.62 | 0.38 | 0.46 | 0.43 | 29 | 114 | 64 | 12 | 10 | 1.68 |
|  | < 25 | 121 | 43 | 0.67 | 0.41 | 0.46 | 0.65 | 29 | 114 | 62 | 12 | 12 | 1.92 |
|  | 25–75 | 134 | 48 | 0.58 | 0.36 | 0.51 | 0.25 | 29 | 114 | 67 | 12 | 8 | 1.56 |
|  | > 75 | 25 | 9 | 0.52 | 0.41 | 0.45 | -0.07 | 29 | 110 | 64 | 11 | 7 | 1.16 |
|  | *Χ2* |  |  | 0.33 | 2.08 | 0.94 | **37.50** | 0.45 | 0.04 | **6.92** | 0.42 | **18.36** | **29.85** |
|  | *p* |  |  | .849 | .353 | .624 | **.000** | .798 | .980 | **.031** | .811 | **.000** | **.000** |
| naMCI |  | 181 |  | -0.21 | -0.20 | -0.36 | 0.16 | 28 | 104 | 67 | 10 | 11 | 1.88 |
|  | < 25 | 68 | 38 | 0.06 | -0.04 | -0.17 | 0.53 | 28 | 104 | 62 | 10 | 15 | 2.32 |
|  | 25–75 | 99 | 55 | -0.33 | -0.26 | -0.37 | -0.08 | 28 | 104 | 70 | 10 | 10 | 1.72 |
|  | > 75 | 14 | 8 | -0.49 | -0.51 | -0.64 | -0.16 | 28 | 105 | 71 | 11 | 10 | 1.32 |
|  | *Χ2* |  |  | **10.81** | **7.97** | **7.35** | **40.49** | 2.06 | 0.59 | **15.81** | 0.13 | **9.62** | **12.24** |
|  | *p* |  |  | **.004** | **.019** | **.025** | **.000** | .356 | .745 | **.000** | .937 | **.008** | **.002** |
| aMCI |  | 137 |  | -0.08 | -0.31 | -0.23 | -0.92 | 27 | 107 | 70 | 11 | 9 | 2.07 |
|  | < 25 | 19 | 14 | 0.10 | 0.02 | 0.10 | -0.48 | 28 | 110 | 58 | 13 | 15 | 3.40 |
|  | 25–75 | 55 | 40 | -0.03 | -0.05 | -0.13 | -0.75 | 28 | 107 | 68 | 10 | 10 | 2.40 |
|  | > 75 | 63 | 46 | -0.28 | -0.45 | -0.41 | -1.30 | 27 | 107 | 73 | 11 | 7 | 1.70 |
|  | *Χ2* |  |  | 4.52 | **8.85** | **9.48** | **19.35** | 5.13 | 2.34 | **19.01** | 2.53 | **10.46** | **14.10** |
|  | *p* |  |  | .104 | **.012** | **.009** | **.000** | .077 | .311 | **.000** | .282 | **.005** | **.001** |
| AD |  | 43 |  | -1.25 | -1.00 | -1.25 | -1.31 | 25 | 100 | 74 | 10 | 9 | 2.10 |
|  | < 25 | 2 | 5 | -1.15 | -1.46 | -0.84 | -1.17 | 28 | 116 | 81 | 10 | 29 | 3.81 |
|  | 25–75 | 14 | 33 | -1.04 | -0.77 | -1.21 | -1.28 | 26 | 97 | 72 | 9 | 8 | 1.92 |
|  | > 75 | 27 | 63 | -1.35 | -1.10 | -1.25 | -1.47 | 25 | 104 | 75 | 11 | 10 | 2.12 |
| PD-CH |  | 28 |  | 0.32 | 0.29 | 0.07 | 0.29 | 29 | 109 | 67 | 12 | 9 | 1.60 |
|  | < 25 | 8 | 29 | 0.25 | 0.40 | 0.18 | 0.49 | 29 | 120 | 70 | 14 | 11 | 1.68 |
|  | 25–75 | 16 | 57 | 0.36 | 0.35 | 0.02 | 0.35 | 29 | 109 | 65 | 12 | 10 | 1.66 |
|  | > 75 | 4 | 14 | 0.49 | 0.18 | 0.08 | -0.41 | 29 | 104 | 72 | 12 | 5 | 1.06 |
| PDnaMCI |  | 58 |  | -0.47 | -0.02 | -0.47 | -0.06 | 28 | 103 | 69 | 9 | 8 | 1.68 |
|  | < 25 | 9 | 16 | 0.05 | -0.04 | -0.25 | 0.60 | 29 | 118 | 69 | 10 | 11 | 2.08 |
|  | 25–75 | 37 | 64 | -0.51 | 0.05 | -0.42 | -0.08 | 28 | 99 | 67 | 8 | 9 | 1.74 |
|  | > 75 | 12 | 21 | -0.83 | -0.23 | -0.82 | -0.56 | 28 | 109 | 70 | 10 | 6 | 1.42 |
|  | *Χ2* |  |  | 1.68 | 4.05 | 3.25 | **12.21** | 3.22 | 3.55 | 0.49 | 2.95 | 3.28 | 3.65 |
|  | *p* |  |  | .433 | .132 | .197 | **.002** | .200 | .170 | .781 | .228 | .194 | .161 |
| PD aMCI |  | 29 |  | -1.10 | -0.30 | -0.60 | -0.85 | 27 | 107 | 69 | 10 | 12 | 3.52 |
|  | < 25 | 1 | 3 | 0.05 | 0.96 | 0.11 | 0.02 | 27 | 89 | 60 | 8 | 1 | 1.00 |
|  | 25–75 | 17 | 59 | -1.12 | -0.45 | -0.69 | -0.97 | 27 | 110 | 69 | 12 | 13 | 3.56 |
|  | > 75 | 11 | 38 | -1.10 | -0.15 | -0.45 | -0.85 | 27 | 99 | 70 | 8 | 10 | 3.52 |

*Note*. NTBV – Neuropsychological Test Battery Vienna: Domains Attention (AT), Language (LG), Executive Functioning (EF), Memory (M) (higher scores indicate better cognitive performance); MMSE – Mini Mental State Examination; WST – Wortschatztest; BDI – Beck Depression Inventory; B-ADL – Bayer Activities of Daily Living Scale. Classification based on percentile ranks of control group (<25th percentile: underestimators; 25th-75th percentile: normal raters; >75th percentile: overestimators). Kruskal-Wallis tests were not performed for the groups AD, PD-CH and PD aMCI due to small sub-group sample sizes.

***Comparison of subgroups with different levels of awareness***

Kruskal-Wallis tests were used to investigate differences between the subgroups of participants scoring at different percentile ranges (i.e. underestimators/normal raters: 25th-75th percentile/overestimators). Differences between the subgroups varied depending on the diagnosis. Significant differences were observed for memory (controls/SCD/naMCI/aMCI/PD naMCI), executive function (naMCI/aMCI), language (controls/naMCI/aMCI), attention (naMCI), MMSE and WST scores (controls), age (naMCI/aMCI/SCD), depression and functional impairment (controls/SCD/naMCI/aMCI).